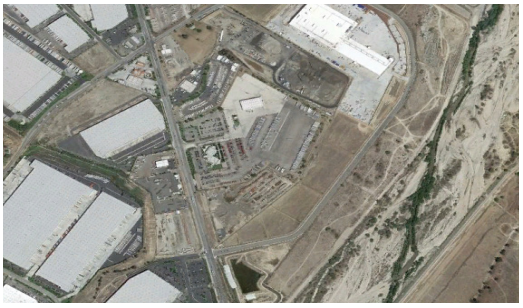
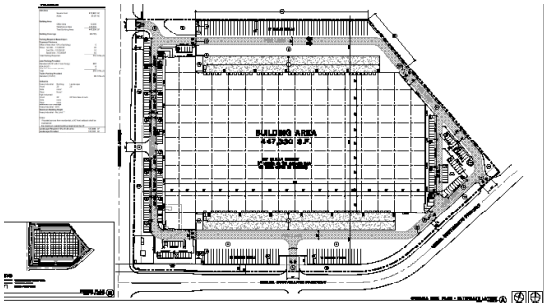
MARCH 2015

VOLUME 2

Agua Mansa Commerce Center





CITY OF COLTON

Agua Mansa Commerce Center

Draft Supplemental Environmental Impact Report

Project Applicant:

Prologis

2817 East Cedar Street, Suite 200 | Ontario, CA 91761

Prepared By:

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Agua Mansa Commerce Center

Draft Supplemental Environmental Impact Report

March 2015

City of Colton

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Volume II – Appendix

Appendix A Scoping Materials
Appendix B Air Quality and Climate Change Assessment & Health Risk Assessment
Appendix C Phase I Environmental Site Assessment
Appendix D Traffic Impact Analysis

Appendix A Scoping Materials

Agua Mansa Commerce Center
Building 1
Initial Study

Prepared for:

City of Colton
659 N La Cadena Drive
Colton, California 92324
909-370-5079

Project Proponent:

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2817 East Cedar Street
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June 2014

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1 Introduction

The City of Colton (Lead Agency) received applications for a Tentative Parcel Map, Architectural/Site Plan Review, Variance (for a decrease in parking spaces), and Historic Certificate of Appropriateness for the construction of a speculative warehouse distribution facility that includes 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located at the northeast corner of South Riverside Avenue and Miguel Bustamante Parkway. The approval of these applications constitute a project that is subject to review under the California Environmental Quality Act (CEQA) 1970 (Public Resources Code, Section 21000 et seq.), and the State CEQA Guidelines (California Code of Regulations, Section 15000 et. seq.).

Pursuant to Section 15163 of the CEQA Guidelines, the City has determined that a Supplemental Environmental Impact Report (EIR) will be required for this project. This Initial Study has been prepared to determine those issues to be addressed in the Supplemental EIR.

1.1 – Purpose of CEQA

The body of state law known as *CEQA* was originally enacted in 1970 and has been amended a number of times since then. The legislative intent of these regulations is established in Section 21000 of the California Public Resources Code, as follows:

The Legislature finds and declares as follows:

a) The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
b) It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
c) There is a need to understand the relationship between the maintenance of high-quality ecological systems and the general welfare of the people of the state, including their enjoyment of the natural resources of the state.
d) The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached.
e) Every citizen has a responsibility to contribute to the preservation and enhancement of the environment.
f) The interrelationship of policies and practices in the management of natural resources and waste disposal requires systematic and concerted efforts by public and private interests to enhance environmental quality and to control environmental pollution.
g) It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian.

The Legislature further finds and declares that it is the policy of the State to:

h) Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.
i) Take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.

j) Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.
k) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, shall be the guiding criterion in public decisions.
l) Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.
m) Require governmental agencies at all levels to develop standards and procedures necessary to protect environmental quality.
n) Require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment.

A concise statement of legislative policy, with respect to public agency consideration of projects for some form of approval, is found in Section 21002 of the Public Resources Code, quoted below:

The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

1.2 – Supplemental EIR

CEQA authorizes a Lead or Responsible Agency to prepare a supplement to a previously certified EIR if some changes or additions are necessary to a previously analyzed project and none of the conditions described in CEQA Guidelines Section 15162 requiring the preparation of a Subsequent EIR are met.

Pursuant to Section 15162 of the CEQA Guidelines, a Subsequent EIR or Negative Declaration may only be prepared if:

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

(d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

Pursuant to CEQA Guidelines Section 15163:

(a) The Lead or Responsible Agency may choose to prepare a Supplement to an EIR rather than a Subsequent EIR if:

(1) any of the conditions described in Section 15162 would require the preparation of a Subsequent EIR, and

(2) only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

(b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

(c) A supplement to an EIR shall be given the same kind of notice and public review as is given the draft EIR under Section 15087.

(d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.

(e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

1.3 – Analytical Approach

This Initial Study has been prepared to evaluate those environmental issues resulting from the addition of land and building square footage to the Agua Mansa Commerce Center Master Plan. Environmental issues requiring minor revisions or changes to the certified EIR are identified as *potentially significant impacts* and will be evaluated in a Supplemental EIR. Those issues analyzed in the certified EIR that require no further analysis in a Supplemental EIR are also noted herein.

1.4 – Public Comments

Comments from all agencies and individuals are invited regarding the information contained in this Initial Study. Such comments should explain any perceived deficiencies in the assessment of impacts, identify the information that is purportedly lacking in the Initial Study or indicate where the information may be found. All comments on the Initial Study are to be submitted to:

Mark Tomich, Development Services Director
City of Colton Planning Division
659 N La Cadena Drive
Colton, California 92324
909-370-5523

Following a 30-day period of circulation and review of the Initial Study, all comments will be considered by the City of Colton prior to public circulation of the Draft Supplemental EIR.

Availability of Materials

All materials related to the preparation of this Initial Study are available for public review. Materials include the Agua Mansa Commerce Center Final Environmental Impact Report and associated addendums. To request an appointment to review these materials, please contact:

Mark Tomich, Development Services Director
City of Colton Planning Division
659 N La Cadena Drive
Colton, California 92324
909-370-5523

2 Project Description

2.1 – Project Title

Agua Mansa Commerce Center Building 1

2.2 – Lead Agency Name and Address

City of Colton Planning Division
659 North La Cadena Drive
Colton, California 92324
909-370-5079

2.3 – Contact Person and Phone Number

Mark Tomich, Development Services Director
909-370-5523

Project Location

Northeast Corner of South Riverside Avenue at Miguel Bustamante Parkway
APN: 0260-091-87; 0260-221-01, -02, and -03
Latitude: 34° 1'57" North, Longitude: 117°21'47" West
(See Exhibit 1, Regional Context and Vicinity Map)

Project Sponsor's Name and Address

Prologis
2817 East Cedar Street, Suite 200
Ontario, California 91761

2.6 – General Plan Land Use Designation

Heavy Industrial (M-2)

2.7 – Zoning District

Heavy Industrial (M-2)

2.8 – Project Description

The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located at the northeast corner of Riverside Avenue at Miguel Bustamante Parkway on 21.07 acres (see Exhibit 3, Revised Master Site Plan and Exhibit 4, Site Plan). The building is intended to be used as a warehouse/distribution facility; however, an end user has not been identified at this time, as such, specific details about the future operation of the facility are not currently available. The proposed design will be a concrete tilt-up building. The project proposes 216 automobile parking spaces, including six ADA parking spaces

and three ADA van accessible parking spaces. The project also proposes 99 truck trailer parking stalls, and 83 loading docks. The proposed landscape coverage for the site is 117,767 square feet or 12.83%. The project includes applications for a Tentative Parcel Map, Architectural/Site Plan Review, Variance (for a decrease in parking spaces), and Historic Certificate of Appropriateness.

The project is an modification to the previously approved Agua Mansa Commerce Center Master Plan (see Exhibit 2, Master Site Plan). The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres (see Exhibit 3, Revised Master Site Plan). The Tentative Parcel Map will consolidate Lots 1, 2, and part of Lot 3 (APNs 0260-221-01, -02, and -03), along with the addition of new acreage on Parcel 2 (APN 0260-091-87) to the north, resulting in a total of 21.07 acres for this new parcel. The Tentative Parcel Map will transfer the remaining 11,074 square feet (0.25 acres) from Lot 3 to Lot 4, thereby increasing Lot 4 from 5.18 acres to 5.43 acres. With the consolidation of these lots, a new 447,330 square foot single building is proposed to replace the previously approved Buildings 1, 2, and 3.

Circulation

The project will take access from Riverside Avenue via a 30-foot driveway and a 40' driveway. The project will also take access from two 40-foot driveways on Miguel Bustamante Parkway. A 26-foot wide drive aisle is proposed within the vehicular parking areas and a minimum 40-foot wide interior access drive aisle is proposed to circumnavigate the building in the truck court area providing access to truck trailer parking and loading areas, and access for the Fire Department. Per the City's General Plan, Riverside Avenue is classified as a Major Arterial. Existing street improvements include street pavement, painted medians, curbs, gutters, sidewalks, and parkway landscape improvements. All existing street and parkway improvements are to remain in place. Improvements along Riverside Avenue frontage shall be constructed per planned ultimate right of way. Missing street improvements along the project frontage consisting of curb, gutter, sidewalk, pavement, raised landscaped median, driveway approaches, handicap access ramps, streetlights, street trees, street signs, and roadway striping will be constructed as per the approved Street Improvement Plans and City of Colton Standard Specifications. The project will be required to dedicate to the City the necessary right of way for the ultimate width of Riverside Avenue, if needed.

Utilities and Drainage

Building 1 will connect to existing water and sewer mains underlying Riverside Avenue. West Valley Water District will provide water to the project site. A Will Serve Letter dated March 20, 2014 is provided confirming availability of service. The City of Colton Public Utilities Department will provide sewer service to the site. A Will Serve Letter dated March 19, 2014 is provided confirming availability of service. The property drainage areas are split on the site. Lots 1, 2, and 3 drainage is directed south into the detention basin across Miguel Bustamante Parkway, while the drainage for the northern Parcel #0260-091-87 is directed to drain under Miguel Bustamante Parkway through the channel along the basin into the Santa Ana River.

2.9 – Surrounding Land Uses

Table 1
Surrounding Land Uses

Direction	General Plan Designation*	Zoning District*	Existing Land Use
Project Site (Building 1)	Heavy Industrial	Heavy Industrial (M-2)	Materials Storage Vacant Lots
North	Heavy Industrial	Heavy Industrial (M-2)	Truck Terminal
East	Open Space-Resource	OS-R	Vacant Lot
South	Heavy Industrial	Heavy Industrial (M-2)	Detention Basin

Direction	General Plan Designation*	Zoning District*	Existing Land Use
			Vacant
West (Rialto)	General Industrial	Agua Mansa Specific Plan	Materials Storage Industrial

2.10 – Environmental Setting

Approximately eleven acres of the project site are currently used for construction materials and equipment storage. A driveway and truck trailer storage associated with the adjacent truck terminal occupies the northern 2.17 acres of the project site. The remaining 8.54 acres on the southern portion of the project site are undeveloped but have been graded. There is a City of Colton owned sewer lift station located on the southwest corner of the project site that will be relocated on-site to accommodate development of the proposed building. There are no habitable structures located on the project site. The project site is completely disturbed.

The southern portion of the project site (8.10 acres) was previously entitled for industrial uses as part of the Agua Mansa Commerce Center Master Plan. The 8.10 acres is comprised of three parcels (APN 0260-221-01, -02, and -03) approved for three warehouses totaling 120,314 square feet. A detention basin and parking area were also approved as a part of the Agua Mansa Commerce Center on 11.71 acres south of the project site.

The Agua Mansa Commerce Center was originally approved for the construction of an industrial business park including 1,365,448 square feet of industrial buildings on a 94.20-acre site. Subsequently, the Agua Mansa Commerce Center approval was revised to consolidate development on Lots 6, 7, 8, and 9 from 762,919 square feet to 423,981 square feet to accommodate a proposed cold storage warehouse which has now been constructed. The certified Environmental Impact Report (EIR) has been amended three times to analyze various changes to the project. Table 2 (Agua Mansa Commerce Center Development Comparison) summarizes the changes to the previously approved Agua Mansa Commerce Center, including the changes proposed as part of this project.

Table 2
Agua Mansa Commerce Center Development Comparison

	Certified EIR	Addendum 1	Addendum 2	Addendum 3	Proposed Project
Buildings	11	11	9	8	6
Detention Basins (AC)	8.05	8.05	8.05	8.05	8.88
Off-Site Parking (AC)	3.66	3.66	3.66	3.66	2.82
Master Plan Area (AC)	94.18	94.18	94.18	94.18	107.13
Building Area (SF)	1,365,450	1,365,450	1,365,450	1,019,418	1,346,435

The Master Plan area has been graded and infrastructure improvements have been installed including street improvements, curbs, gutters, sidewalks, medians, parkway landscaping, fire hydrants, and street lights. A traffic signal at the intersection of Riverside Avenue and Miguel Bustamante Parkway has been installed. All biological permitting requirements and mitigation measures required in the certified Agua Mansa Commerce Center Environmental Impact report (EIR) have been satisfied, including those required by the U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Game (DFG), U.S. Army Corps of Engineers (ACOE), and Regional Water Quality Control Board (RWQCB).

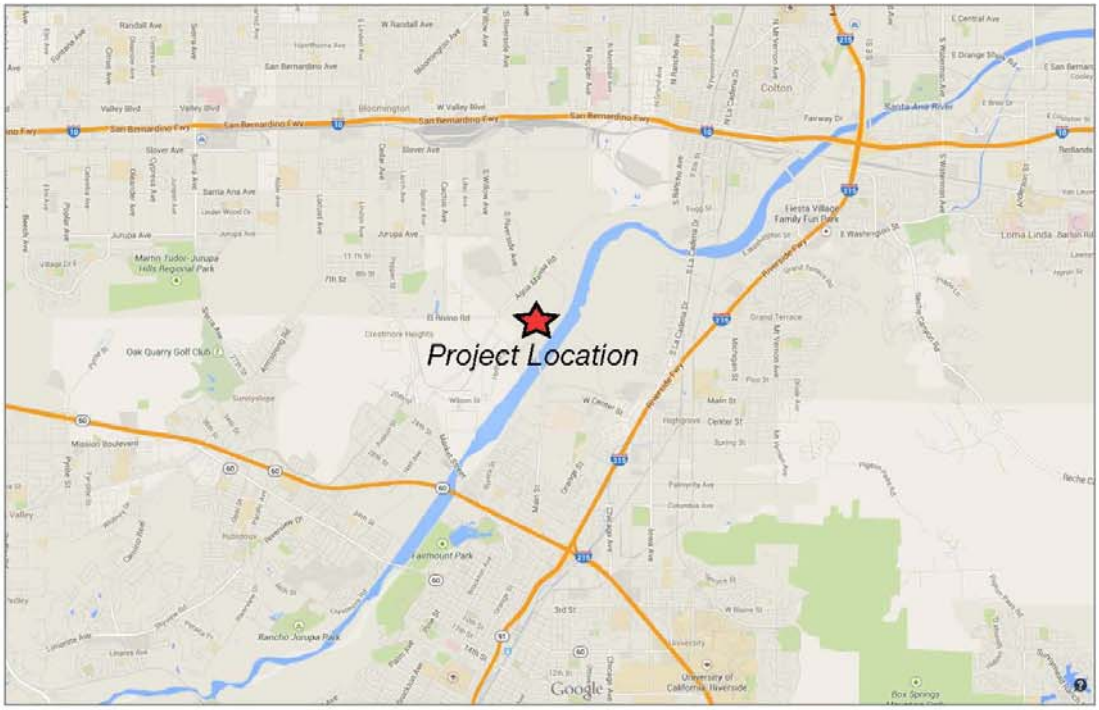
2.11 – Required Approvals

The City of Colton is the only land use authority for this project and this project will require the following City approvals:

- Tentative Parcel Map
- Architectural/Site Plan Review
- Certificate of Historical Appropriateness
- Major Variance (for a decrease in parking spaces)

2.12 – Other Public Agencies Whose Approval is Required

West Valley Water District



Source: Google Maps

Regional

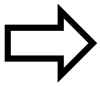
Source: Google Maps

Vicinity

Not to Scale

Exhibit 1 Regional and Vicinity Map

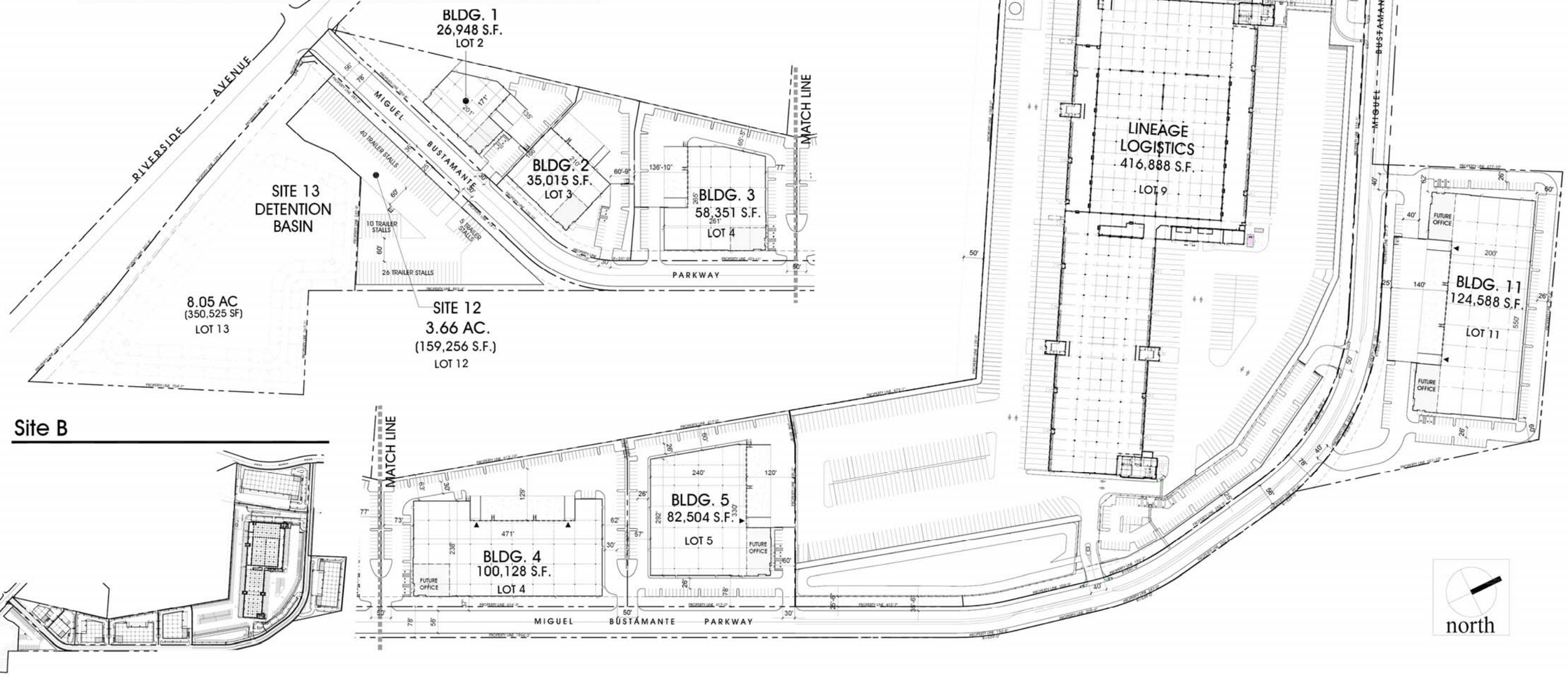
Agua Mansa Commerce Center - Building 1
Colton, California



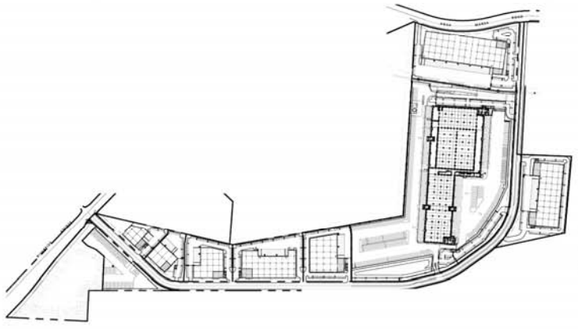
Tabulation

Building #	1	2	3	4	5	9	10	11	Subtotal	Site 12	Site 13 Detention Basin	Street	Total
Lot #	1	2	3	4	5	9	10	11		12	13		
Land Area													
Total Land area													
Square Feet	98,702	104,258	150,968	225,545	190,193	1,627,362	460,091	328,294	3,185,413	159,256	350,525	407,175	4,102,369
Acres	2.27	2.39	3.47	5.18	4.37	37.36	10.56	7.54	73.13	3.66	8.05	9.35	94.18
Building Area													
Office Area	2,695	3,502	5,835	10,013	8,250	41,689	17,500	12,459	101,943				
Manufacturing Area	8,084	10,505	17,505	30,038	24,751	83,378	34,999	24,918	234,177				
Warehouse Area	16,169	21,008	35,011	60,077	49,503	291,822	122,497	87,212	683,298				
	26,948	35,015	58,351	100,128	82,504	416,888	174,995	124,588	1,019,418				
Building Coverage	27.30%	33.58%	38.65%	44.39%	43.38%	25.62%	38.03%	37.95%	32.00%				
Landscape Coverage	42.64%	26.54%	18.20%	14.01%	12.03%	14.44%	20.13%	21.97%	17.31%	45.79%			15.22%
	42,091	27,674	27,470	31,598	22,882	235,000	92,621	72,129	551,465	72,927			624,392
Parking Required													
Office: 1/300 SF	9	12	19	33	28	139	58	42	340				
Manufacturing: 1/500 SF	16	21	35	60	50	167	70	50	469				
Whse: 1/1,000 SF - 1st 10,000 SF	10	10	10	10	10	10	10	10	80				
Whse: 1/2,000 SF - Above 10,000 SF	3	6	13	25	20	141	56	39	303				
Total Parking Required	38	49	77	128	108	457	194	141	1192				
Parking Provided													
Standard (9'x20')	45	53	105	124	107	387	195	179	1,195	0			
Handicap (9'x20')	3	3	5	5	5	11	7	6	45	0			
Trailer (10'x60')	-	-	-	-	-	-	-	-	-	81			
Total Parking Provided	48	56	110	129	112	398	202	185	1240	81			

Aerial Map



Site B



Source: HPA Architecture

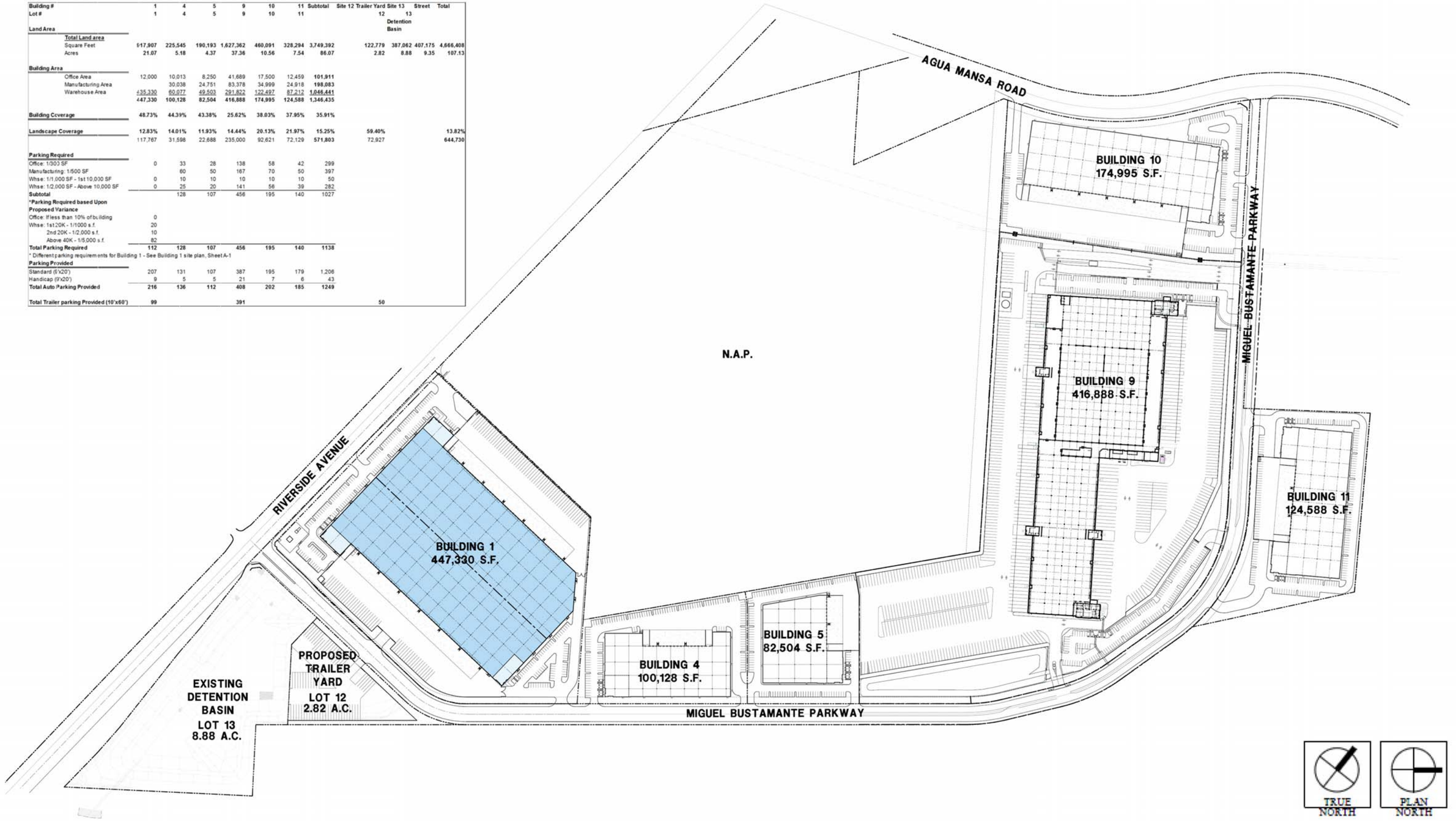
Exhibit 2 Current Approved Master Plan

Agua Mansa Commerce Center
Colton, California

MIG | Hogle-Ireland

TABULATION

Building #	1	4	5	9	10	11	Subtotal	Site 12 Trailer Yard	Site 13	Street	Total
Lot #	1	4	5	9	10	11		12	13		
									Detention Basin		
Land Area											
Total Land area											
Square Feet	447,907	225,545	190,193	1,627,362	460,091	328,294	3,749,392	122,779	387,062	407,175	4,666,408
Acres	21.07	5.18	4.37	37.36	10.56	7.54	86.07	2.82	8.88	9.35	107.13
Building Area											
Office Area	12,000	10,013	8,250	41,689	17,500	12,459	**101,911**				
Manufacturing Area		30,038	24,751	83,378	34,999	24,918	**198,083**				
Warehouse Area	435,330	60,077	49,503	291,822	122,497	87,212	**1,046,441**				
	447,330	**100,128**	**82,504**	**416,888**	**174,995**	**124,588**	**1,346,435**				
Building Coverage	**48.73%**	**44.39%**	**43.38%**	**25.62%**	**38.03%**	**37.95%**	**35.91%**				
Landscape Coverage	**12.83%**	**14.01%**	**11.93%**	**14.44%**	**20.13%**	**21.97%**	**15.25%**	**59.40%**			**13.82%**
	117,767	31,598	22,688	235,000	92,621	72,129	**571,803**	72,927			**644,730**
Parking Required											
Office: 1/300 SF	0	33	28	138	58	42	299				
Manufacturing: 1/500 SF		60	50	167	70	50	397				
Whse: 1/1,000 SF - 1st 10,000 SF	0	10	10	10	10	10	50				
Whse: 1/2,000 SF - Above 10,000 SF	0	25	20	141	56	39	282				
Subtotal		128	107	456	195	140	1027				
***Parking Required based Upon Proposed Variance**											
Office: If less than 10% of building	0										
Whse: 1st 20K - 1/1000 s.f.	20										
2nd 20K - 1/2,000 s.f.	10										
Above 40K - 1/5,000 s.f.	82										
Total Parking Required	**112**	**128**	**107**	**456**	**195**	**140**	**1138**				
* Different parking requirements for Building 1 - See Building 1 site plan, Sheet A-1											
Parking Provided											
Standard (9'x20')	207	131	107	387	195	179	1,206				
Handicap (9'x20')	9	5	5	21	7	6	43				
Total Auto Parking Provided	**216**	**136**	**112**	**408**	**202**	**185**	**1249**				
Total Trailer parking Provided (10'x60')	**99**			**391**				**50**			



Source: HPA Architecture

Exhibit 3 Current Revised Master Plan

Agua Mansa Commerce Center
Colton, California

MIG Hogle-Ireland

TABULATION

Site Area		
	Square Feet	**917,907** SF
	Acres	**21.07** AC
Building Area		
	Office Area	12,000
	Warehouse Area	435,330
	Total Building Area	**447,330** SF
Building Coverage		**48.73%**
Parking Required Based Upon Proposed Variance		
Office (if less than 10% of building)		0
Whse: 1st 20K - 1/1,000 SF		20
2nd 20k - 1/2,000 SF		10
Above 40k - 1/5,000SF		82
Total Parking Required		**112** STALLS
Auto Parking Provided		
Standard (9'x18' with 2' over hang)		**207**
ADA (9'x20')		**6**
ADA Van Accessible (9'x20')		**3**
Total		**216** STALLS
Trailer Parking Provided		
Standard (10'x53')		**99** STALLS

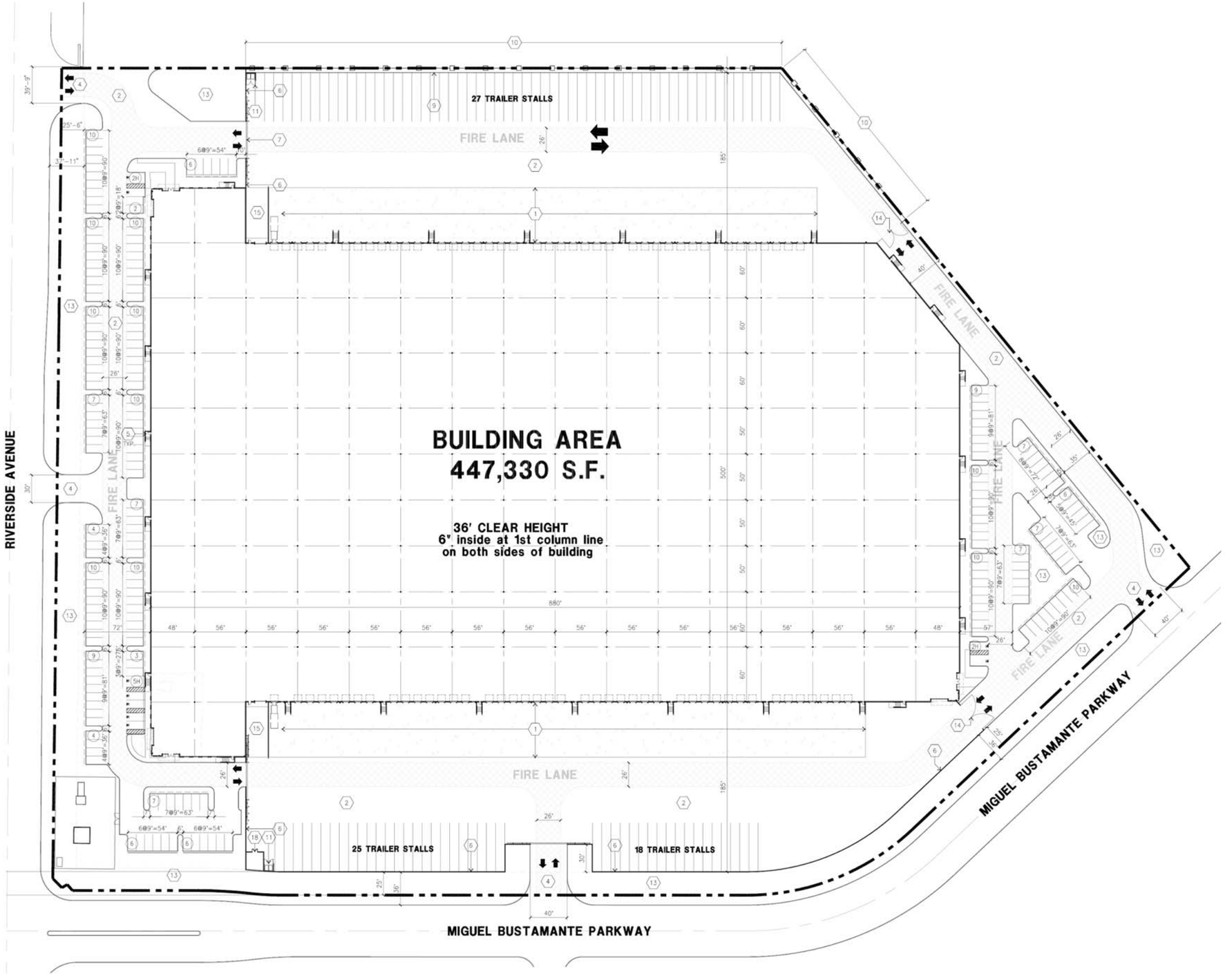
Setbacks

Heavy Industrial	Building	Landscape
Front	25'	25'
Side	none*	
Rear	None*	
High Industrail		
Front	25'	20' from face of curb
Side	none	
Rear	none	

Maximum Lot Coverage
Heavy Industrial - 50%
Maximum Building Height
Heavy Industrial - No Limit **

Notes:
* If located across from residential, a 50' front setback shall be maintained
the maximum overall building height shall be 35'

Landscape Required 15% of site area	**137,686**	SF
Landscape Provided	**117,767**	SF

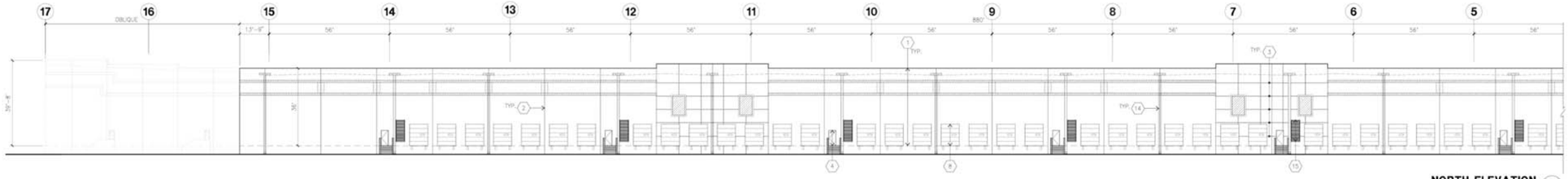


Source: HPA Architecture

Hogle-Ireland

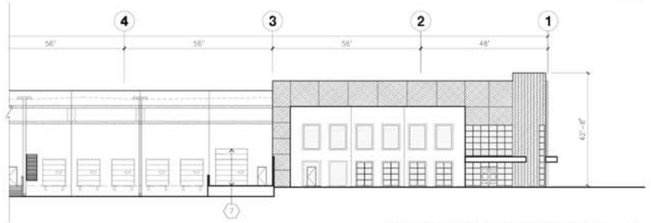
Exhibit 4 Current Site Plan

Agua Mansa Commerce Center - Building 1
Colton, California



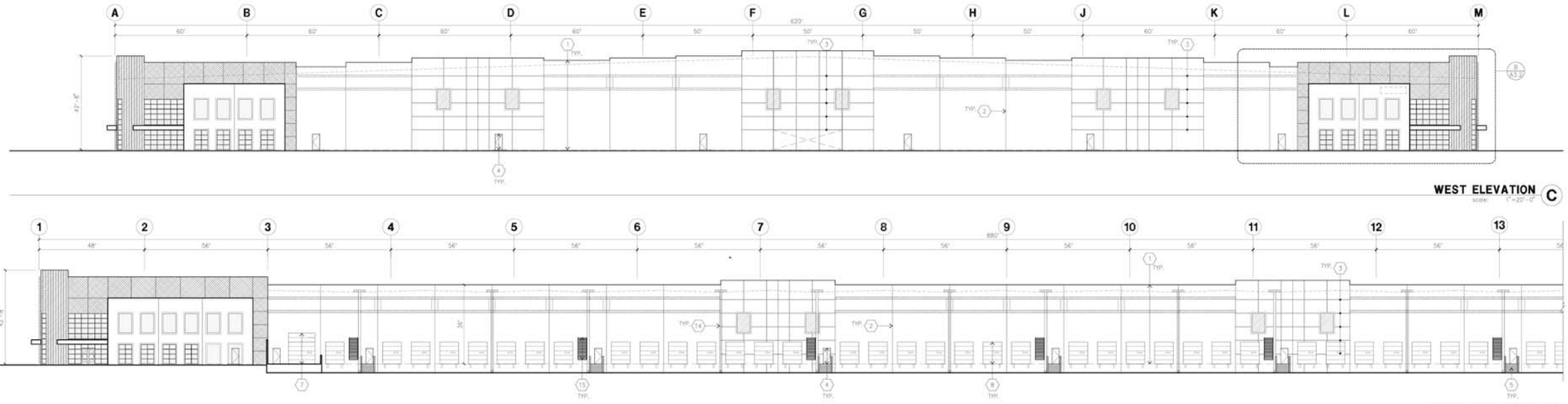
NORTH ELEVATION A

scale: 1"=20'-0"



NORTH ELEVATION (CONTINUED) B

scale: 1"=20'-0"


A
B
C
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620'
42'-8"
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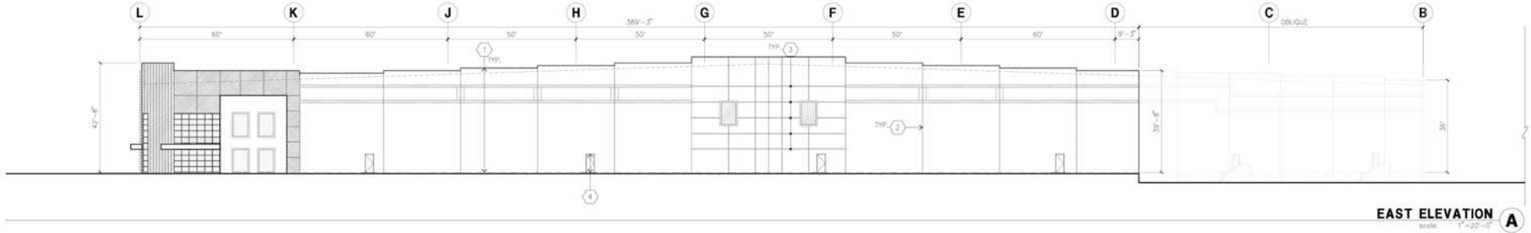
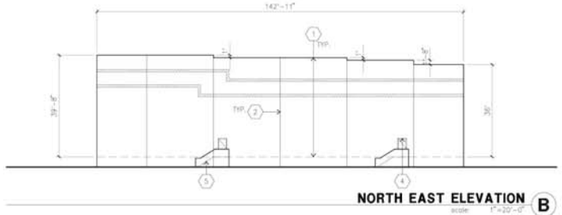
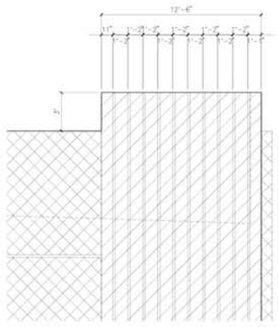
TYP.
TYP.



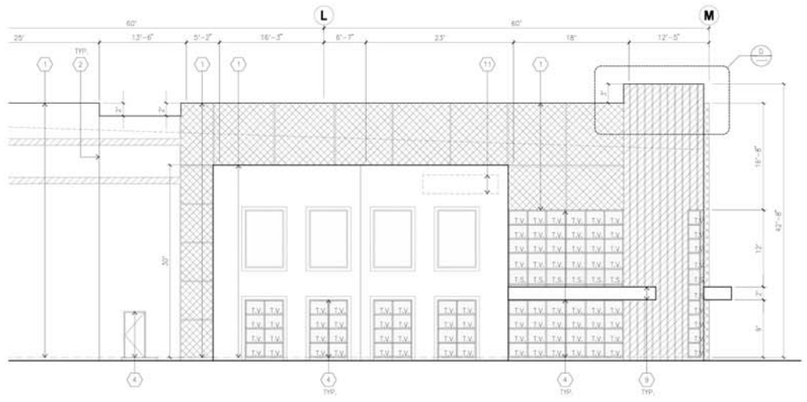
EAST ELEVATION (A)
SCALE: 1" = 20'-0"



NORTH EAST ELEVATION (B)
SCALE: 1" = 20'-0"



ENLARGED REVEAL DETAIL (D)
SCALE: 1/4" = 1'-0"



ENLARGED WEST ELEVATION (C)
SCALE: 1/8" = 1'-0"

Not to Scale

Source: HPA Architecture

Exhibit 5b Elevations

Agua Mansa Commerce Center - Building 1
Colton, California

3 Determination

3.1 – Environmental Factors Potentially Affected

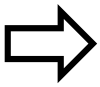
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a 'Potentially Significant Impact' as indicated by the checklist on the following pages.

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

3.2 – Determination

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☐	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☑	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a 'potentially significant impact' or 'potentially significant unless mitigated' impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Name Mark Tomich, Development Services Director _____ Date _____



4.1 – Aesthetics

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☑	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?	☑	☐	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☑	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☑	☐	☐	☐

a-b) **Potentially Significant Impact [Impact AVQ-1].** Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks the view of a vista. Second, the vista itself may be altered (e.g., development on a scenic hillside). No state scenic highways are located within or adjacent to the City limits, according to the State of California Department of Transportation (Caltrans) *California Scenic Highway Mapping System* Web Site.[1] The project site is vacant and graded and no scenic resources are located on site.

The certified Agua Mansa Commerce Center EIR indicates that Agua Mansa Road is designated as a Scenic Drive by the City of Colton but is not a State Designated or Eligible Scenic Highway. The certified EIR found that views of the La Loma Hills and the Santa Ana River from the Master Plan area would not be blocked from Agua Mansa Road because the approved buildings would be developed at a lower elevation than the road. Furthermore, the approved buildings would not be constructed as a continuous block mass and would thereby allow intermittent views of the hills. Siting of the proposed Building 1 will occur at approximately the same elevation as anticipated in the certified EIR and is thus within the purview of the determination that views will not be substantially reduced due to elevation. Although the project will result in the consolidation of three buildings into one, thereby creating larger massing at the southern portion of the site, the

[1] California Department of Transportation. California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm [February 6, 2014]

proposed Building 1 is approximately 0.40 miles from Agua Mansa Road and thus is not in proximity to substantially disrupt intermittent view of the La Loma Hills and Santa Ana River as indicated in the certified EIR.

The certified EIR further notes that the Master Plan area is within an area designated for industrial uses, and the surrounding land along Agua Mansa Road is developed with similar industrial uses. The proposed Building 1 is a warehouse building and is consistent with this analysis. The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are currently being used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the project site are currently being used as a driveway and truck trailer storage. Thus, impacts to scenic vistas and scenic resources will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact AVQ-2].** Development of the proposed project could result in a significant impact if it culminated in substantial degradation of the existing visual character or quality of the site and its surroundings. Degradation of visual character or quality is defined by substantial changes to the existing site appearance through construction of structures such that they are poorly designed or conflict with the site's existing surroundings.

The certified EIR indicates that all buildings within the Agua Mansa Commerce Center will have a contemporary architectural style and design elements including roofline variation, varied building colors and materials, and horizontal and vertical breaks. The proposed Building 1 will be subject to design requirements of the General Plan and Zoning Code to ensure that the building is visually interesting and consistent with the industrial character of the Agua Mansa Commerce Center. Since the proposed project is adding 13.23 acres to the Agua Mansa Commerce Center Master Plan, impacts to visual character will be analyzed in the Supplemental EIR.

d) **Potentially Significant Impact [Impact AVQ-3].** Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists).

The certified EIR found that development of the area would result in new sources of light and glare. Furthermore, the certified EIR indicated that the new sources of light and glare could impact nocturnal wildlife associated with the riparian habitat of the Santa Ana River which is located directly to the south. All lighting will be required to comply with the development standards contained in the City's Development Code.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the project site are used as a driveway and truck trailer storage. The northern portion of the project site used as a driveway and truck trailer storage (2.17 acres) includes lighting and asphalt pavement improvements. Thus, impacts related to light and glare will be analyzed in a Supplemental EIR.

4.2 – Agriculture and Forest Resources

Would the project:

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

a) **No Impact.** As indicated in the Map of Important Farmland in California prepared by the Department of Conservation, the project site is not identified as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[2] In addition, the City of Colton General Plan does not identify any areas for agriculture use. Therefore, there will be no conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to a non-agricultural use as a

[2] California Department of Conservation. San Bernardino County Important Farmland 2010. December 2011.

result of this project. This is consistent with the determination provided in the Initial Study prepared for the certified EIR.[3] No impacts will occur.

b) **No Impact.** As indicated by the Department of Conservation, Division of Land Resources Protection, the project site is not identified as being on Williamson Act enrolled land.[4] In addition the project is currently zoned as Heavy Industrial. Therefore, there will be no conflict with existing zoning for agricultural use or a Williamson Act contract. This is consistent with the determination provided in the Initial Study prepared for the certified EIR. No impacts will occur.

c) **No Impact.** Public Resources Code Section 12220(g) identifies forest land as *land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits*. The project site and surrounding properties are not currently being managed or used for forest land as identified in Public Resources Code Section 12220(g). The project site is disturbed and a portion of the site is currently used for construction equipment and materials storage. The site is zoned for industrial uses, with no substantial vegetation on site. Therefore, development of this project will have no impact to any timberland zoning.

d) **No Impact.** The project site is disturbed land with no substantial vegetation; thus, there will be no loss of forest land or conversion of forest land to non-forest use as a result of this project. This is consistent with the determination provided in the initial study prepared for the certified EIR; no impacts will occur.

e) **No Impact.** A portion of the project site is currently utilized for equipment and materials storage or truck parking with no substantial vegetation and the remainder has been graded as a part of the Master Plan. The project is surrounded by other developed industrial properties and vacant properties with little to no vegetation. None of the surrounding sites contain existing forest uses. Development of this project will not change the existing environment in a manner that will result in the conversion of forest land to a non-forest use. This is consistent with the determination provided in the Initial Study prepared for the certified EIR relating to agricultural uses. No impacts will occur.

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[3] Agua Mansa Commerce Center Initial Study. July 2, 2007.

[4] California Department of Conservation. San Bernardino County Williamson Act Fiscal Year 2012/2013.

4.3 – Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☑	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☑	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☑	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☑	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑

a) **Potentially Significant Impact [Impact AQ-1].** A significant impact could occur if the proposed project conflicts with or obstructs implementation of the South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2007 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[5] Consistency review is presented below:

[5] South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993

1. The project will result in short-term construction and long-term pollutant emissions that may exceed CEQA significance emissions thresholds established by the SCAQMD or result in greater air quality impacts than those identified in the certified EIR; therefore, the project may result in an increase in the frequency or severity of air quality standards violation or cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan Elements, Specific Plans, and *significant projects*. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities. This project does not involve a General Plan/Specific Plan Amendment and is not considered a *significant project*.

The certified EIR found that impacts related to AQMP inconsistency would be less than significant; however, because the project will add additional land and building area to the Agua Mansa Commerce Center, criteria pollutant emissions may exceed those analyzed in the certified EIR. Based on the consistency analysis presented above, the proposed project could conflict with the AQMP; therefore, potentially significant impacts could occur. Impacts associated with AQMP inconsistency will be analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [Impact AQ-2, Impact AQ-3].** A project may have a significant impact if project related emissions would exceed federal, state, or regional standards or thresholds, or if project-related emissions would substantially contribute to existing or project air quality violations. The proposed project is located within the South Coast Air Basin, where efforts to attain state and federal air quality standards are governed by the South Coast Air Quality Management District (SCAQMD). Both the State of California (State) and the Federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as "criteria pollutants"). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM^{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM^{2.5}$), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS are more stringent than the national AAQS.

The certified EIR determined that diesel emissions resulting from the construction of the business park are not expected to result in a significant impact. The certified EIR further determined that the PM_{10} and $PM_{2.5}$ emissions and emissions from architectural coatings generated by the project are projected to exceed thresholds. Because the project will add additional land and building area to the Agua Mansa Commerce Center, criteria pollutant emissions may exceed CEQA significance emissions thresholds established by the SCAQMD or result in greater air quality impacts than those identified in the certified EIR. Thus, impacts associated with criteria pollutant emissions will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact AQ-4].** Because the proposed project may result in potentially significant impacts related to criteria pollutants, as discussed in Section 4.3.b above, the proposed project could also contribute substantially to cumulative short- and long-term air quality impacts. The certified EIR found that cumulative air quality impacts would be significant and unavoidable. Because the project will add additional land and building area to the Agua Mansa Commerce Center, criteria pollutant emissions may result in greater cumulative air quality impacts than those identified in the certified EIR. Therefore, impacts related to criteria pollutant emissions will be analyzed further in a Supplemental EIR.

d) **Potentially Significant Impact [Impact AQ-5].** Sensitive receptors are those segments of the population that are most susceptible to poor air quality such as children, the elderly, the sick, and athletes who perform outdoors. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. In general, the California Department of Transportation *Project-Level Carbon Monoxide Protocol* (CO Protocol) recommends analysis of CO hotspots when a project increases the number of vehicles operating in cold start mode by more than 2%, increases traffic volumes by more than 5%, or worsens average traffic speeds. According to the certified EIR, CO increases due to the project are not significant enough to exceed the state and federal CO standards. However, because the project will add additional land and building area to the Agua Mansa Commerce Center, CO emissions may result in greater impacts than those identified in the certified EIR. Therefore, CO emissions will be analyzed further in a Supplemental EIR.

Diesel Particulate Matter (DPM) was identified as a toxic because of its potential to cause cancer, premature deaths, and other health problems. Health hazards associated with DPM are especially hazardous for children because their lungs are still developing, and the elderly who may have other serious health problems. The certified EIR found that cancer risk and non-cancer risk would not significantly increase at sensitive receptors in the vicinity of the Agua Mansa Commerce Center; however, because the project will add additional land and building area to the Agua Mansa Commerce Center, diesel particulate matter emissions may result in greater toxic air contaminant impacts than those identified in the certified EIR. Therefore, emissions diesel particulate matter will be evaluated in a Supplemental EIR.

e) **No Impact.** According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed warehouse is sited within an existing industrial area. The proposed warehouse is not considered a sensitive receptor and therefore would not be substantially affected by potential odors from existing industrial use operations. The proposed warehouse, in turn, would not produce odors that would affect a substantial number of people considering that the proposed warehouse will not result in the manufacturing of any products and that there are no sensitive receptors in the project vicinity. According to the certified EIR prepared for the Agua Mansa Commerce Center, the project will be required to comply with the policies of the City of Colton Municipal Code and General Plan regarding odors. Impacts are consistent with the certified EIR; no impacts will occur.

4.4 – Biological Resources

Would the project:

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

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

a) **Potentially Significant Impact [Impact BIO-1].** A biological reconnaissance survey was conducted by NRA, Inc. and Tetra Tech, Inc. in 2007 as part of the certified EIR for the Agua Mansa Commerce Center. No burrowing owls were located during the survey; however, it was determined that they may move onto the site from adjacent areas.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the project site are used as a driveway and truck trailer storage. The additional 13.23 acres is disturbed and no natural habitat exists that could support any of the species listed above. However, burrowing owls are a ubiquitous species that can take up residence in drainage pipes and vacant ground squirrel holes. Thus, impacts related to candidate, sensitive or special status species will be analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [BIO-3].** No water bodies or riparian features or habitat exist on the site and the project site has been graded and is disturbed. However, the Santa Ana River is located approximately 0.18 miles south of the proposed project site. The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Thus, impacts to riparian habitat or other sensitive natural community will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact BIO-5].** The certified EIR for the Agua Mansa Commerce Center indicates that no jurisdictional waters or wetland habitats are present on the project site.

According to the federal National Wetlands Inventory, no data is available for the addition of the 13.23 acres to the Agua Mansa Commerce Center Master Plan.[6] The Santa Ana River is located approximately 0.18 miles south of the project; however, no water bodies, wetlands or riparian areas are visible on the project site. Impacts to federally protected wetlands will be analyzed in a Supplemental EIR.

d) **Potentially Significant Impact [Impact BIO-4].** The certified EIR determined that habitat fragmentation has already occurred and that the property does not function as a substantial wildlife corridor. The addition of the 13.23 acres to the Agua Mansa Commerce Center Master Plan will not interfere with any wildlife corridors as habitat fragmentation has already occurred as established in the certified EIR. However, impacts to wildlife migration and movement will be evaluated in a Supplemental EIR.

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[6] United States Fish and Wildlife Service. National Wetlands Inventory. http://107.20.228.18/Wetlands/WetlandsMapper.html# [February 27, 2014]

e) **Potentially Significant Impact [Impact BIO-6].** According to the certified EIR, the City of Colton does not have any adopted tree preservation ordinance or other policies protecting biological resources. Limited vegetation exists on the 13.23 acres being added to Agua Mansa Commerce Center Master Plan. However, impacts to policies protecting biological resources will be analyzed in a Supplemental EIR.

f) **No Impact.** The certified EIR indicates that no Habitat Conservation Plan[7], Natural Community Conservation Plan, [8] or other approved local, regional or state habitat conservation plan has been adopted for the project area. The addition of the 13.13 acres to the Agua Mansa Commerce Center Master Plan is also not within an HCP, NCCP, or other local regional or state conservation plan. Impacts are consistent with the certified EIR; no impacts will occur.

[7] United States Fish and Wildlife Service. Conservation Plans and Agreements Database. http://ecos.fws.gov/conserv_plans/public.jsp [February 27, 2014]
[8] California Department of Fish and Game. California Natural Community Conservation Planning. http://www.dfg.ca.gov/habcon/nccp/ [February 27, 2014]

4.5 – Cultural Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☑	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☑	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☑	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☑	☐	☐	☐

a) **Potentially Significant Impact [Impact CR-1].** The project area occurs within the historic Rancho Jurupa, originally confirmed to Juan Bandini by Governor Alvarado in 1838. The rancho consisted of approximately seven square leagues in San Bernardino County (now including a portion of Riverside County). Bandini's grant was approved on May 22, 1840. The Rancho Jurupa was originally under the jurisdiction of the Mission San Gabriel and used for cattle grazing and, with the assistance of "neophytes" (Native American converts), small gardens. After the declaration of independence by Mexico from Spain, the secularization of the Missions opened large tracts of land for settlement. Following the prior policies of Spain, the Mexican government continued to issue large land grants and supported the settlement of Alta California. The principle of granting lands to encourage settlement and colonization of undeveloped areas is an ancient custom of empire-minded nations, which found its counterpart in the more recent homestead and railroad grant laws of our United States. In the beginning, the ranch grants of California were merely grazing or pasturage permits which entitled the grantees to the use but not the ownership of the land. Eventually these permits became actual transfers of ownership by the regnant sovereign or political jurisdiction; and so California's more than 500 private land grants came into being.

Juan Bandini held the rancho until his death in 1859. However, when he needed funds, he sold a large portion of the Rancho Jurupa to Louis Rubidoux, resulting in the identification of the Rancho Jurupa (Rubidoux). As early as 1840, however, Don Juan Bandini offered a portion of his land as a place of settlement for the displaced population from Politana. Politana was a small community of Native Americans from Abiquiu, New Mexico, brought to California by the Lugos of the Rancho San Bernardino. This gift of land was known as the "Bandini Donations," consisting of approximately 2,200 acres of land along the Santa Ana River in the northeastern portion of the Rancho Jurupa. Various accounts describe this land as covering an area of six miles along the river and one half mile wide along both sides of the River. These two settlements were named "Agua Mansa" (gentle water) and "La Placita" (small town). Agua Mansa was northwest of the

River and La Placita was southeast of the River. The current project area is within the boundaries of Agua Mansa.

Both communities were established as pueblos, with small central plazas, a church, and dwellings surrounding the plaza. Individual lands were established along the river frontage and included approximately 550 feet of frontage on the River and approximately 1,300 feet deep. The current project area involves portions of Bandini's Lots 39, 42, 44, 50, and 51. Hayes (1929) suggests that the existing church within the Cemetery at Agua Mansa was the third church built for the community and likely dates to 1854.

The floods of the 1860's destroyed the community of Agua Mansa (and La Placita). In 1862, a wall of water estimated to be between 30 to 50 feet tall overran the communities on the Santa Ana River, destroying everything except the church and the single residence near the church (located on a bluff above the flood line). In 1868, a second flood destroyed the re-established community and left many feet of silt and debris atop the community's lands. Following the second flood, the community was officially abandoned and the church fell into ruins.[9]

As part of the certified EIR for the Agua Mansa Commerce Center, a field reconnaissance of the project site was completed between June 22 and June 27, 2007 by McKenna et al to identify any existing historic resources. Results of the survey included the identification of numerous features associated with the Beckett Ranch, none of which meet the minimum age for historic resources. Furthermore, it was determined that the structures associated with Beckett Ranch are in poor condition and had no architectural significance. No evidence of historic or prehistoric remains was identified during the survey of the project area. Due to flooding events in the 1860s, the community of Agua Mansa is buried by several feet of silt and debris. Evidence of the historic community may be present in a buried context within the area of the Agua Mansa Commerce Center.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The entire site is disturbed and a large portion of the site has been graded. However, impacts related to historical resources will be analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [Impact CR-1].** As part of the certified EIR for the Agua Mansa Commerce Center, a standard archaeological record search was conducted by the San Bernardino County Museum, Archaeological Information Center. The search included a review of all recorded historic and prehistoric archeological sites within a one-mile radius of the project area as well as a review of all known cultural resource reports. In addition, the file of historic maps, the California Historical Points of Interest, the listing of California Historical Landmarks, the California Register of Historic Resources Inventory were checked for the project site. Research showed that the majority of the project area was previously surveyed for cultural resources. A total of nine cultural resource overviews and 37-area specific studies (12 of which involved portions of the Agua Mansa Commerce Center) have been completed within one-mile of the project area. The Archeological Information Center identified six prehistoric archeological sites; 13 historic archeological sites; five pending archeological sites; two historic isolates; five possible historic structural locations; one California Historical Landmark; and one California Point of Historic Interest. Two of the resources identified were identified within the project area including 1) CA-SBR-6940H (an irrigation ditch); and 2) 36-015221 (the Community of Agua Mansa).

[9] City of Colton General Plan, Cultural Resources Preservation Element. 2000.

Nearby sites include additional irrigation features and the historic Agua Mansa Road. The presence of these historic features renders the project area highly sensitive for the identification of historic archeological resources.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The entire site has been disturbed and a large portion of the site has been graded. Impacts to archaeological resources will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact CR-4].** As part of the Phase I Cultural Resource Investigation for the Agua Mansa Commerce Center, a standard paleontological overview was prepared by the Natural History Museum of Los Angeles County Vertebrate Paleontology Section. No vertebrate fossil localities were identified as occurring within the project area; however, vertebrate fossil localities were identified further afield from sedimentary deposits similar to those that may occur as subsurface deposits within the project site. The project area consists of younger Quaternary Alluvium that is not conducive to yielding fossil specimens. However, specimens have been identified in older alluvium downstream from the project site. There is a potential than fossil remains may have been carried into the area by heavy flooding episodes. Therefore the area is considered moderately sensitive for paleontological resources. Surface grading or shallow excavations in the proposed project area are not likely to uncover significant vertebrate fossils. Deeper excavations in the proposed project area that extend beneath the surficial younger Quaternary Alluvium into the older Quaternary sedimentary deposits, may encounter significant vertebrate fossil remains.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The entire site has been disturbed and graded. Impacts to paleontological resources will be evaluated in a Supplemental EIR.

d) **Potentially Significant Impact [Impact CR-2].** According to the certified EIR, the Agua Mansa Commerce Center has been disturbed and developed in the past. However, during development there is always a possibility of potentially disturbing previously unidentified human remains.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The entire site has been disturbed and has been graded. Impacts to buried human remains will be analyzed in a Supplemental EIR.

4.6 – Geology and Soils

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☑	☐	☐	☐
ii) Strong seismic ground shaking?	☑	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☑	☐	☐	☐
iv Landslides?	☑	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☑	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☑	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☑	☐	☐	☐

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

a.i) **Potentially Significant Impact [Impact GS-1].** Although the Agua Mansa Commerce Center is located in seismically active Southern California, it is not located within an Alquist-Priolo Earthquake Fault Zone. According to the certified EIR prepared for the Agua Mansa Commerce Center, no known active or potentially active faults pass through the project site.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts related to rupture of earthquake faults will be evaluated in the Supplemental EIR.

a.ii) **Potentially Significant Impact [Impact GS-1].** The Agua Mansa Commerce Center is subject to strong seismic ground shaking, as are virtually all properties in Southern California. According to the certified EIR, the San Jacinto Fault is located approximately three miles northeast of the Agua Mansa Commerce Center and could be a source of ground shaking if an earthquake occurred.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. The proposed high-cube warehouse building is subject to the seismic design criteria of the California Building Code (CBC). The 2010 California Building Code (CBC; Title 14, California Code of Regulations, Part 2) contains seismic safety provisions with the aim of preventing building collapse during a design earthquake so that occupants would be able to evacuate after the earthquake. A "design earthquake" is defined as a magnitude earthquake with a two percent chance of exceedance in 50 years, or an average return period of 2,475 years. Adherence to these requirements will reduce the potential of the building from collapsing during an earthquake, thereby minimizing injury and loss of life. Impacts related to strong seismic ground shaking will be analyzed in a Supplemental EIR.

a.iii) **Potentially Significant Impact [Impact GS-1].** Liquefaction is a phenomenon that occurs when soil undergoes transformation from a solid state to a liquefied condition due to the effects of increased pore-water pressure. This typically occurs where susceptible soils (particularly the medium sand to silt range) are located over a high groundwater table. Affected soils lose all strength during liquefaction and foundation failure can occur. According to the geotechnical analysis performed as part of the certified EIR, the Agua Mansa Commerce Center has low liquefaction potential due to dense sands located below the area.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Impacts related to liquefaction will be analyzed in a Supplemental EIR.

a.iv) **Potentially Significant Impact [Impact GS-1].** According to the certified EIR, the Agua Mansa Commerce Center is relatively flat and slopes gently to the south/southeast. Slopes range from zero to nine percent. Considering the flat topography of the project site, landslides are not

anticipated. The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan, which is considered topographically flat.[10] Impacts related to landslides will be analyzed in the Supplemental EIR.

b) **Potentially Significant Impact [Impact GS-2].** Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms. The project has the potential to expose surficial soils to wind and water erosion during construction activities.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts related to soil erosion and loss of topsoil will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact GS-1].** Impacts related to liquefaction and landslides are discussed above in Section 4.6.a. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake -shaking combined. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e., retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope.

As stated in the Section 4.a.iii), according to the certified EIR, the geotechnical analyses indicate that the potential for liquefaction is considered to be low at the Agua Mansa Commerce Center due to dense sands located below the site.

Liquefaction potential is considered low on the proposed 13.23-acre addition to the Agua Mansa Commerce Center Master Plan.[11] The project site is relatively flat and slopes gently to the south/southeast. Slopes range from zero to nine percent. Impacts related to lateral spreading, subsidence, and collapse will be analyzed in the Supplemental EIR.

d) **Potentially Significant Impact [Impact GS-1].** According to the certified EIR, soils beneath the Agua Mansa Commerce Center are not anticipated to be expansive based on the laboratory test conducted as part of the geotechnical study prepared by NorCal Engineering.[12] [13]

The proposed 13.23 acre addition to the Agua Mansa Commerce Center Master Plan is not anticipated to have expansive soils. However, a geotechnical study will be required prior to the issuance of any building permits for the site. Impacts related to expansive soils will be evaluated in a Supplemental EIR.

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[10] United States Geological Survey. San Bernardino South Quadrangle 7.5 Minute Series Topographic Map. 1967.
[11] California Department of Conservation. Regulatory Maps. http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm [March 2014]
[12] NorCal Engineering. Geotechnical Engineering Investigation. October 20, 2006.
[13] NorCal Engineering. Supplemental Geotechnical Engineering Investigation. July 20, 2007.

e) **No Impact.** The proposed 13.23 acre addition to the Agua Mansa Commerce Center will be connected to the City's wastewater collection and treatment system, therefore, no septic tanks or alternative wastewater systems are proposed. Impacts will be consistent with the certified EIR; no impacts will occur.

4.7 – Greenhouse Gas Emissions

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

a) **Potentially Significant Impact [Impact AQ-6].** Climate change is the distinct change in measures of climate for a long period of time.[14] Climate change is the result of numerous, cumulative sources of greenhouse gas emissions all over the world. Natural changes in climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of greenhouse gases (GHG) and changes to the planet's surface. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and rasing livestock, deforestation activities; and some agricultural practices.

Greenhouse gases differ from other emissions in that they contribute to the "greenhouse effect." The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Greenhouse gases occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

[14] United States Environmental Protection Agency. Frequently Asked Questions About Global Warming and Climate Change. Back to Basics. April 2009.

Operation emissions associated with the proposed project would include GHG emissions from mobile sources (transportation), energy, water use and treatment, and waste disposal. GHG emissions from electricity use are indirect GHG emissions from the energy (purchased energy) that is produced offsite. Construction activities are short term and cease to emit greenhouse gases upon completion. Net greenhouse gas emissions may have a potentially significant environmental impact.

The previously certified Agua Mansa Commerce Center EIR addresses greenhouse gas and climate change impacts within its Air Quality section. However, as of February 2008, the date of the certified EIR, no significance thresholds had been adopted or even proposed for greenhouse gas emissions. Neither SCAQMD nor the CARB had suggested significance thresholds. Thus, it was determined in the certified EIR that it was not reasonable to identify the project as having a significant direct impact or a cumulative impact.

Because the proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan, an air quality and climate change assessment will be prepared to determine if net changes in greenhouse gas emissions resulting from the proposed project would contribute substantially to climate change impacts. Impacts related to greenhouse gas emissions will be further evaluated in a Supplemental EIR.

b) **Potentially Significant Impact [Impact AQ-6].** The City of Colton has adopted the 2010 edition of the California Building Code (Title 24), including the California Green Building Standards Code (pursuant to Colton Municipal Code 15.04.010). The proposed 13.23 acre addition to the Agua Mansa Commerce Center and proposed warehouse structure would be subject to the California Green Building Standards Code (pursuant to the Colton Municipal Code 15.04.010) that requires new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert construction waste from landfills, and install low pollutant-emitting finish materials.

Beacause the proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan, greenhouse gas emissions may result in inconsistencies with state and/or regional greenhouse gas reduction plans. Therefore, impacts related to criteria pollutant emissions will be analyzed further in a Supplemental EIR.

4.8 – Hazards and Hazardous Materials

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

a) **Potentially Significant Impact [Impact HAZ-1].** According to the certified EIR for the Agua Mansa Commerce Center, it is possible that future potential uses could result in some hazardous materials being transported to and from the Agua Mansa Commerce Center development.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Impacts due to routine transport, use, or disposal of hazardous materials will be evaluated in a Supplemental EIR.

b) **Potentially Significant Impact [Impact HAZ-1].** There are no open cases of leaking underground storage tanks (LUST) on previously approved Agua Mansa Commerce Center site.[15] A Phase I Environmental Site Assessment (ESA) was prepared by Farallon Consulting and did not reveal recognized environmental conditions (RECs) in connection with the previously approved Agua Mansa Commerce Center.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Construction of the proposed project will require the use of hazardous materials such as asphalt, paints, and other solvents. Construction activities could also produce hazardous wastes associated with the use of such products. No permanent structures exist on the 13.23-acre proposed addition to the Agua Mansa Commerce Center. Thus, releases from asbestos and lead are not anticipated to be a concern. Impacts related to hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment will be evaluated in a Supplemental EIR.

c) **No Impact.** Significant impacts could occur if hazardous emissions are emitted or the handling of hazardous or acutely hazardous materials, substances, or waste occurs within one-quarter mile of an existing or proposed school. According to the Colton Joint Unified School District, no schools are located within one-quarter mile of the project site.[16] Therefore, impacts will be consistent with the certified EIR; no impacts will occur.

[15] California State Water Resources Control Board. GeoTracker. https://geotracker.waterboards.ca.gov/ [March 6, 2014]
[16] Colton Unified School District. School Information. Schools Map. http://www.colton.k12.ca.us/education/district/district.php?sectiondetailid=1& [March 6, 2014]

d) **Less Than Significant Impact.** According to the certified EIR prepared for the Agua Mansa Commerce Center a database search of federal and state environmental records was performed by Environmental Data Resources (EDR). Two sites were identified by the EDR database search: the adjacent power plant to the north and Aguinaga Company, Inc. The EDR database report indicated that the power plant is located at 2040 Agua Mansa Road has not experienced any releases and therefore does not indicate an environmental concern for the site. Aguinaga Company, Inc. (2046 Agua Mansa Road) previously housed a green waste composting area. The company was permitted to receive a maximum of 70 tons of green waste per day; however, according to the certified EIR, the site is not being used as a composting facility and is no longer receiving waste. All previous composting stockpiles have been removed from the site. Based on the review of the databases, release facilities with significant potential to have impacted the site were not identified in the EDR database report, and no further assessment was warranted.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The proposed project site is not located on a site listed on the State 'Cortese List', a compilation of various sites throughout the state that have been compromised due to soil or groundwater contamination from past uses. Therefore, impacts will be consistent with the certified EIR and will be less than significant.

Based upon review of the Cortese list, the project site is not:

- listed as a hazardous waste and substance site by the Department of Toxic Substances Control (DTSC),[17]
- listed as a leaking underground storage tank (LUST) site by the State Water Resources Control Board (SWRCB),[18]
- listed as a hazardous solid waste disposal site by the SWRCB,[19]
- currently subject to a Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) as issued by the SWRCB,[20] or
- developed with a hazardous waste facility subject to corrective action by the DTSC.[21]

e-f) **No Impact.** According to the certified EIR prepared for the Agua Mansa Commerce Center, the nearest airport to the project site is the Flabob Airport located approximately five miles southwest of the project site. The Agua Mansa Commerce Center is not located within an airport land use plan and is not located within two miles of a public or private airstrip. The certified EIR determined that no impact will occur.

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[17] California Department of Toxic Substances Control. EnviroStor. www.envirostor.dtsc.ca.gov/public/search.asp [March 6, 2014]
[18] California State Water Resources Control Board. GeoTracker. geotracker.waterboards.ca.gov [March 6, 2014]
[19] California State Water Resources Control Board. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit. www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf [March 6, 2014]
[20] California State Water Resources Control Board. List of Active CDO and CAO. www.calepa.ca.gov/SiteCleanup/CorteseList/CDOCAOList.xls [March 6, 2014]
[21] California Department of Toxic Substances Control. Hazardous Facilities Subject to Corrective Action. www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm#Facilities [March 6, 2014]

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The additional 13.23 acres will be located approximately the same distance from Flabob Airport and will not be located within an airport land use plan or located within two miles of a private air strip. Impacts will be consistent with the certified EIR.

g) **Less than Significant Impact.** According to the certified EIR prepared for the Agua Mansa Commerce Center, the previously approved Agua Mansa Commerce Center will not impair implementation or interfere with an emergency response or evacuation.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The project will take access from Riverside Avenue via a 30-foot driveway and an 40' driveway that may be shared with the truck terminal adjacent to the northern boundary of the project site. The project will also take access from 40-foot and 30-foot driveways on Miguel Bustamante Parkway. Interior drive aisles have a minimum width of 26 feet to provide adequate emergency access as required by the Fire Department. Impacts will be consistent with the certified EIR and less than significant impacts will occur.

h) **No Impact.** According to the certified EIR for the Agua Mansa Commerce Center, the previously approved Agua Mansa Commerce Center is buffered from wildland areas thereby decreasing the likelihood of wildland fire on the project site. There would not be a mix of wildland and industrial areas. Therefore, no impacts due to wildland fires are anticipated.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The proposed project site is buffered from wildland areas and is not designated as a Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection.[22] Impacts will be consistent with the certified EIR and no impacts will occur.

[22] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Maps. SW San Bernardino County. http://www.fire.ca.gov/fire_prevention/fhsz_maps_sanbernardinosw.php [March 6, 2014]

4.9 – Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☑	☐	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☑	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☑	☐	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☑	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☑	☐	☐	☐
f) Otherwise substantially degrade water quality?	☑	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☑	☐	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☑	☐	☐	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

a) **Potentially Significant Impact [Impact HWQ-2].** Violations of water quality standards or waste discharge requirements, or degradation of water quality can result in potentially significant impacts to water quality and result in environmental damage or sickness in people. The project would result in a significant impact to water quality if water quality standards, waste discharge requirements, or degradation of water quality occurred.

Point-source pollutants can be traced to their original source. Point-source pollutants are discharged directly from pipes or spills. Raw sewage draining from a pipe directly into a stream is an example of a point-source water pollutant. The project consists of the construction of 447,330 square foot warehouse and does not propose any uses that would generate point source pollutants.

Non-point-source pollutants (NPS) cannot be traced to a specific original source. NPS pollution is caused by rainfall or snowmelt moving over and through surface areas. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water. These pollutants include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas
- Oil, grease, and toxic chemicals from urban runoff and energy production
- Sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks
- Salt from irrigation practices and acid drainage from abandoned mines
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems
- Atmospheric deposition and hydromodification

Impacts associated with water pollution include ecological disruption and injury or death to flora and fauna, increased need and cost for water purification, sickness or injury to people, and degradation or elimination of water bodies as recreational opportunities. Accidents, poor site management or negligence by property owners and tenants can result in accumulation of

pollutant substances on parking lots, loading and storage areas, or result in contaminated discharges directly into the storm drain system.

The proposed project would disturb approximately 21.07 acres of land and therefore will be subject to National Pollutant Discharge Elimination System (NPDES) permit requirements during construction activities in addition to standard NPDES operational requirements. The proposed project will require submittal to the local reviewing agency, the San Bernardino County Flood Control, a Storm Water Pollution Prevention Plan (SWPPP) that will include BMPs protects water quality during construction activities.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts to water quality standards or waste discharge requirements will be further analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [Impact HWQ-3].** If the project removed an existing groundwater recharge area or substantially reduces runoff that results in groundwater recharge, a potentially significant impact could occur. According to the certified EIR for the Agua Mansa Commerce Center, the previously approved Agua Mansa Commerce Center site is underlain by the Riverside-Arlington Subbasin of the Upper Santa Ana Valley Basin. Water to the Agua Mansa Commerce Center will be provided by the West Valley Water District (WVWD). There are no developed groundwater recharge facilities on the previously approved Agua Mansa Commerce Center area.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts to groundwater recharge will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact HWQ-4].** Potentially significant impacts to the existing drainage pattern of the site or area could occur if development of the project results in substantial on- or off-site erosion or siltation.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Lots 1, 2, and 3 drainage is directed south into the detention basin across Miguel Bustamante Parkway, while the drainage for the northern Parcel #0260-091-87 is directed to drain under Miguel Bustamante Parkway through the channel along the basin into the Santa Ana River. Underground infiltration chambers will be constructed beneath parking areas located to the north and south of the proposed warehouse and beneath driveways for water quality/detention purposes for areas that are not tabled to the existing water quality basin. No streams or rivers are located on the proposed project site; thus the project would not result in the alteration of any stream course. Impacts to the existing drainage pattern of the site will be analyzed in a Supplemental EIR.

d) **Potentially Significant Impact [HWQ-1].** Potentially significant impacts to the existing drainage pattern of the site or area could occur if development of the project results in substantial increases in runoff that result in on- or off-site flooding.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and

approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The property drainage areas are split on the site. Lots 1, 2, and 3 drainage is directed south into the detention basin across Miguel Bustamante Parkway, while the drainage for the northern Parcel #0260-191-87 is directed to drain under Riverside Avenue through the channel along the basin into the Santa Ana River.

According to the Preliminary Hydrology Calculation Report prepared by Thienes Engineering, runoff tributary to the northeast corner of the site (nodes 510-511) will be intercepted in catch basins and conveyed through or around the northerly portion of the project site. The 100-year peak flow rate for this area is approximately 31.2 cubic feet per second (cfs). Runoff from the offsite area tributary to the northwest corner of the site (nodes 500-512) will also be intercepted by catch basins and conveyed through the project site via a proposed storm drain system. The 100-year peak flow rate at this location is approximately 45.2 cfs. The total off-site 100-year peak flow tributary to the project site from the north is approximately 70.3 cfs. Runoff from the northerly half and the westerly portion of the project site generally drain to a proposed storm drain system from east to west and traverses south and ultimately conveyed to an existing reinforced concrete box culvert located at the southeast corner of the site. Offsite runoff tributary to the project site (45.20 cfs and 31.20 cfs) is added to the proposed storm drain system. Total 100-year peak flow rate for these areas (nodes 120 to 126 including nodes 511 and 512) is approximately 92.7 cfs. Runoff from the southerly half portion of the site drains to a proposed storm drain line from north to south and is ultimately conveyed to an existing storm drain system located in Miguel Bustamante Parkway. The 100-year peak flow rates for these areas are 5.80 cfs (nodes 200 to 202) and 16.50 cfs (nodes 210 to 213). The remaining westerly and southerly landscaped areas sheet flow to Riverside Avenue and Miguel Bustamante Parkway.

Underground infiltration chambers will be constructed beneath parking areas located to the north and south of the proposed warehouse and beneath driveways for water quality/detention purposes for areas that are not tabled to the existing water quality basin. No streams or rivers are located on the proposed project site; thus the project would not result in the alteration of any stream course. Impacts to the existing drainage pattern of the site will be analyzed in a Supplemental EIR.

e) **Potentially Significant Impact [Impact HWQ-4].** A potentially significant impact could occur if the project creates or contributes runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. The WQMP lists expected stormwater pollutants of concern for the proposed project as pathogens, nitrogen, and metals. As was mentioned above, underground infiltration chambers will be constructed beneath parking areas located to the north and south of the proposed warehouse and beneath driveways for water quality/detention purposes for areas that are not tabled to the existing water quality basin. Furthermore, during construction, the project applicant would be required to develop and implement a SWPPP as required by law; this would prevent polluted runoff from leaving the construction site. As mentioned above, per the WQMP, non-structural and structural source control BMPs and LID site design practices will also be incorporated into the proposed project to reduce pollutants in stormwater. Impacts to the existing stormwater drainage system and impacts related to additional sources of polluted runoff will be analyzed in a Supplemental EIR.

f) **Potentially Significant Impact.** As mentioned above in 4.9 a) and e), potential impacts to water quality will be evaluated in a Supplemental EIR.

g) **No Impact.** The proposed project does not include housing. Impacts are consistent with the certified EIR; no impact will occur.

h) **Potentially Significant Impact [Impact HWQ-6].** The previously approved Agua Mansa Commerce Center is located within a designated 100-year flood hazard area [23]; however, to protect the previously approved project from flooding, it was determined that all of the buildings be raised above the Base Flood Elevations. Therefore, the project would not impede or redirect flood flows.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts related to 100-year flood hazard zones will be analyzed in a Supplemental EIR.

i) **Potentially Significant Impact [Impact HWQ-6].** The Seven Oaks Dam is located upstream of the previously approved Agua Mansa Commerce Center and the 13.23 acre addition to the Agua Mansa Commerce Center (proposed project). However, the proposed project is not located within the designated inundation area for the dam.[24] Numerous levees are located along the banks of the Santa Ana River both within the City and upstream that may protect the project site from flooding. However, these levees will be subject to recertification by the County and accreditation by FEMA to assure proper protection of affected downstream areas. Impacts related to dam inundation will be analyzed in a Supplemental EIR.

j) **No Impact.** The proposed project is not located near any lakes or other bodies of water that would be subject to potential seiche. The proposed project site is located approximately forty miles from the Pacific Ocean. Due to the distance, no impact from tsunami or earthquake induced seiche would likely occur. Impacts will be consistent with the certified EIR; no impacts will occur.

The potential for mudflow is low, since the project site does not lie below steep slopes, within a designated floodplain area, or near any area with substantial exposed natural soil. However, the City's building code provides minimum standards of construction in case of flooding or mudflow such as anchoring, placement and type of utility equipment, building materials, building elevation and flood proofing (i.e., water-tight walls and resistance to hydrostatic pressures and buoyancy), should mudflow occur. Impacts will be consistent with the certified EIR. No impacts are likely to occur.

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[23] FEMA. Flood Insurance Rate Maps. Map Numbers 06071C8686H, Panel 8686H. August 28, 2008.
[24] County of San Bernardino. General Plan Hazard Overlay Map. FH30b. 2010.

4.10 – Land Use and Planning

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☑	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

a) **No Impact.** The proposed project is within the existing city limits of the City of Colton and is primarily undeveloped. The project location would not divide any established community. Further, the project is consistent with General Plan Land Use Element land use designations for the site adjacent to the project site, which include industrially zoned parcels. As proposed, the development meets the City's intent to develop the area. This is consistent with the determination provided in the Initial Study prepared for the certified EIR. [25] No impacts are anticipated.

b) **Less than Significant Impact.** The project site is designated as Heavy Industrial (M-2) by the City of Colton zoning and land use maps. The proposed project is not in conflict with any currently adopted policies. Project completion may take between one (1) and four (4) years, depending on market conditions. The project will require a Tentative Parcel Map, a Design Review Application, Historic Certificate of Appropriateness, and a Variance (for a decrease in parking spaces). Impacts are anticipated to be less than significant, which is consistent with the determination provided in the Initial Study prepared for the certified EIR.

c) **No Impact.** The project is not located within a wildlife conservation plan or natural community conservation plan. Therefore, it will not conflict with any applicable habitat conservation plan or natural community conservation plan. This is consistent with the determination provided in the Initial Study prepared for the certified EIR.

[25] Agua Mansa Commerce Center Initial Study. July 2, 2007.

4.11 – Mineral Resources

Would the project:

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

a-b) **Potentially Significant Impact [Impact MR-1].** The project site is identified within the City of Colton General Plan as being located in a Mineral Resource Zone (2), and therefore has potential mineral resources. Development of the proposed project could result in loss of mineral resources. Impacts to mineral resources will be analyzed in a Supplemental EIR.

4.12 – Noise

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☑	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☑	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Noise can be defined as unwanted sound. Sound (and therefore noise) consists of energy waves that people receive and interpret. Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called *bels*. In order to provide a finer description of sound, a *bel* is subdivided into ten *decibels*, abbreviated dB. To account for the range of sound that human hearing perceives, a modified scale is utilized known as the A-weighted decibel (dBA). Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dBA when it passes an observer, two 2 cars passing

simultaneously would not produce 140 dBA. In fact, they would combine to produce 73 dBA. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by 3 dBA. Conversely, halving the traffic volume or speed will reduce the traffic noise level by 3 dBA. A 3 dBA change in sound is the beginning at which humans generally notice a *barely perceptible* change in sound and a 5 dBA change is generally *readily perceptible*.[26]

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise has been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:[27]

L_{EQ} (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L_{EQ} is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00pm to 10:00pm and after addition of ten decibels to sound levels in the night from 10:00pm to 7:00am.

L_{DN} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00pm and before 7:00am.

CNEL and L_{DN} are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L_{EQ} is better utilized for describing specific and consistent sources because of the shorter reference period.

a) **Potentially Significant Impact.** The City of Colton General Plan has established noise compatibility standards for land uses throughout the city.[28] Exterior noise levels for commercial land uses are considered acceptable up to 65 dBA CNEL during the day and 55 dBA CNEL at night. The Zoning Code Section 18.42.040 limits noise levels radiated by any facility to 65 dBA when measured at the property line and Municipal Code Section 9.16.010 which generally prohibits excessive noise. Existing land uses within the project vicinity generally consist of industrial facilities. According to the certified EIR, the nearest homes may experience worst-case unmitigated peak construction noise levels up to 59 dBA for brief periods of time.

The proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the site are used as a driveway and truck trailer storage. Impacts related to generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies will be further analyzed in a Supplemental EIR.

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[26] California Department of Transportation. Basics of Highway Noise: Technical Noise Supplement. November 2009.
[27] California Governor's Office of Planning and Research. General Plan Guidelines. 2003
[28] City of Colton General Plan Noise Element. 1987.

b) **Potentially Significant Impact.** Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

Impacts related to excessive groundborne vibration or groundborne noise levels will be analyzed in a Supplemental EIR.

c) **Potentially Significant Impact [Impact N-2].** The proposed project would increase ambient noise levels if it increased traffic generation in the project vicinity. According to the certified EIR, ambient noise increases due to the project will not exceed the 3 dB threshold criteria. The certified EIR for the Agua Mansa Commerce Center determined that long-term on-site noise impacts would be normally acceptable for office and warehouse uses. Impacts related to permanent increases in ambient noise levels in the project vicinity will be analyzed in a Supplemental EIR.

d) **Potentially Significant Impact [Impact N-1].** Operationally, the project will result in periodic landscaping and other occasional noise generating activities. These activities are common in industrial uses and do not represent a substantial increase in periodic noise. According to the certified EIR, ambient noise increases due to the project will not exceed the 3 dB threshold criteria. Furthermore, the project is subject to Zoning Code Section 18.42.040 that limits noise levels radiated by any facility to 65 dBA when measured at the property line and Municipal Code Section 9.16.010 which generally prohibits excessive noise. The certified EIR determined that the noise from the proposed project would be primarily contained inside the buildings and would be mitigated by the buildings themselves.

Impacts related to temporary or periodic increases in ambient noise levels in the project vicinity will be analyzed in a Supplemental EIR.

e,f) **No Impact.** The project is located approximately 3.5 miles northeast of Flabob Airport and 7.5 miles southwest of the San Bernardino International Airport (formerly Norton Air Force Base). The project is located outside of the 65 dBA CNEL noise contours of both Flabob Airport and the former Norton Air Force Base.[29] [30] Impacts are consistent with the certified EIR; no impact will occur.

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[29] Riverside County Airport Land Use Commission. Riverside County Airport Land Use Compatibility Plan – Flabob Airport. 2004.
[30] City of Colton General Plan Noise Element.

4.13 – Population and Housing

Would the project:

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

a) **Less than Significant Impact.** The 2012 Regional Transportation Plan (RTP) growth projections are developed utilizing a comprehensive analysis of fertility, mortality, migration, labor force, housing units, and local policies such as land use plans. Growth projections for the 2012 RTP predicted a citywide employment growth between 2008 and 2020 of approximately 1,500 and 5,600 by 2035. This project's estimated 381 employees represent approximately 25% and 6% of that citywide projection for 2020 and 2035 respectively. This project would accommodate additional local employment that is well within the growth forecasts developed for the RTP. Furthermore, the project does not include any infrastructure extension or expansion and therefore will not result in any indirect population growth. Impacts will be consistent with the certified EIR for the Agua Mansa Commerce Center; impacts will be less than significant.

b) **No Impact.** Approximately eleven acres of the project site are currently used for construction materials and equipment storage. A driveway and truck trailer storage associated with the adjacent truck terminal occupies the northern 2.17 acres of the project site. The remaining 8.54 acres on the southern portion of the project site are undeveloped but have been graded. The project site does not contain any housing and does not require removal of any residential units, thus no impact will occur. Impacts will be consistent with the certified EIR for the Agua Mansa Commerce Center.

c) **No Impact.** Displacement, in the context of housing, can generally be defined as persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of

habitual residence.[31] There is no housing located onsite, and therefore no residents. As such, there is no *forced or obliged* removal of persons, and therefore no displacement. Impacts will be consistent with the EIR certified for the Agua Mansa Commerce Center; no impacts would occur.

[31] The Brookings Institute. Handbook for Applying the Guiding Principles on Internal Displacement. 1999.

4.14 – Public Services

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?	☑	☐	☐	☐
b) Police protection?	☑	☐	☐	☐
c) Schools?	☐	☐	☐	☑
d) Parks?	☐	☐	☐	☑
e) Other public facilities?	☐	☐	☐	☑

a) Potentially Significant Impact [Impact PS-1]. The proposed project includes the construction of a speculative warehouse distribution facility that encompasses 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located at the northeast corner of Riverside Avenue at Miguel Bustamante Parkway on 21.07 acres. The City of Colton Fire Department (CFD) provides fire protection and emergency medical response services in the City of Colton. The project site is primarily serviced by Station No. 213, located at 1100 South La Cadena Drive, approximately 2.5 miles northeast of the project site.

The certified EIR for the Agua Mansa Commerce Center determined that the proposed industrial development would not likely create a significant increase in calls and was not expected to impact the City's response time. However, the proposed project will add 13.23 acres to the approved Agua Mansa Commerce Center Master Plan. Approximately eleven acres are used for construction materials and equipment storage and approximately 2.17 acres in the northern portion of the project site are used as a driveway and truck trailer storage. Thus, impacts related to expansion of fire protection services will be analyzed in a Supplemental EIR.

b) Potentially Significant Impact [Impact PS-2]. The proposed project includes the construction of a speculative warehouse distribution facility that encompasses 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located at the northeast corner of South Riverside Avenue at Miguel Bustamante Parkway on 21.07 acres. The City of Colton Police Department (CPD) provides police protection services in the City of Colton. The project site is served by the main CPD office located at 650 North La Cadena Drive, approximately 3.5 miles northeast of the project site.

According to the certified EIR for the Agua Mansa Commerce Center, the Colton Police Department included a number of conditions of approval to ensure that potential impacts would be reduced. The certified EIR also determined that development impact fees would be collected prior to the issuance of building permits to support public facilities such as the police department.

Since the proposed project will add 13.23 acres to the Agua Mansa Commerce Center Master Plan, potential impacts related to expansion of police protection services will be analyzed in a Supplemental EIR.

c) No Impact. The proposed industrial project will result in indirect incremental population growth and potential associated growth in students within the Colton Joint Unified School District. In accordance with California Government Code and the Colton Joint Unified School District, standard school facility impact fees will be paid to offset any incremental impacts of the proposed project. According to AB 2926, payment of developer fees constitutes adequate mitigation for any project-related impacts to school facilities. Impacts will be consistent with the Initial Study prepared for the certified EIR. No impacts to will occur.

d) No Impact. The proposed industrial project will not result in direct population growth that would incrementally impact recreation facilities. Impacts to recreation facilities are further discussed in section 4.15. Any expansion or new construction of recreation facilities resulting from the proposed project would be subject to its own environmental review pursuant to CEQA. No impact will occur.

e) No Impact. The proposed industrial project will result in employment growth and indirectly in population growth that would incrementally impact other public services such as libraries or hospitals. Any incremental impact would be addressed through payment of property taxes that go to serve City and County public services. With the payment of development impact fees and property taxes, no impacts will occur to other public services. Impacts are consistent with the Initial study prepared for the certified EIR; no impacts will occur.

4.15 – Recreation

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

a) **No Impact.** The proposed industrial project will not directly result in population growth that would incrementally impact recreation facilities. The City's Quimby Act Fee Ordinance requirement for directly providing parkland is only applicable to residential subdivisions. Impacts are consistent with the Initial Study prepared for the certified EIR; no impact would occur.

b) **No Impact.** The proposed industrial park would not incrementally increase the impact on surrounding and regional parks. Impacts are consistent with the Initial Study prepared for the certified EIR; no impact would occur.

4.16 – Transportation and Traffic

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☑	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☑	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☑	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☑	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☑	☐

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☑	☐

a) **Potentially Significant Impact [Impact TC-1].** Construction of the proposed project could reduce the performance of the circulation system if the project-related vehicle trips or any proposed improvements decrease the Level of Service (LOS) on existing streets. In addition, impacts could occur if project improvements reduce the performance of any mode of transportation including mass transit and non-motorized travel. Impacts related to the performance of the circulation system will be analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [Impact TC-1].** The proposed project could result in significant impacts if it conflicts with the San Bernardino County Congestion Management Program (CMP) through reducing the Level of Service of a program identified road to a rating of "E" or below for designated roads or highways. The CMP also establishes a threshold of 100 two-way peak freeway trips or threshold of 50-two way peak arterial link trips to require further analysis by CalTrans or San Bernardino Association of Governments (SANBAG) who oversee preparation and implementation of the CMP. According to the certified EIR for the Agua Mansa Commerce Center, the nearest affected CMP designated freeways are I-10 and SR-60 and arterial links are Riverside Avenue and Agua Mansa Road. Impacts related to CMP designated roads or highways will be analyzed in a Supplemental EIR.

c) **Less Than Significant Impact.** The proposed project is located approximately 3.5 miles northeast of Flabob Airport in Riverside County and approximately eight miles southwest of the San Bernardino International Airport. The proposed building would not encroach into air traffic space and this project would have no effects on demand for local air service or volumes of air traffic. The proposed project will not alter air traffic patterns. Impacts will be consistent with the certified EIR; impacts will be less than significant.

d) **Potentially Significant Impact.** If the project will substantially increase hazards due to a design feature, a significant impact could occur. Impacts related to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses will be analyzed in a Supplemental EIR. An updated site plan will be included in the Supplemental EIR which shows the appropriate turning radii for emergency vehicles and the largest expected semitrailer truck size. Furthermore, the Supplemental EIR will discuss how the project proposes to ensure that the 26-foot wide fire access lane will be kept clear of trucks parked adjacent to the building throughout the day. The Supplemental EIR will also address trucks queuing into the site from Miguel Bustamante Parkway and Riverside Avenue. In addition, the Supplemental EIR will address any off-site access improvements and measures to address potential access issues. Driveway sight distance assessments for truck access to the project site from Riverside Avenue and Miguel Bustamante Parkway.

e) **Less than Significant Impact.** The proposed project will be accessible via Riverside Avenue and Miguel Bustamante Parkway. The project site plan identifies the 26 foot wide fire department access and turning radii entering the site and within the site, which are adequate to serve the site in case of an emergency. Impacts will be consistent with the certified EIR; the project would have less than significant impacts to the provision of adequate emergency access.

f) **Less than Significant Impact.** The project will not result in conflicts with adopted policies or plans related to alternative modes of travel, such as bus transit, bicycles or walking paths. The project is not located adjacent to or near an existing bike path or pedestrian facility, nor does the City have adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities that apply to the proposed project site. Impacts will be consistent with the certified EIR; less than significant impact will occur.

4.17 – Utilities and Service Systems

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☑	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☑	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☑	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☑	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☑	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☑	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

a) **Potentially Significant Impact [Impact PU-1].** Because of the addition of land area and building area to the Agua Mansa Commerce Center, the proposed project could affect Regional Water Quality Control Board treatment standards by increasing wastewater production, which

would require expansion of existing facilities or construction of new facilities. Exceeding the RWQCB treatment standards could result in contamination of surface or ground waters with pollutants such as pathogens and nitrates.

According to the certified EIR for the Agua Mansa Commerce Center, sewage discharge from the project site will be treated at the City of Colton Wastewater Treatment Plant. Impacts related the project's impact on wastewater treatment requirements will be analyzed in a Supplemental EIR.

b) **Potentially Significant Impact [Impact PU-2].** Colton's water supply is comprised entirely of groundwater extracted from the San Bernardino Basin Area (Bunker Hill Basin portion), the Rialto-Colton Basin, and the Riverside Basin (Riverside North Basin portion). The City of Colton's potable water is supplied by deep water wells. Colton's existing potable water system facilities consist of 15 wells, five main booster pumping plants, nine storage reservoirs, two pressure reducing facilities, and over 120 miles of water transmission and distribution pipelines. The proposed project will connect to an existing twelve inch water main located under Riverside Avenue and an existing twelve inch water line located under Miguel Bustamante Parkway.

The City of Colton Water and Wastewater Department will provide sewer service to the site. Sewage discharge from the project site will be treated at the City of Colton Wastewater Treatment Plant. The proposed project will discharge common wastewater. The project will be served by a new 8" sewer force main located under Riverside Avenue which connects under Agua Mansa and to the City of Colton treatment facility located on South Rancho Road.

The existing Sewer Lift Station, transformer pad, and maintenance building will be relocated on-site, southwest of their current locations near the corner of Riverside Avenue and Miguel Bustamante Parkway, to accommodate the proposed building. The new sewer lift station will be constructed and operational prior to the demolition of the existing sewer lift station. The adequacy of existing sewer mains to convey project-related wastewater flows will be evaluated in a Supplemental EIR.

c) **Potentially Significant Impact [Impact PU-3].** Potentially significant impacts could occur as a result of the proposed project if stormwater runoff was increased to a level that would require construction of new storm drainage facilities. The proposed project will include underground stormwater infiltration chambers located on the north, south, and east sides of the proposed building beneath driveways. New storm drains and catch basins are proposed throughout the perimeter of the site. A proposed storm drain will be located in the northern and western driveways, in parking stalls in the southern driveway, and in eastern driveways. The impacts of the proposed project related to the need for additional local storm drain capacity will be further evaluated in a Supplemental EIR.

d) **Potentially Significant Impact [Impact PU-4].** The project could result in significant impacts if the project required additional water supplies other than those that are currently entitled. Impacts to water supply will be further evaluated in a Supplemental EIR.

e) **Potentially Significant Impact.** As detailed in Sections 4.17.a) and 4.17.b), sewage discharge from the project site will be treated at the Colton Wastewater Treatment Plant. The proposed project will discharge common wastewater. The project will be served by a new 8" sewer force main located under Riverside Avenue which connects under Agua Mansa and to the City of Colton treatment facility located on South Rancho Road. Wastewater treatment capacity will be further evaluated in a Supplemental EIR.

f) **Potentially Significant Impact [Impact PU-5].** Significant impacts could occur if the proposed project will cause or substantially contribute to exceedance of the existing permitted landfill capacity or violates federal, state, and local statutes and regulations.

Per the CalRecyle, California's trucking and warehousing disposal rate was 1.9 tons per employee year.[32] Based upon this estimate, the proposed project's 381 employees would generate approximately 723.9 tons per year. This represents less than one percent of the yearly allowable disposal rates for the Colton, Mid-Valley, California Street Landfills, the main recipients of the City's landfill waste.[33] Impacts related to landfill capacity will be evaluated in a Supplemental EIR.

g) **No Impact.** The proposed project is required to comply with all pertinent federal, state, and local statutes and regulations related to solid waste as a standard project condition of approval. Impacts will remain consistent with the certified EIR; no impact will occur.

---

[32] CalRecyle. Waste Disposal by Business Grouping. http://www.calrecycle.ca.gov/wastechar/DispRate.htm [June 4, 2014]

[33] CalRecycle. Solid Waste Information System. http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx [June 4, 2014]

4.18 – Mandatory Findings of Significance

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

a) **Potentially Significant Impact.** The project site is located adjacent to the Santa Ana River and impacts related to biological resources and the visual character of site and its surroundings may occur. The project may impact sensitive species and migratory birds as indicated in Section 4.4. Furthermore, adverse impacts to historical, cultural, and paleontological resources may occur as discussed in Section 4.5. The environmental analysis provided in Section 4.3 concludes that impacts related to emissions of criteria pollutants and other air quality impacts may pose environmental impacts. In addition, Sections 4.7 and 4.12 conclude that impacts related to climate change and noise may occur. The City hereby finds that the proposed project may result in impacts and a Supplemental Environmental Impact Report will be prepared.

b) **Potentially Significant Impact.** Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and probable future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network elements, air basin, watershed, or other physical conditions. Such impacts could be short-term and temporary, usually consisting of overlapping construction impacts, as well as long term, due to the permanent land use changes involved in the proposed project. According to the certified EIR for the Agua Mansa Commerce Center, cumulative impacts considered to be less than significant include aesthetics, biological resources, cultural resources, geology and soils, hydrology and water quality, hazards, mineral resources, noise, public services, traffic and circulation, and public utilities. Cumulative Impacts related to air quality will be analyzed further in the Supplemental EIR. The City hereby finds that the proposed project may result in cumulative impacts and a Supplemental Environmental Impact Report will be prepared.

c) **Potentially Significant Impact.** Based on the analysis of the proposed project's impacts in the responses to Sections 1 thru 17, there is indication that the proposed project could result in substantial adverse effects on human beings. Based on the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings may occur and a Supplemental Environmental Impact Report will be prepared.

5 References

5.1 – List of Preparers

City of Colton (Lead Agency)

659 N La Cadena Drive
Colton, California 92324
909-370-5079

- Mark Tomich, Development Services Director

MIG|Hogle-Ireland (Environmental Analysis)

1500 Iowa Avenue, Suite 110
Riverside, California 92507
951-787-9222

- Christopher Brown, Director of Environmental Services, Southern California
- Savannah Richards, Project Assistant

5.2 – Persons and Organizations Consulted

- None

NOTICE OF PREPARATION

TO:		FROM:	City of Colton Development Services Department 659 N. La Cadena Drive Colton, California 92324

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report.

The City of Colton will be the Lead Agency and will prepare a Supplemental Environmental Impact Report (SEIR) for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the SEIR prepared by our agency when considering your permit or other approval for the project, if applicable..

The project description, location, and the potential environmental effects are contained in the attached materials.

☒	A copy of the Initial Study IS attached.
☐	A copy of the Initial Study IS NOT attached.
☐	The proposed project IS considered a project of statewide, regional or areawide significance.
☒	The proposed project IS NOT considered a project of statewide, regional or areawide significance.
☒	The proposed project WILL affect highways or other facilities under the jurisdiction of the State Department of Transportation.
☐	The proposed project WILL NOT affect highways or other facilities under the jurisdiction of the State Department of Transportation.
☐	A scoping meeting WILL be held by the Lead Agency.
☒	A scoping meeting WILL NOT be held by the Lead Agency.

Your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. The public notice period will begin on Monday July 21, 2014 and end on August 19, 2014.

Please send your response to Mark Tomich, Development Services Director at the address shown above. We will need the name of a contact person in your agency.

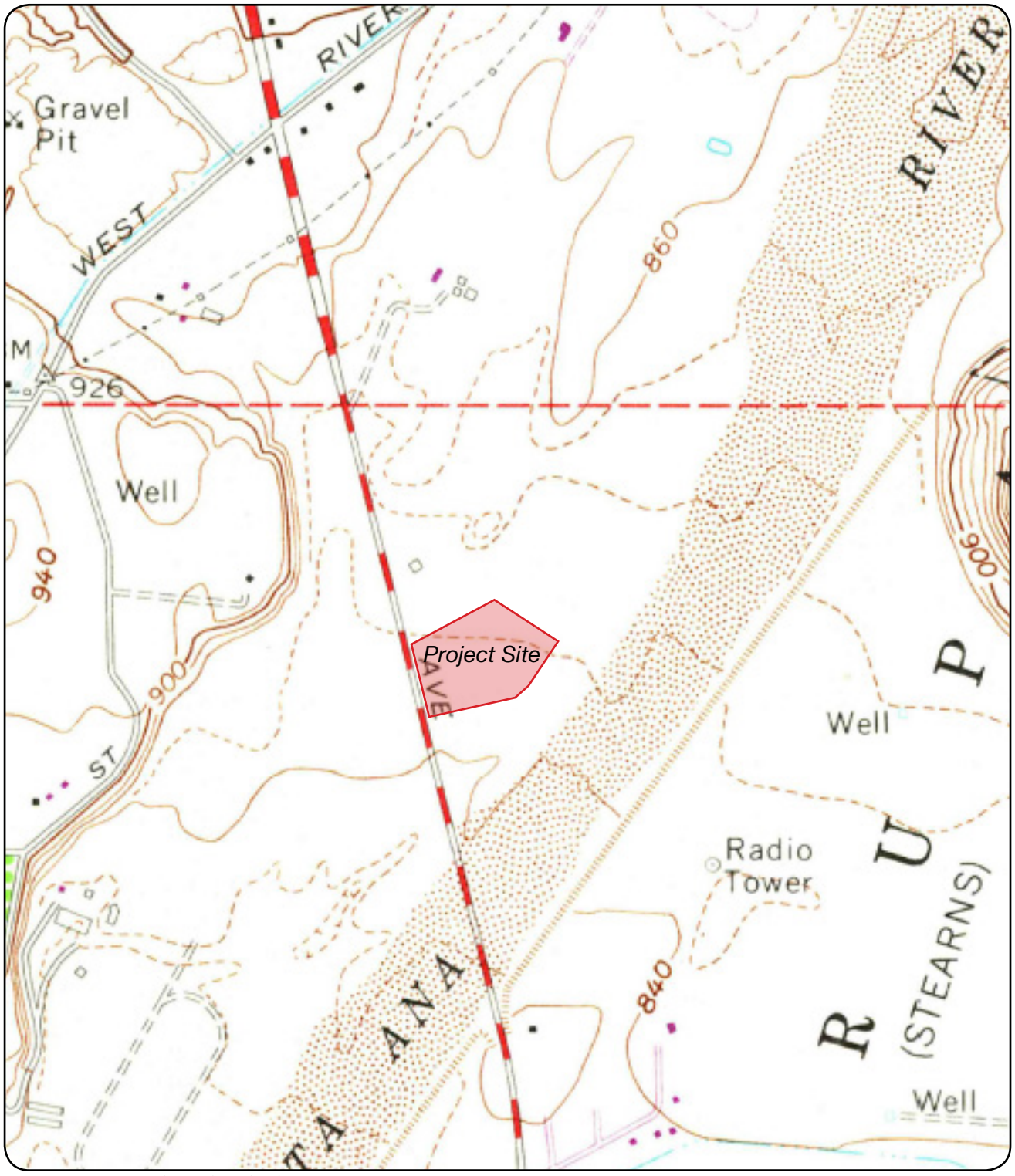
Project Title:	Agua Mansa Commerce Center Building 1
Project Location – Specific: Identify street address and cross street or attach a map showing project site (preferably a U.S.G.S. 15' or 7 ½' topographical map identified by quadrangle name):	Northeast Corner of Riverside Avenue and Miguel Bustamante Parkway Colton, California
Project Description:	The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres. The SEIR will examine the following topics identified in the CEQA Environmental Checklist (CEQA Guidelines, Appendix G): Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Mineral Resources, Noise, Public Services, Transportation/Traffic, and Utilities/Service Systems.
Project Applicant (if any):	Prologis 2817 East Cedar Street, Suite 200 Ontario, California 91761
California Environmental Protection Agency Hazardous Waste List (if applicable):	The proposed project site is not located on a site listed on the State Hazardous Waste List.

Date: July 21, 2014	Contact:	Mark Tomich
	Title:	Development Services Director
	Telephone:	909-370-5523

Consulting firm retained to prepare Draft SEIR (if applicable):

Name:	MIG | Hogle-Ireland
Address:	1500 Iowa Avenue, Suite 110
City/State/Zip:	Riverside, California 92507
Contact Person:	Christopher Brown, Director of Environmental Services

Reference: California Code of Regulations, Title 14 (CEQA Guidelines) Sections 15082(a), 15103, 15375.



Source: USGS San Bernardino South Quadrangle

Not to Scale

Project Location Map
San Bernardino South USGS Quad

Agua Mansa Commerce Center - Building 1
Colton, California

http://www.migcom.com • 951-787-9222

MIG | Hogle-Ireland

City of Riverside
Planning Department
3900 Main Street
Riverside, CA 92522

City of Grand Terrace
Planning Department
22795 Barton Road
Grand Terrace, CA 92324

Pacific Telephone
Right of Way Office
3939 E. Coronado, 1st Floor
Anaheim, CA 92807

San Bernardino County Flood Control
Environmental Management Div.
Rm. 129
825 East Third Street
San Bernardino, CA 92415

City of Loma Linda
Community Development Dept.
25541 Barton Road
Loma Linda, CA 92354

Southern California Edison
Real Estate Operations
Attn: Mark Meizner
14803 Chestnut Street
Westminister, CA 92683

Santa Fe Pacific Pipeline Co.
Attn: Don R. Quinn
1100 Town and Country Road
Orange, CA 92868

SANBAG
1170 West 3rd Street, 2nd Floor
San Bernardino, CA, 92410

San Bernardino County
Solid Waste Management Department
222 W. Hospitality Lane, 2nd Floor
San Bernardino, CA 92415-0017

San Bernardino County
County Clerk Division
222 West Hospitality Lane, 1st Floor
San Bernardino, CA 92415-0022

San Bernardino County
Planning Department
385 N. Arrowhead Ave., 3rd Floor
San Bernardino, CA 92415-0182

West Valley Water District
Attn: Lon Tsai, Chief Engineer
P.O. Box 920
Rialto, CA 92377-0920

City of San Bernardino
Planning Department
300 N. "D" Street
San Bernardino, CA 92418

California Regional Water Quality
Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Colton Unified School District
1212 Valencia Drive
Colton, CA 92324

City of Rialto
Planning Department
150 S. Palm
Rialto, CA 92376

Union Pacific Railroad
Attn: Richard Gonzales
19100 Slover
Bloomington, CA 92316

Omnitrans
1700 West Fifth Street
San Bernardino, CA 92411

San Bernardino County, Fire Dept.
Hazardous Materials Division
620 South "E" Street
San Bernardino, CA 92415-0153

Department of Water Resources
Division of Engineering/Real Estate Branch
ATTN: Linus A. Paulus, Senior Land Agent
1416 9th Street, Room 425
Sacramento, California 95814

Pacific Bell
Attn: Scanner
1742 E. Edinger, Room 2200
Tustin, CA 92680

Southern California Gas Company
P.O. Box 3003
Redlands, CA 92373-0306

Rialto Unified School District
Attn: Jerry Vincent
182 E. Walnut Avenue
Rialto, CA 92376

San Bernardino Valley
Municipal Water District
380 E. Vanderbilt Way
San Bernardino, CA 92408

South Coast Air Quality
Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

CalNev Pipeline Co.
2319 South Riverside Avenue
Bloomington, CA 92316

California Dept. of Transportation
Planning & Local Assistance
IGR/CEQA Review
464 West 4th Street, 6th Floor, MS722
San Bernardino, CA 92401-1400

S.C.A.G.
818 West 7th Street, 12th Floor
Los Angeles, CA 90017

United States Postmaster
Colton Office
265 N. Seventh Street
Colton, CA 92324-2897

Riverside County
Planning Department
P.O. Box 1409
Riverside, CA 92502-1409

CA Dept. of Fish & Wildlife
Leslie MacNair, Envir. Specialist
3602 Inland Empire Blvd., Ste. C220
Ontario, CA 91764

SUSAN W. CASE, INC.
susancaseinc@yahoo.com

917 Glenneyre Street, Suite 7 • Laguna Beach, CA 92651
PHONE (949) 494-6105 • FAX (949) 494-7418

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AGUA MANSA COMMERCIAL CENTER
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COLTON CA
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San Bernardino Co Flood Control Dist
825 E 3rd St
San Bernardino CA 92415

0260 091 87 0000 (2)
Amb Holdco LLC
60 State St #200
Boston MA 2109

0260 091 88 0000 (3)
Falcon Colton LLC
2200 S Riverside Ave
Colton CA 92324

0260 131 29 0000 (4)
C & R Sales Inc
3750 S Riverside Ave
Colton CA 92324

0260 131 33 0000 (5)
Teachers Ins & Annuity Assn Of Am
4675 Macarthur Ct #1100
Newport Beach CA 92660

0260 131 34 0000 (6)
Teachers Ins & Annuity Assn Of Am
4675 Macarthur Ct #1100
Newport Beach CA 92660

0260 131 35 0000 (7)
Land Corridor
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Atlanta GA 30343

0260 211 03 0000 (8)
Amb Holdco LLC
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Boston MA 2109

0260 211 04 0000 (9)
Amb Holdco LLC
60 State St #1200
Boston MA 2109

0260 221 01 0000 (10)
Amb Holdco LLC
60 State St #1200
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0260 231 01 0000 (13)
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Amb Holdco LLC
60 State St #1200
Boston MA 2109

Scott Mulkay, Prologis
2817 E Cedar Street
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Deirdre McCollister
MIG H-I
1500 Iowa Avenue, Ste 110
Riverside Ca 92507

Jaime Cruz, HPA
18831 Barden Avenue
Suite 100
Irvine Ca 92612

Michael Roberts
Thienes Engineering
14349 Firestone Blvd
La Mirada Ca 90638

CITY OF COLTON PLANNING DEPARTMENT

LETTER OF CERTIFICATION

STATE OF CALIFORNIA)
) SS
COUNTY OF SAN BERNARDINO)

I, Susan Case, HEREBY CERTIFY THAT THE ATTACHED LIST CONTAINS THE NAMES AND ADDRESSES OF ALL PERSONS TO WHOM ALL PROPERTY IS ASSESSED AS THEY APPEAR ON THE LATEST AVAILABLE ASSESSMENT ROLL OF THE COUNTY OF SAN BERNARDINO WITHIN THE AREA DESCRIBED AND FOR A DISTANCE OF FOUR HUNDRED (400) FEET FROM THE EXTERIOR BOUNDARIES OF PROPERTY LEGALLY DESCRIBED AS:

PR 18250 Lot 12 Book 332 pgs 100-105...

DATE 4/7/14 (SIGNED) Susan Case

SUBSCRIBED AND SWORN TO BEFORE ME THIS 7th DAY OF April, 20 14.

Laura Case
NOTARY PUBLIC

LAURA CASE
Commission # 1893415
Notary Public - California
Orange County
My Comm. Expires Jul 18, 2014

FILE#149714
AGUA MANSA COMMERCIAL CENTER
RIVERSIDE AVE
COLTON CA
400' OWNERS
APRIL 7 2014
0260 091 87, 221 01 TO 03

NORTH

Map Preparer:
SUSAN W. CASE, INC.
917 GLENNEYRE ST #7
LAGUNA BEACH CA 92651
949 494 6105
susancaseinc@yahoo.com

P.M. 132/47-48

Ptn. Par. 2

Par.3 3.08 AC

Par.4

7.12 AC

Par.1
(36.62 AC.)

P.M. 190/88-89

34.42 AC

Par.2
(10.98 AC.)

Par. 1
42.64 AC GR
41.77 AC. NT.

P.M. 226/25-29

Par. 2

Par.
5.25 AC GR
4.65 AC. NT.

5.15 AC

Ptn. 39

Ptn. 42

Ptn. 44

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Department of Water Resources
Division of Engineering/Real Estate Branch
ATTN: Linus A. Paulus, Senior Land Agent
1416 9th Street, Room 425
Sacramento, California 95814
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Management District
21865 E. Copley Drive
Diamond Bar, CA 91765
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Rialto, CA 92377-0920

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Tustin, CA 92680

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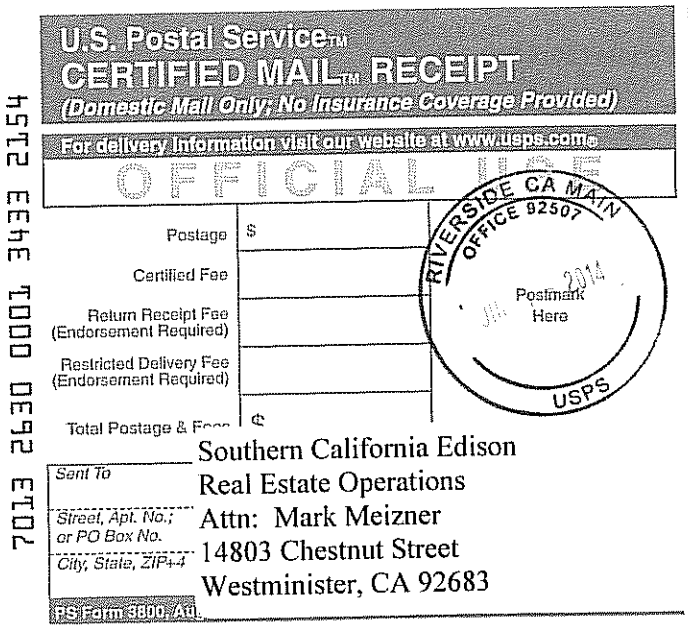
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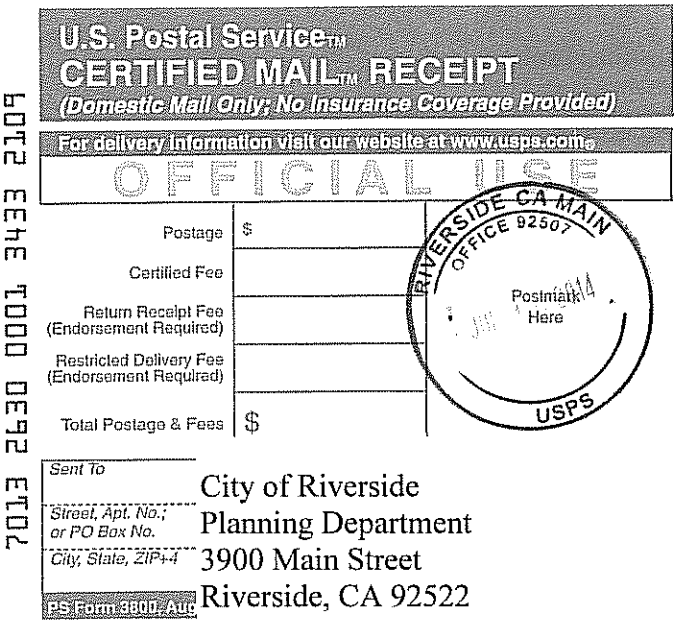
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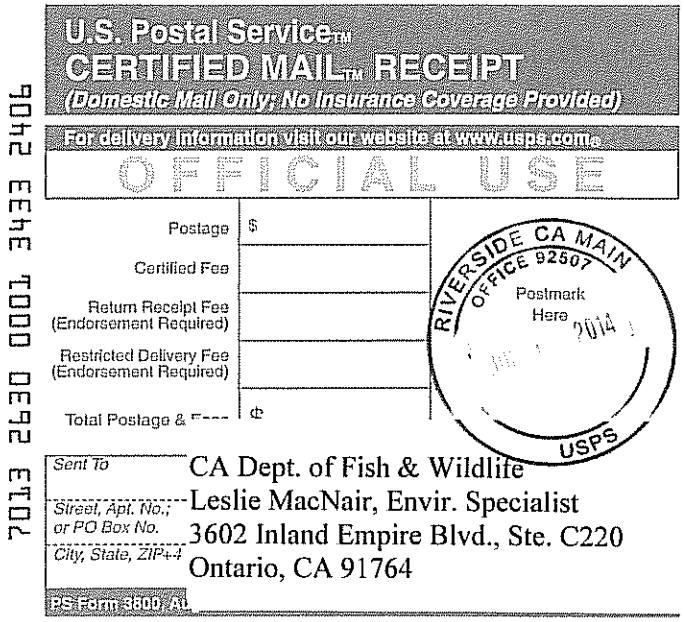
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Leslie MacNair, Envir. Specialist
3602 Inland Empire Blvd., Ste. C220
Ontario, CA 91764
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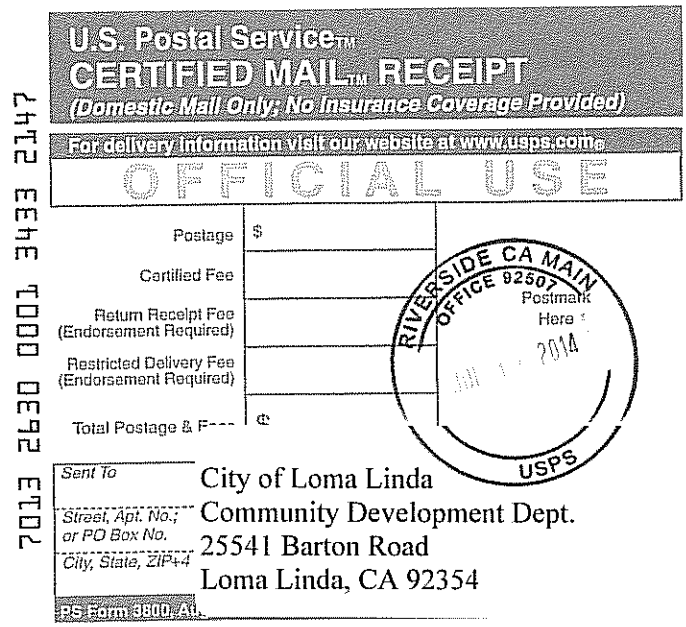
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Steve Gonzales c\o City Clerk
CITY OF COLTON/CITY CLERK
650 N. LA CADENA DRIVE
COLTON, CA - 92324

SBS#: 2646901

PROOF OF PUBLICATION

(2015.5 C.C.P.)

State of California)
County of SAN BERNARDINO) ss

Notice Type: GPNSB - GOVERNMENT PUBLIC NOTICE-SB

Ad Description:

DAP-001-154

I am a citizen of the United States and a resident of the State of California; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer and publisher of the SAN BERNARDINO COUNTY SUN, a newspaper published in the English language in the city of SAN BERNARDINO, county of SAN BERNARDINO, and adjudged a newspaper of general circulation as defined by the laws of the State of California by the Superior Court of the County of SAN BERNARDINO, State of California, under date 06/20/1952, Case No. 73084. That the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

07/21/2014

Executed on: 07/21/2014
At Riverside, California

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Barbara Cortez

Signature

NOTICE OF PREPARATION
CITY OF COLTON
Development Services Department
NOTICE IS HEREBY GIVEN that the City of Colton will prepare a Supplemental Environmental Impact Report (SEIR) for the project identified below, pursuant to the provisions of the California Environmental Quality Act (CEQA).
AGUA MANSA COMMERCE CENTER BUILDING 1
FILE INDEX NUMBER: DAP-001-154
PROJECT DESCRIPTION: The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres.
The SEIR will examine the following topics identified in the CEQA Environmental Checklist (CEQA Guidelines, Appendix G): Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Mineral Resources, Noise, Public Services, Transportation/Traffic, and Utilities/Service Systems.
PROPERTY LOCATION : 2250 South Riverside Avenue (Northeast corner of Riverside Avenue and Miguel Bustamante Parkway)
PUBLIC REVIEW PERIOD:
Monday, July 21, 2014 to Tuesday, August 19, 2014
We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the SEIR prepared by our agency when considering your permit or other approval for the project, if applicable.
Your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice. The public notice period will begin on Monday July 21, 2014 and end on August 19, 2014.
Please send your response to Mark Tomich, Development Services Director at the address shown above. We will need the name of a contact person in your agency.

* A 0 0 0 0 0 3 4 8 9 8 9 2 *

Mark Tomich
659 North La Cadena Drive
Colton, CA 92324
Notice Date: July 21, 2014
7/21/14

SBS-2646901#

August 19, 2014

Mark Tomich, Development Services Director
City of Colton Planning Division
659 N La Cadena Drive
Colton, California 92324

Re: Agua Mansa Commerce Center, Building 1, Initial Study – Prologis

Thank you for the opportunity to comment on the Initial Study for the Agua Mansa Commerce Center for the construction a 447,330 square feet speculative warehouse distribution facility located at the Northeast Corner of South Riverside Avenue at Miguel Bustamante Parkway. Though the project is within the City of Colton, Riverside Avenue will be used by vehicles and trucks to enter and exit the site. The west side of Riverside Avenue is within the jurisdiction of the City of Rialto. The Initial Study concludes that:

1) Based on the analysis of the proposed project's impacts in the responses to Sections 1 thru 17, there is indication that the proposed project could result in substantial adverse effects on human beings.; and
2) Based the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings may occur.

Although a Supplemental EIR will be prepared, the City of Rialto is concerned with the proposed project because:

1) The project will take access from Riverside Avenue via a 30-foot driveway and a 40' driveway. Development Impact Fees to mitigate impacts to Riverside Avenue will be required.

2) The speculative nature of the project will require analysis of the traffic impacts at a general industrial rate. The "high cube" trip distribution rate is not applicable.

3) Building one will connect to existing water and sewer mains underlying Riverside Avenue. The Initial Study does not refer to the City of Rialto as the sewer

purveyor. An extraterritorial wastewater agreement to connect to the sewer may be required.

4) Section 2.11 – Required Approvals of the Initial Study, does not refer to the approval required from the City of Rialto to connect to the sewer.

5) Section 2.12 – Other Public Agencies Whose Approval is Required, does not refer to the encroachment permit required from the City of Rialto to cut the street.

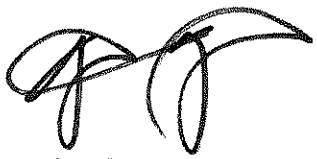
6) According to the Initial Study, Potentially Significant Impact [Impact TC-1], construction of the proposed project could reduce the performance of the circulation system if the project-related vehicle trips or any proposed improvements decrease the Level of Service (LOS) on existing streets. In addition, impacts could occur if project improvements reduce the performance of any mode of transportation including mass transit and non-motorized travel. A reduction in the performance of the circulation system will have a negative impact on traffic flows in the City of Rialto along Riverside Avenue from the project site to the I-10 freeway north and from the project site to the city boundary south. These impacts related to the performance of the circulation system must be analyzed in the Supplemental EIR.

7) According to the Initial Study, Potentially Significant Impact [Impact TC-1], the proposed project could result in significant impacts if it conflicts with the San Bernardino County Congestion Management Program (CMP) through reducing the Level of Service of a program identified road to a rating of "E" or below for designated roads or highways. The CMP also establishes a threshold of 100 two-way peak freeway trips or threshold of 50-two way peak arterial link trips to require further analysis by CalTrans or San Bernardino Association of Governments (SANBAG) who oversee preparation and implementation of the CMP. According to the certified EIR for the Agua Mansa Commerce Center, the nearest affected CMP designated freeways are I-10 and SR-60 and arterial links are Riverside Avenue and Agua Mansa Road. The City of Rialto General Plan establishes a minimum LOS rating of "D". A LOS rating of "E" or worse at the I-10 freeway, portions of Riverside Avenue and Agua Mansa Road will have a negative impact on the City of Rialto. Impacts related to CMP designated roads or highways must be analyzed in a Supplemental EIR.

The City of Rialto requests a meeting with the City of Colton, to discuss the project and the cumulative impacts to the City and that that the Supplemental EIR and accompanying environmental documents address the issues listed herein. Should you have any questions, please do not hesitate to contact me at ggibson@rialtoca.gov or (909) 421-7240.

Sincerely,

Gina M. Gibson



Planning Manager
Development Services Department

cc: Michael E. Story, City Administrator
Robb Steel, Assistant City Administrator/ Development Services Director

Community Development
Department
Planning Division

City of Arts & Innovation

RECEIVED
AUG 26 2014
MIG RIVERSIDE

August 22, 2014

Mark Tomich
Development Services Director
City of Colton Development Services Department
659 La Cadena Drive
Colton, CA 92324

Subject: Notice of Preparation of a Draft Supplemental Environmental Impact Report for the Agua Mansa Commerce Center Building 1.

Dear Mr. Tomich:

Thank you for the opportunity to comment on the Notice of Preparation of Draft Supplemental Environmental Impact Report for the above-noted project – Agua Mansa Commerce Center Building 1 – construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located on approximately 21 acres at the northeast corner of Riverside Avenue at Miguel Bustamante Parkway.

This project results in a modification to the previously approved Augua Mansa Commerce Center Master Plan adding 13.23 acres to the master plan area, increasing the Master Plan area from 94.18 acres to 107.3 acres. The original approved Agua Mansa Commerce Center Master Plan project under the certified Final Environmental Impact Report was for 11 buildings totaling approximately 1.36 million square feet of industrial building area. Three subsequent Addendums to the FEIR reduced the number of buildings from 11 to 8 buildings and the total building area to approximately 1.09 million square feet. As proposed, Building 1 (447,330 square feet) will replace previously approved Buildings 1 through 3 reducing the total number of buildings for the Master Plan from 8 to 6 and increasing the total building area to approximately 1.35 million square feet.

City staff has reviewed the Notice of Preparation and Initial Study and requests that the project fully analyze, and mitigate project impacts within the City of Riverside:

Aesthetics

The project site is located along the Santa Ana River and near a gateway to the City of Riverside. In particular, the proposed project modification situates Building 1 adjacent to Riverside Avenue. The proposed plan appears to reflect changes to the truck trailer yard and existing detention basin which are located in proximity to Riverside Avenue and the Santa Ana

River. The Draft Supplemental EIR needs to fully evaluate aesthetic impacts to public views and appropriately mitigate aesthetic impacts. The project design should screen trucks and truck loading activity from public view as well as enhancing public views through setbacks, architectural design and landscaping and consider views from public recreation areas such as the Santa Ana River and Crest-to-Coast trail system.

Public Works Department Traffic Division Comments

The City staff requests that analysis of the expanded site fully evaluate the following traffic concerns:

a. Changes to Trip Distribution used in the original EIR to be reviewed by the City of Riverside Traffic Engineering Department in order to assess the realistic traffic travel pattern. If changes are made to the Trip Distribution used in the original EIR, the resulting impacts to the traffic circulation system should be assessed:

   - Analysis of impacts on key intersections on Main Street during the AM and PM Peak Hours.
   - Analysis of impacts on key intersections on Columbia Avenue during the AM and PM Peak Hours.
   - Analysis of the impacts to intersections on Market Street during the AM and PM Peak Hours.
   - Analysis of the impacts to the State Route 60 ramps at Market Street during the AM and PM Peak Hours.
   - Analysis of the impacts to the Interstate 215 ramps at Columbia Avenue during the AM and PM Peak Hours.

b. Contact should be made with other neighboring cities for short-term transportation improvement projects that are expected to be completed prior to completion of this project.

c. A cumulative impact analysis is necessary to fully understand the impacts on the City of Riverside transportation network including effects of past projects, the effects of other current projects, and the effects of probable future projects. Projects to be considered in the cumulative analysis may include but not be limited to, Kline, El Rivino, Rio Vista Specific Plans, and Emerald Meadows Ranch Specific Plan.

d. The City of Riverside must be assured that haul routes/plans will be jointly acceptable and that the City will be compensated for damages and have legal recourse if route/plans are violated.

e. The supplemental EIR has the potential to alter traffic circulation patterns for this project. Existing City intersections are inadequate to handle the extra burden this expansion project will bring, both during construction and after, without proper mitigation. Therefore, the traffic analysis needs to include mitigation for impacts to City of Riverside streets.

We look forward to continue working with you. Please forward any subsequent documents related to this project to the City of Riverside Planning Division for review. Coordination of your project with the City to address these matters would be greatly appreciated. Should you have any questions regarding this letter, please contact Doug Darnell, Senior Planner, at (951) 826-5219 or by e-mail at ddarnell@riversideca.gov.

Sincerely,

Jay Eastman, AICP
Principal Planner

c: Rusty Bailey, Mayor
Riverside City Council Members
Scott Barber, City Manager
Deanna Lorson, Assistant City Manager
Al Zelinka, Community Development Director
Emilio Ramirez, Deputy Community Development Director
Tom Boyd, Public Works Director
Prologis, 2817 East Cedar Street, Suite 200 Ontario, CA 91761
Christopher Brown, Director of Environmental Services MIG/Hogle-Ireland, 1500 Iowa Avenue, Suite 110 Riverside, CA 92507

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • ENVIRONMENTAL & CONSTRUCTION • OPERATIONS
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO

825 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130

GERRY NEWCOMBE
Director of Public Works

August 18, 2014

File: 10(ENV)-4.01

Mark Tomich, Development Services Director
City of Colton
650 N. La Cadena Drive
Colton, CA. 92324

RE: CEQA – NOTICE OF AVAILABILITY OF A SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE AQUA MANSA COMMERCE CENTER BUILDING 1 FOR THE CITY OF COLTON

Mr. Tomich:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on July 22, 2014,** and pursuant to our review, the following comments are provided:

Environmental Management Division (Marc Rodabaugh, Stormwater Program Manager, 909-387-8112):

1. Section 4.9 needs to clarify that the project proponent will need to: 1) prepare a Water Quality Management Plan as part of the development design and implement it thereafter; and 2) obtain coverage under the Construction General Permit (of which the Stormwater Pollutions Prevention Plan is one component) and implement its requirements during the course of construction, including initial grading work.

Traffic Division (Eloy Ruvalcaba, PWE III, 909-387-1869):

1. The potential truck routes for the project traffic should be evaluated to ensure that the geometry of the roadway and pavement are designed to handle trucks.

Water Resources Division (Mary Lou Mermilliod, PWE III, 909-387-8213):

1. In general, it appears that the Supplemental EIR will address the major concerns of the Flood Control District.

2. It is the responsibility of the City of Colton to establish adequate provisions for intercepting and conducting the accumulated drainage around or through the site in a manner that does not adversely affect adjacent or downstream properties.

3. We recommend that the City of Colton enforce, at a minimum, the most current FEMA regulations for construction within a Special Flood Hazard Area.

GREGORY C. DEVEREAUX
Chief Executive Officer

Board of Supervisors
ROBERT A. LOVINGOOD . . . . . First District
JANICE RUTHERFORD . . . . . Second District
JOSIE GONZALES . . . . . Fifth District
JAMES RAMOS . . . . . Third District
GARY C. OVITT . . . . . Fourth District

Environmental Management Division (Erma Hurse, Senior Planner, 909-387-1866):

It is recommended that impacts related to solid waste issues be assessed in the Supplemental EIR. We request that the project proponent identify in the Environmental Impact Report specific strategies or diversion programs that will reduce significantly the solid waste disposal needs generated by the proposed project.

Examples of specific strategies for waste reduction may include, but are not limited to the following:

1. Diverting mixed construction waste materials, demolition, and inert debris and other recyclable materials that are transported to a landfill or material recovery/recycling facility.

2. Composting that would utilize wood and green waste materials, food waste, and bio-solids, or composting workshops.

3. Commercial development utilizing waste reduction assessment and recycling program.

4. Curbside and commercial recycling programs instituted within the jurisdiction's borders.

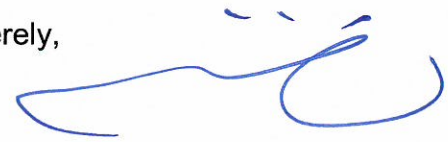
5. State specific types of solid waste being generated during the operation of the project and what programs that are in place to help reduce, recycle or divert from being landfilled.

Environmental Management Division (Nancy Sansonetti, Senior Planner, 909-387-1866):

1. The identified project is a speculative warehouse distribution facility that does not have an identified end user and will result in an increase of 13.23 acres to the Agua Mansa Commerce Center Master Plan. The project will result in the 4th supplement to the certified Environmental Impact Report for the master plan. As a general comment, the Initial Study scoping document appears to be quite thorough and well-written. Since the end user is yet unknown, it is recommended that cumulative impacts to Air Quality and Traffic be thoroughly addressed in a 'worst case scenario' manner to insure CEQA compliance for all eventual tenants.

Should you have any questions, please contact the individual who provided the specific comment, as listed above.

Sincerely,



NIDHAM ARAM ALRAYES, MSCE, P.E., QSD/P
Public Works Engineer III
Environmental Management

NA:PE:nh/CEQAComments_Colton_SEIR_AguaMansaCommerceCtrBldg1

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August 19, 2014

Mr. Mark Tomich, Director
City of Colton
Development Services Department
659 North La Cadena Drive
Colton, California 92324
Telephone: (909) 370-5523
E-mail: mtomich@ci.colton.ca.us

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for Agua Mansa Commerce Center Building 1 [SCAG NO. IGR8124]

Dear Mr. Tomich,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for Agua Mansa Commerce Center Building 1 ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for Agua Mansa Commerce Center Building 1. The proposed project would include the construction of a warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space, totaling 447,330 square feet of building on a 21.07 project site in the City of Colton, County of San Bernardino, California.

When available, please send environmental documentation to SCAG's *office in Los Angeles or by email to sunl@scag.ca.gov* providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact Lijin Sun, Senior Regional Planner, at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Jonathan Nadler,
Manager, Compliance and Performance Assessment

[1] SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR AGUA MANSA COMMERCE CENTER BUILDING 1 [SCAG NO. IGR8124]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

2012 RTP/SCS Goals

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

SCAG 2012 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and non-motorized transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

SCAG 2012 RTP/SCS Goals		
Goal		**Analysis**
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness.*	*Consistent: Statement as to why* *Not-Consistent: Statement as to why* *or* *Not Applicable: Statement as to why* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region.*	*Consistent: Statement as to why* *Not-Consistent: Statement as to why* *or* *Not Applicable: Statement as to why* *DEIR page number reference*
etc.		etc.

RTP/SCS Strategies

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

The 2012 RTP/SCS also identifies a goods movement system in the SCAG region and develops strategies to address expected growth trends in goods movement. For further information on the goods movement strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (beginning on page 64 through page 76). For further information on SCAG's long-range comprehensive plan for the goods movement system in Southern California, please see "On the Move, Southern California Delivers the Goods" (http://www.freightworks.org/DocumentLibrary/CRGMPIS_Summary_Report_Final.pdf).

Regional Growth Forecasts

The Draft Environmental Impact Report for the proposed project should reflect the most recently adopted SCAG forecasts. At the time of this letter, the most recently adopted SCAG forecasts consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. To view them, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf. The forecasts for the region and applicable jurisdictions are below.

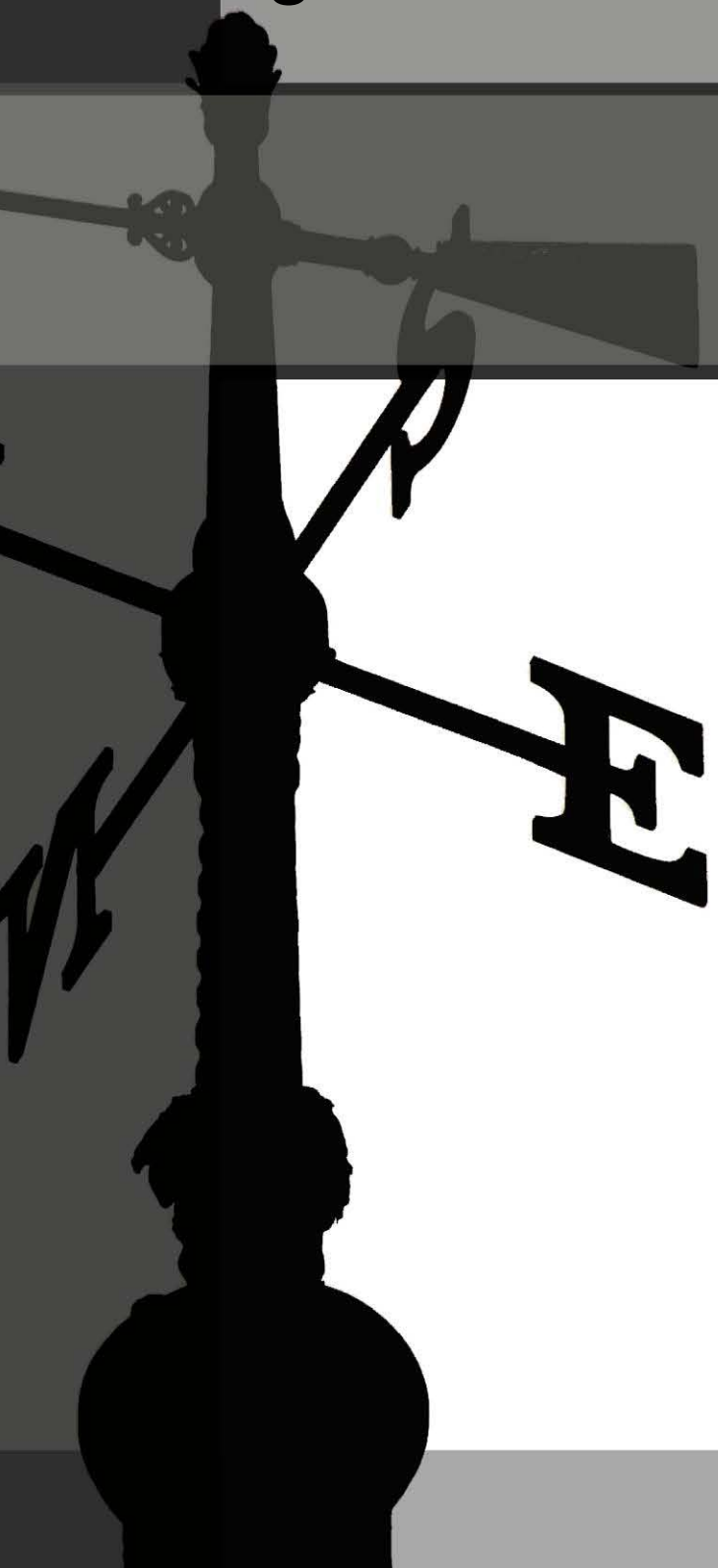
	Adopted SCAG Region Wide Forecasts		**Adopted City of Colton Forecasts**	
Forecast	**Year 2020**	**Year 2035**	**Year 2020**	**Year 2035**
Population	19,663,000	22,091,000	60,700	71,700
Households	6,458,000	7,325,000	17,800	21,100
Employment	8,414,000	9,441,000	25,500	29,600

MITIGATION

SCAG staff recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: *Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects.* Appendix G can be accessed at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf

Appendix B Air Quality and Climate Change Assessment & Health Risk Assessment



Agua Mansa Commerce Center Building 1

Air Quality & Climate Change Assessment

August 2014 (13343)

Prepared for:

City of Colton
Planning Division
659 N. La Cadena Drive
Colton, California 92324

Prepared by:

MIG | Hogle-Ireland
1500 Iowa Avenue, Suite 110
Riverside, California 92507

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This document is formatted for double-sided printing to conserve natural resources.

Agua Mansa Commerce Center Building 1

Air Quality & Climate Change Assessment

August 2014

Colton, California

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Appendix A CalEEMod Output
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Attachments

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1 Executive Summary

Construction-related and operational emissions of criteria pollutants were modeled and analyzed for the proposed project located at the northeast corner of Riverside Avenue and Miguel Bustamante Parkway, City of Colton, San Bernardino County, California. This report also analyzes the proposed project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the SCAQMD STAFF. The results of this report find that the thresholds established by SCAQMD for volume and receptor-specific criteria pollutant emissions will not be exceeded and toxic air contaminants will not be exceeded.

Additionally, this report models and analyzes construction-related and operational emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2. The results of this report find that the interim threshold established by the South Coast Air Quality Management District for greenhouse gas emissions will be exceeded.

1.1 Project Description

The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres.

The total building square footage proposed in the Agua Mansa Commerce Center certified EIR for all eleven buildings was 1,365,450 square feet. The proposed Supplemental EIR Building 1 project would reduce the overall building square footage of the Agua Mansa Commerce Center Master Plan to 1,346,435 square feet. Thus, the air quality analysis was conducted to reflect the decrease in building square footage.

1.2 Air Quality

The project will not result in substantial emissions of oxides of nitrogen, volatile organic compounds (with mitigation incorporated), or particulate matter, and will not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Emissions of carbon monoxide will not substantially impact sensitive receptors in the vicinity of the project. The project will not expose a substantial number of people to odors.

1.3 Climate Change

The project will not exceed the 10,000 MTCO2E per year threshold for industrial projects.

1.4 Mitigation Measures

No mitigation measures are required for the proposed project.

2 Introduction

This report models and analyzes construction-related and operational emissions of criteria air pollutants, toxic air contaminants, and greenhouse gas emissions from the proposed Agua Mansa Commerce Center Building 1 project. The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres.

The total building square footage proposed in the certified EIR for all eleven buildings was 1,365,450 square feet. The proposed Supplemental EIR Building 1 project would reduce the overall building square footage of the Agua Mansa Commerce Center to 1,346,435 square feet.

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (http://www.aqmd.gov/ceqa/hdbk.html). Modeling of emissions utilizes the following software and guidelines:

- California Emissions Estimator Model (CalEEMod) v 2013.2.2
- California Department of Transportation (Caltrans) *Carbon Monoxide Protocol*

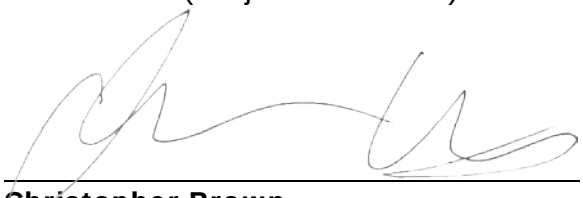
The climate change analysis provided herein utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of greenhouse gas emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by established model default values or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of emissions.

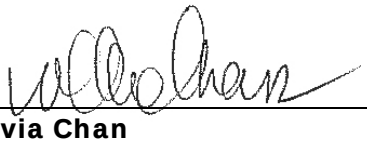
This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the State CEQA Guidelines. This report suggests significance thresholds pursuant to published data for review and consideration by the Lead Agency that is responsible for making determinations of significance pursuant to CEQA.

This document has been reviewed in accordance with the *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Project Associate) of MIG | Hogle-Ireland, Inc. under contract by Prologis.



Christopher Brown
Director of Environmental Services



Olivia Chan
Project Associate

3 Environmental Setting

3.1 Climate

The proposed project is located in the City of Colton, San Bernardino County, California. The City of Colton and the broader San Bernardino Valley is defined by a semi-arid Mediterranean climate with hot, dry summers and mild, relatively wet winters. Annual rainfall averages 9.86 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.3° Fahrenheit (F). The warmest month is August with an average monthly high of 94.4° F. The annual average maximum temperature is 79.0° F and the annual average minimum temperature is 50.5° F. Colton is located at an elevation of approximately 1000 feet above mean sea level (AMSL). The project site is located at an approximate elevation of 853 AMSL.[2]

3.2 Regional Air Quality

The proposed project is located within the South Coast Air Basin (Basin).[3] The Basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The Basin is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Basin is managed by the South Coast Air Quality Management District (SCAQMD). Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and state air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, state, and local agencies to reduce pollutant emissions from stationary, mobile, and indirect pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as “criteria pollutants”). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The State has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the State and Federal standards differ, State AAQS are more stringent than Federal AAQS. Federal and State standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided below.

Ozone. Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_X) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone can also damage building materials and plant leafs.

Carbon Monoxide. Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because it combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

Nitrogen Dioxide. Nitrogen dioxide and other oxides of nitrogen (NO_X) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

Particulate Matter. Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM_{10}, also known as coarse or inhalable particulate matter. PM_{10} is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM_{10} can also be formed secondarily in the atmosphere when NO_2 and SO_2 react with ammonia. Particulate matter less than 2.5 microns in size are called $PM_{2.5}$ or fine particulate matter. $PM_{2.5}$ is primarily emitted from point sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and cause permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

Sulfur Dioxide. Sulfur dioxide and other oxides of sulfur (SO_X) are reactive gases emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities.[4] Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO_X emissions include bronchoconstriction and increased asthma symptoms.

Lead. Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter($PM_{2.5}$)[8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR) -
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		-	-	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) -
	3 Hour	-		-	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[10]	-	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average[10]	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, June 2013

PPM, parts per million
µg/m3, micrograms per cubic meter

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not

to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

9. To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour daily maximum concentrations at each site must not exceed 100ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 100ppb is identical to 0.100ppm.

10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

11. The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

3.3 Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin Attainment Status) summarizes the attainment status in the non-desert portion of the Basin for the criteria pollutants.[5] The non-desert portion of the Basin is currently in nonattainment status for ozone, and inhalable and fine particulate matter.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial uses. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

Table 2
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	--	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Pb	Attainment	Attainment
VRP	--	Unclassified
SO_4	--	Attainment
H_2S	--	Unclassified
Sources: ARB 2014		

3.4 Local Air Quality

The City of Colton is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Colton is located in the Central San Bernardino Valley (1) monitoring area known as Source Receptor Area 34 (SRA 34). The air quality in SRA 34 is monitored at Station 5197. Air monitoring results for SRA 34 over the last three years of available data are summarized in Table 3 (2010-2012 Local Air Quality).[6] [7] [8] Carbon monoxide maximum 1-hour and sulfur dioxide maximum 24-hour were not monitored for years 2011 and 2012. In addition, data for lead was not available for all three years. Table 4 (2010-2012 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded. Based on the 2010-2012 air quality monitoring data, the Central San Bernardino Valley area experiences a high number of days in which ozone standards exceed the federal 8-hour standards as well as the state 1-hour and 8-hour standards. Less particulate matter pollution occurs in this area with at most nine days a year exceeding particulate matter standards.

Table 3
2010-2012 Local Air Quality

Year	CO (PPM)		O_3 (PPM)		NO_2 (ppb)		SO_2 (ppb)	
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 1-hr	Max 24-hr
2012	--	1.1	0.142	0.11	69.1	22.1	22.5	--
2011	--	1.1	0.144	0.124	76.4	21.1	12.3	--
2010	3	1.4	0.143	0.100	71.9	23.1	6.6	1.6

Year	PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)		TSP (µg/m^3)		Pb (µg/m^3)		SO_4 (µg/m^3)
	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
2012	67	34.3	39.9	12.82	148	78.4	--	--	4.6
2011	84	31.8	60.1	12.6	131	64.7	--	--	5.5
2010	62	33.9	42.6	12.0	142	73.3	--	--	6.3

Source: SCAQMD 2010-2012

-- pollutant not monitored
PPM, parts per million
Ppb, parts per billion
µg/m^3, micrograms per cubic meter
AAM, annual arithmetic mean

Table 4
2010-2012 Air Quality Standards Exceedance

Year	O_3 (PPM)			PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
2012	62	60	85	0	9	3
2011	39	39	53	0	4	2
2010	33	28	55	0	9	2

Source: SCAQMD 2010-2012

-- pollutant not monitored
* 0.075 ppm
^35 µg/m^3

3.5 Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large. These susceptible populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities (including hospitals), rehabilitation centers, convalescent centers, and retirement homes. Pollutants of particular concern to sensitive receptors include carbon monoxide, toxic air contaminants, and odors. There are no sensitive receptors within one quarter mile of the proposed project site. The surrounding area is either developed with industrial uses or is vacant.

3.6 Toxic Emission Sources

Toxic air contaminants (TACs) refer to a diverse group of "non-criteria" air pollutants that can affect human health, but do not have established ambient air quality standards. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TACs can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular). Diesel Particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the State as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 µm), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances. Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities.

According to the EPA and California Air Resources Board (CARB), there are no existing sources of industrial- or utility-related toxic emissions uses within one-quarter mile of the project site.[9] [10] The nearest toxics emitter to the project site is EI Colton, LLC located at 2040 Agua Mansa Road, approximately 0.75 miles north of the project site. EI Colton, LLC (SIC 4911, electric services) engages in the generation, transmission, and/or distribution of electric energy for sale. There are existing warehouses and distribution centers to the north and west and within the project vicinity that emit diesel-particulate matter associated with heavy-duty truck traffic, an identified toxic air contaminant.

3.7 Local Transportation

The proposed project will be located northeast corner of Riverside Avenue and Miguel Bustamante Parkway. Riverside Avenue is a north-south roadway that is currently four lanes undivided in the study area with a center left turn lane. The project traffic study analyzed existing performance at seven intersections in the project vicinity.[11] The intersections currently operate at an acceptable level of service (LOS) of D or better.

3.8 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project is not a use generally associated with substantial odors. Two trash enclosures will be located within the proposed project and will be designed per City of Colton standards. One trash enclosure will be located near the northwest corner of the site and one will be located near the southwest corner of the site. Enclosed receptacles and frequent removal will reduce potential for the proposed project to emit substantial odors. Furthermore, the surrounding industrial uses are not associated with substantial odors.

3.9 Climate Change

3.9.1 Defining Climate Change

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic
- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

Greenhouse Gases

The greenhouse effect is caused by a variety of "greenhouse gases". Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since the year 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. The primary GHGs are discussed below.[12]

Carbon Dioxide. CO_2 is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from onsite industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

Methane. Methane (CH_4) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are human generated. Wetlands are the primary natural producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes are the primary source of human-related methane.

Nitrous Oxide. Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

High Global Warming Potential Gases. High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF_6 are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofuorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

Water Vapor. It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.[13] The weighting depends on the lifetime of the gas in the atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 would contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a *sink*. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

Table 5
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007[14]		

3.9.2 Climate Change and California

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.[15] General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to

increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see "Water Management" herein). Earlier snow melts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures,

snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

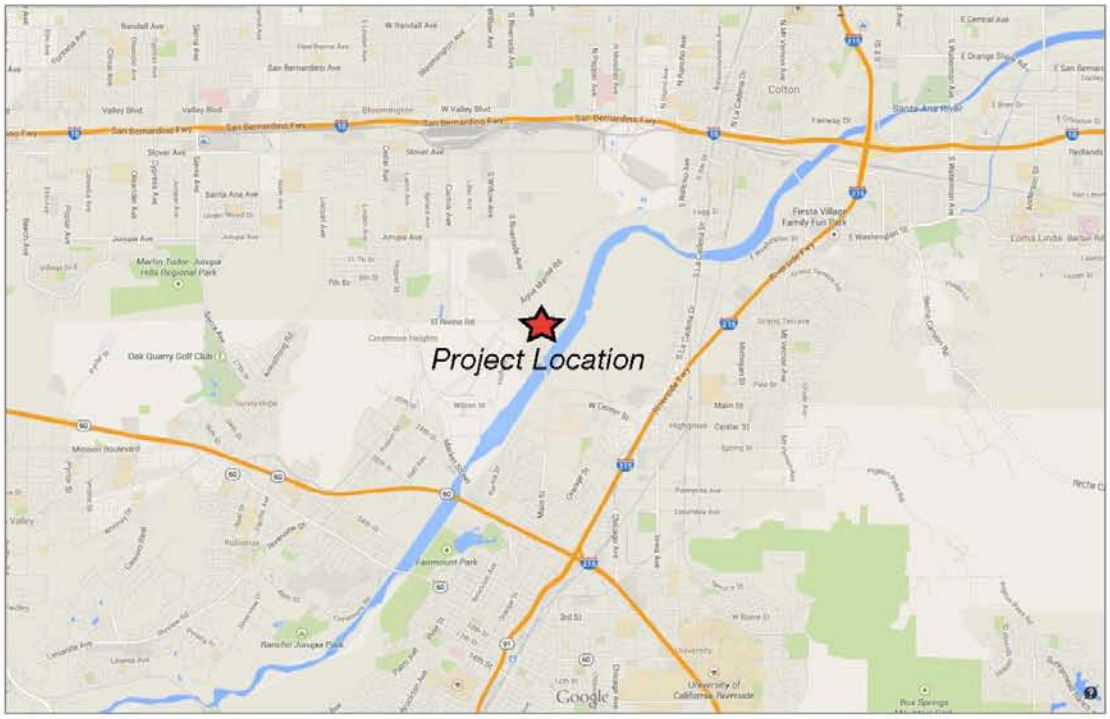
California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.



Source: Google Maps

Regional

Source: Google Maps

Vicinity

Not to Scale

Exhibit 1 Regional and Vicinity Map

Agua Mansa Commerce Center - Building 1
Colton, California

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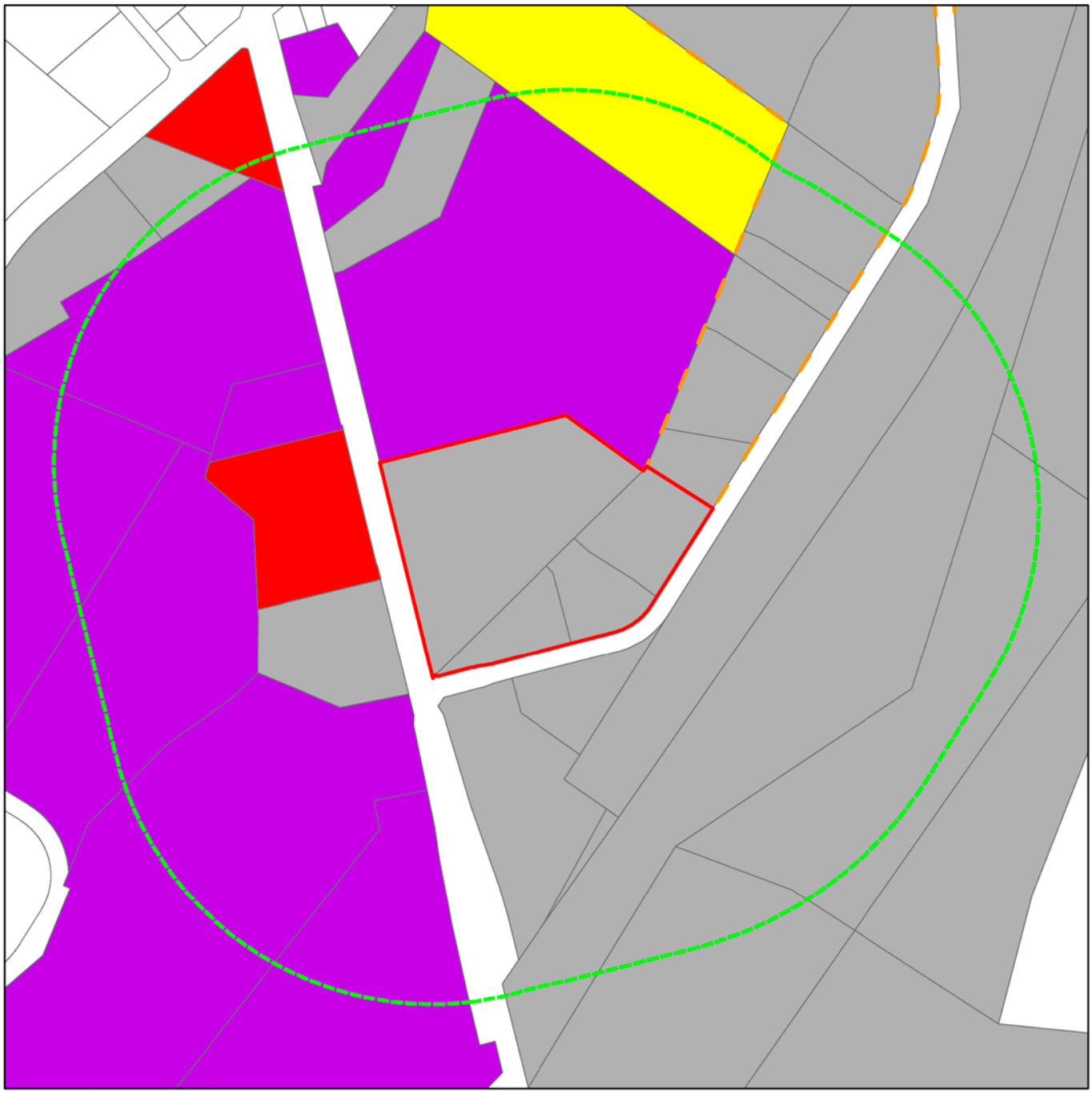

Legend

- One-Quarter Mile
- Building 1 Site
- Master Plan Site

Land Use

TYPEUSE

- Vacant
- Industrial
- Commercial
- Residential
- Parcels

0 210 420 840 1,260 1,680 Feet

N

Not to Scale

Exhibit 2 Radius Map

Agua Mansa Commercial Center Building 1
City of Colton, California

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4 Regulatory Framework

The following summarizes Federal, State, and local regulations related to air quality, pollution control, and greenhouse gas emissions.

4.1 Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.[16] Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, Carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the State or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and State and Federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMP. Currently, SCAQMD implements the 8-hr Ozone and $PM_{2.5}$ SIP in the 2007 AQMP and the PM_{10} SIP in the 2003 AQMP. The $PM_{2.5}$ SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

4.2 California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than Federal law in a number of ways including revised standards for PM_{10} and ozone and State for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

4.3 Toxic Hotspots

State requirements specifically address air toxics issues through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the State air toxics program and the Air Toxics Hot Spots Information and Assessment Act (AB 2588). The air quality regulations developed from these bills have been modified recently to incorporate the Federal regulations associated with the Federal Clean Air Act Amendments of 1990. The Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) was enacted in September 1987. Under this bill, stationary sources of emissions are required to report the types and quantities of certain substances that their facilities routinely release into the air.

The SCAQMD is required to prepare an annual report on the status and forecast of air toxic "hot spots" pursuant to Section 44363 of the California Health and Safety Code. SCAQMD monitors facilities that are not exempt from the fee and reporting requirements of AB2588.

Some facilities are covered under "umbrella" permits that address industry-wide categories. SCAQMD has issued general permits for the following seven activities:

- Retail gasoline dispensing
- Perchloroethylene dry cleaning
- Auto body shops
- Fiberglass molding
- Printing
- Metal plating
- Wood striping and finishing

Emissions inventories and risk assessment guidelines have been prepared for the seven industry-wide categories. Approximately 1,400 auto body shops, 3,200 gasoline stations, and 1,400 perchloroethylene dry cleaners within the District are covered under these umbrella permits.

Depending on the severity of the facilities' TAC releases, SCAQMD requires either public notification of toxic hot spots or preparation of a risk reduction plan, as follows:

	Cancer Risk (per million)	Acute Risk	Chronic Risk
Action Risk Level	>= 25	>= 3.0	>= 3.0
Public Notification Level	>= 10	>= 1.0	>= 1.0
Exempt	<1	<0.1	<0.1

4.4 2012 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.[17] The 2003 AQMP was adopted in August 2003 and demonstrated O_3 and PM_{10} for the Basin. It also provides the maintenance plans for CO and NO_2, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and $PM_{2.5}$ air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD is currently initiating an early development process for preparation of the 2016 AQMP.

4.5 SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed warehouse include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

4.6 Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in April 2010.[18] CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see "California Global Warming Solutions Act" herein).

4.7 California Global Warming Solutions Act

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB32). AB32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009 Adopt Scoping Plan

January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO2E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO2E; therefore, California GHG emissions must be reduced 80 MMTCO2E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

4.8 Sustainable Communities and Climate Protection Act

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.[19] The objective of SB375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the proposed project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities.

4.9 Air Resources Board Scoping Plan

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy

efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.[20] The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO2E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.[21] The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.[22] ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping plan was reapproved by the ARB Board with the program's environmental documentation.

The ARB is currently in the process of preparing the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update will highlight California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It will also evaluate how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. The environmental analysis for the Update is anticipated to be released in the middle of March 2014. In late spring 2014, ARB will hold a Board Hearing to consider the Final Scoping Plan Update and environmental assessment.

4.10 Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum

applied water allowance and must be prepared and stamped by a licensed landscape architect.

4.11 California Green Building Standards

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2011.[23] The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016.

Table 6
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II – Light Duty Vehicle Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF_6 Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture
Source: ARB 2008[24]	

Table 7
CALGREEN Requirements

Item		Requirements	
		Previous	**CALGREEN**
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads cannot exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulted louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
7	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained

Source: HCD 2010

5 Project Description

The proposed project includes the construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area located at the northeast corner of Riverside Avenue at Miguel Bustamante Parkway on 21.07 acres. The building is intended to be used as a warehouse/distribution facility; however, an end user has not been identified at this time, as such, specific details about the future operation of the facility are not currently available. The proposed design will be a concrete tilt-up building. The project proposes 216 automobile parking spaces, including six ADA parking spaces and three ADA van accessible parking spaces. The project also proposes 99 truck trailer parking stalls, and 83 loading docks. The proposed landscape coverage for the site is 1133,119 square feet. The project includes applications for a Tentative Parcel Map, Architectural/Site Plan Review, Variance (for a decrease in parking spaces), and Historic Certificate of Appropriateness.

The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the Master Plan area from 94.18 acres to 107.13 acres.

The total building square footage proposed in the Agua Mansa Commerce Center certified EIR for all eleven buildings was 1,365,450 square feet. The proposed Supplemental EIR Building 1 project would reduce the overall building square footage of the Agua Mansa Commerce Center Master Plan to 1,346,435 square feet.

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TABULATION

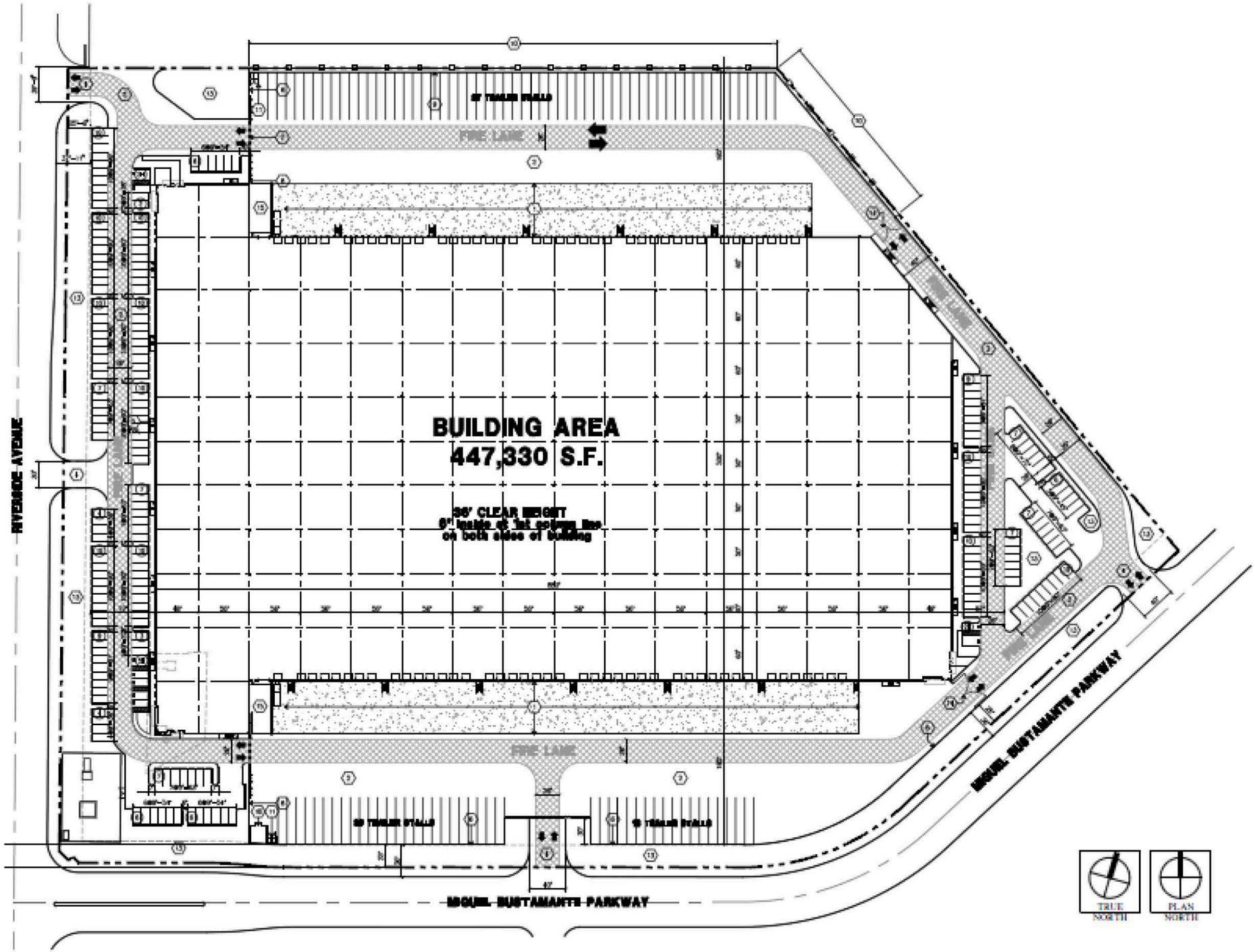
Site Area		
	Square Feet	917,997 SF
	Acres	21.07 AC
Building Area		
	Office Area	12,000
	Warehouse Area	435,330
	Total Building Area	447,330 SF
Building Coverage		48.73%
Parking Required Based Upon Proposed Variance		
Office (if less than 10% of building)		0
Ware: 1st 20K - 1/1,000 SF		20
2nd 20k - 1/2,000 SF		10
Above 40k - 1/5,000SF		82
Total Parking Required		112 STALLS
Auto Parking Provided		
Standard (9'x18' with 2' over hang)		287
ADA (9'x20')		6
ADA Van Accessible (9'x20')		3
Total		316 STALLS
Trailer Parking Provided		
Standard (10'X53')		99 STALLS

Setbacks		
Heavy Industrial	Building	Landscape
Front	25'	25'
Side	none*	
Rear	None*	
High Industrial		
Front	25'	20' from face of curb
Side	none	
Rear	none	

Maximum Lot Coverage
Heavy Industrial - 50%
Maximum Building Height
Heavy Industrial - No Limit **

Notes:
* If located across from residential, a 50' front setback shall be maintained
** the maximum overall building height shall be 35'

Landscape Required 15% of site area	137,696	SF
Landscape Provided	117,767	SF



Source: HPA Architecture

Exhibit 3 Site Plan

Agua Mansa Commerce Center Building 1
Colton, California

MIG Hogle-Ireland

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6 Air Quality Impact Analysis

The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the City of Colton, have been utilized to determine the significance of potential impacts.

6.1 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the local implementation procedures of the City of Colton, the proposed project could result in potentially significant impacts related to air quality if it:

A. Conflicts with or obstructs implementation of the applicable air quality plan.
B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
D. Exposes sensitive receptors to substantial pollutant concentrations.
E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds).

Table 8
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM^{10}	150	150
$PM^{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2011		

6.2 AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 Air

Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[25] Consistency review is presented below:

1. The proposed project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated in Section 6.3 et seq of this report; therefore, the proposed project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*. The proposed project does not include a General Plan or Zoning Code amendment and therefore does not require consistency analysis with the AQMP.

6.3 Pollutant Emissions

6.3.1 Demolition

Demolition activities produce criteria pollutant emissions from on-site equipment usage and off-site hauling and worker trips. No permanent existing structures are located on the proposed project site. Thus, the proposed project does not require demolition of existing on-site structures to construct the proposed warehouse structure.

6.3.2 Building Construction

Short-term criteria pollutant emissions will occur during on-site grading, building construction, paving, and coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of on-site soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. Default CalEEMod assumptions for construction activities have been generally utilized with the exception of the the distance to haul imported soil that has been changed to 10 miles considering the proximity of local facilities. It is estimated that the building will take approximately two years to complete. The results of the CalEEMod outputs are summarized in Table 9 (Unmitigated Daily Construction Emissions (lbs/day)). Based on the results of the models, maximum daily emissions from the construction of the proposed project will exceed established thresholds for ROG emissions.

Table 9
Unmitigated Daily Construction Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2015	8	93	68	<1	21	13
2016	685	44	59	<1	8	4
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	Yes	No	No	No	No	No

The project is located in the Agua Mansa Master Plan area and is subject to Mitigation Measure AQ-3 adopted in the Master Plan certified EIR minimizing ROG emissions from coating activities. The Measure provides a menu of options to minimize ROG emissions that include limiting the amount of painting each day, minimizing the use of paint, use of low-VOC paints, and use high efficiency painting methods. For example, if the project proponent proposes to use low-VOC painting applications for Building 1, maximum ROG emissions from coating activities would be reduced to 8 lbs/day and would therefore meet the daily threshold established by SCAQMD. Impacts will be less than significant with incorporation of the adopted Mitigation Measure AQ-3.

6.3.3 Operational and Area Sources

Long-term criteria air pollutant emissions will result from the operation of the proposed warehouse facility. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the warehouse facility. The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation is based on project trip generation rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and City of Fontana, Truck Trip Generation Study, August 2003 and are listed in the project traffic study prepared by Kunzman Associates.[26] The heavy duty fleet mix is comprised of approximately 12.3 percent heavy-heavy-duty (HHD), 4.6 percent medium-heavy-duty (MHD), and 3.5 percent light-heavy-duty (LHD1). The remaining 79.6 percent of the fleet mix is allocated to passenger vehicles (LDA). Trip lengths have been adjusted based on a study of metropolitan commercial and freight travel conducted by the National Cooperative Highway Research Program. According to observed data collected in the field for the Southern California Association of Governments (SCAG) region, trip lengths for warehouse uses are estimated at 5.92 miles for light-duty trucks, 13.06 for medium-duty trucks, and 22.40 for heavy-duty trucks. Total vehicle miles were calculated using the average daily trips for each vehicle class and divided by total daily truck trips to get to an average truck distance of 17.41 miles.

Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed project. Energy demand is based on default CalEEMod electricity and natural gas demand assumptions. Operational source emissions were modeled under year 2017. The results of the CalEEMod model for summer and winter conditions are summarized in Table 10 (Long-Term Daily Emissions (lbs/day)).

Based on the results of the model, the maximum daily operational emissions associated with the proposed project will not exceed the thresholds established by SCAQMD. Note that this analysis reflects a *worst-case* scenario because it does not account for existing on-site operations that generate criteria pollutant emissions.

Table 10
Long-Term Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM^{10}	$PM^{2.5}$
Summer	25	27	47	<1	10	3
Winter	25	28	47	<1	10	3
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Potentially Significant?	No	No	No	No	No	No

6.4 Localized Emissions

6.4.1 Toxic Air Contaminants

No permanent existing structures are located on the proposed project site. Thus, the proposed project does not require demolition of existing on-site structures to construct the proposed warehouse structure. Since no existing structures are located on the proposed project site, asbestos-containing materials (ACM) are not a concern. Therefore, South Coast Air Quality Management District (SCAQMD) Rule 1403 is not applicable to the proposed project.

Operationally, the proposed project does not emit point-source toxic air contaminants, although diesel particulate matter emissions from warehouse facilities is of concern and are discussed in the project health risk assessment). According to the EPA and California Air Resources Board (CARB), there are no existing sources of industrial- or utility-related toxic emissions uses within one-quarter mile of the project site.[27] [28] The nearest toxics emitter to the project site is EI Colton, LLC located at 2040 Agua Mansa Road, approximately 0.75 miles north of the project site. EI Colton, LLC (SIC 4911, electric services) engages in the generation, transmission, and/or distribution of electric energy for sale. There are existing warehouses and distribution centers to the north and west and within the project vicinity that emit diesel-particulate matter associated with heavy-duty truck traffic, an identified toxic air contaminant.

6.4.2 Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the proposed project could potentially result in a CO hotspot.[29] According to Section 3.1.3 of the Protocol, the proposed project is not regionally significant and therefore is only required to examine local impacts. Regionally significant projects are defined in 40 CFR Section 93.101 and through extension in 40 CFR Section 93.105(c)(1)(ii), as follows:

> *Regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.*

Localized impacts are analyzed in Protocol Section 4. The local analysis procedures in Section 4.7.1 indicate that the proposed project has the potential to worsen air quality (as defined for Protocol purposes only) because it will result in an increase in the number of vehicles operating in *cold start* mode by more than two percent. *Cold Start* mode refers to a vehicle started after an hour or more being turned off. The project will generate 35 passenger vehicle cold starts and 18 truck cold starts during the afternoon. The proposed project will result in an average daily trip (ADT) increase of approximately 986 daily drips to area roadways. The local analysis procedures then direct to Protocol Sections 4.7.3 and 4.7.4. These sections indicate that if the proposed project involves signalized intersections performing at Level of Service (LOS) E or worse then the proposed project will be subject to a screening analysis. The proposed project will involve one signalized intersection operating at LOS E or worse during future conditions as identified in the project traffic study; therefore, a screening analysis is performed to determine if a detailed analysis will be required. Section 4.4 references Appendix A of the Protocol for screening purposes; however, because of the age of the assumptions used in the screening procedures, they are no longer accepted. The Sacramento Metropolitan Air Quality Management District (SAQMD) developed a screening threshold that states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis.[30] The proposed project will not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed acceptable. Based on the local analysis procedures, the proposed project is satisfactory pursuant to the Protocol and will not result in a CO hotspot.

6.4.3 Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutants that exceed national and/or State air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five acre project scenarios, depending on the amount of site disturbance during a day. The construction of Building 1 will disturb approximately 2.5 acres per day (87.5 total acres of disturbance / 35 days of grading = 2.5 acres per day). Linear regression was used to determine screening thresholds for 2.5 acres. Maximum daily emissions of oxides of

nitrogen (NO_X), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$) will occur during construction of the proposed project, grading of the project site, and paving of parking areas. Table 11 (Localized Significance Threshold Analysis) summarizes on-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 34 (Central San Bernardino Valley). A 100 meter receptor distance was used to reflect the proximity of the commercial use to the northwest of the project site. Localized PM_{10} and $PM_{2.5}$ emissions would reach 1.63 and 1.25 pounds per day during grading, which is within the 15 pounds per day threshold. However, CalEEMod does not take into account AQMP Rule 403 requiring the utilization of applicable best management practices to minimize fugitive dust emissions. Based on CalEEMod calculations, assuming that exposed areas will be watered two times daily during construction activities, PM_{10} and $PM_{2.5}$ emissions will be reduced by a minimum of 50 percent. Based on the results of the on-site emissions model the SCAQMD localized significance thresholds will not be exceeded.

Table 11
Localized Significance Threshold Analysis

Construction Activity	CO	NO_X	PM_{10}	$PM_{2.5}$
Site Preparation	43	57	12	8
Grading	51	79	17	5
Building Construction	19	30	2	2
Paving	15	22	1	1
Architectural Coating	2	2	<1	<1
Maximum	**51**	**79**	**17**	**8**
Threshold	**2,925**	**278**	**45**	**12**
Potentially Significant?	**No**	**No**	**No**	**No**

6.5 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed warehouse structure is sited within an area dominated by industrial land uses. The proposed warehouse facility is anticipated to be used for distribution purposes and would not produce odors that would affect a substantial number of people considering that the proposed project is not anticipated to result in the manufacturing of any products or conduct other heavy industrial operations. However, the proposed project has the potential to emit odors at the northwest and southwest corners of the site where solid waste will be stored for pick up. Waste will be stored in trash enclosures. Waste will be stored within the enclosures and will have limited potential to emit substantial odors. Furthermore, the surrounding industrial uses are not associated with substantial odors.

6.6 Cumulative Impacts

6.6.1 Cumulative Construction Impacts

Cumulative short-term, construction-related emissions from the proposed project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in

the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this project has.

6.6.2 Cumulative Operational Impacts

The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD. SCAQMD allows a project to be analyzed using the *projection method* such that consistency with the AQMP will indicate that a project will not contribute considerably to cumulative air quality impacts. As discussed in AQMD Consistency, the proposed project is consistent with current land use designations and is consistent with the growth assumptions in the AQMP. Therefore, the proposed project will not contribute substantially or considerably to any potential cumulative air quality impacts.

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7 Climate Change Impact Analysis

7.1 Thresholds of Significance

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

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

B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the SCAQMD. As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* white paper, a non-zero threshold based on Approach 2 of the handbook will be used.[31] Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 metric tons carbon dioxide equivalent ($MTCO_2E$) per year for industrial projects.[32] This threshold is based on the review of 711 CEQA projects.

7.2 Short-Term Emissions

The proposed project will result in short-term greenhouse gas emissions from construction and installation activities. Greenhouse gas emissions will be released by equipment used for demolition, grading, paving, building construction, and architectural coating activities. GHG emissions will also result from worker and vendor trips to and from the project site. Table 12 (Construction Greenhouse Gas Emissions) summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory. Amortized construction emissions are included in Table 12.

Table 12
Construction Greenhouse Gas Emissions

	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
2015	1,060	<1	0	1,063
2016	845	<1	0	847
Total	*1,906*	*<1*	*0*	*1,910*
*AMORTIZED TOTAL^*	*64*	*<1*	*0*	*64*

* MTCO2E
Note: Slight variations may occur due to rounding and variations in modeling software
^ Amortized over 30-years

7.3 Long-Term Emissions

Proposed project activities will result in continuous greenhouse gas emissions from mobile, area, and operational sources. Mobile sources including vehicle trips to and from the project site will result primarily in emissions of CO_2 with minor emissions of methane and nitrous oxide. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the proposed warehouse facility and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions inventory for the build-out of the proposed project.

The methodology utilized for each emissions source in CalEEMod is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.[33] A summary of the proposed project operational greenhouse gas emissions is included in Table 13 (Long-Term Greenhouse Gas Emissions). The emissions inventories are presented as metric tons of carbon dioxide equivalent (MTCO2E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons). Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in the project traffic study.[34] Natural gas, electricity, water demand, and solid waste generation were projected using CalEEMod default values.

Table 13
Long-Term Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area Emissions	<1	<1	0	<1
Energy Demand	523	<1	<1	525
Mobile Emissions	4,224	<1	0	4,225
Solid Waste	85	5	0	191
Water/Wastewater	8	<1	<1	9
TOTAL	*4,840*	*5*	<1	*4,950*

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding

7.3.1 Greenhouse Gas Emissions Inventory

Table 14 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from the certified Agua Mansa Commerce Center. Greenhouse gases associated with the construction and operation of the proposed project will NOT exceed the 10,000 MTCO2E threshold.

Table 14
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Construction^	64	<1	0	64
Operational	4,840	5	<1	4,950
TOTAL				**5,014**

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding
^ Construction impacts amortized over 30-years

7.4 Greenhouse Gas Emissions Reduction Planning

7.4.1 California Air Resources Board Scoping Plan

ARB's *Scoping Plan* identifies strategies to reduce California's greenhouse gas emissions in support of AB32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the proposed project, such as energy efficiency. Finally, while some measures are not directly applicable, the proposed project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. **California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions.** Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a

regional market system to achieve greater environmental and economic benefits for California.[35] Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.

2. **California Light-Duty Vehicle Greenhouse Gas Standards.** Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. **Energy Efficiency.** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. **Renewables Portfolio Standards.** Achieve 33 percent renewable energy mix statewide.
5. **Low Carbon Fuel Standard.** Develop and adopt the Low Carbon Fuel Standard.
6. **Regional Transportation-Related Greenhouse Gas Targets.** Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. **Vehicle Efficiency Measures.** Implement light-duty vehicle efficiency measures.
8. **Goods Movement.** Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. **Million Solar Roofs Program.** Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. **Medium- and Heavy-Duty Vehicles.** Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.[36] Future, yet to be determined improvements, includes hybridization of MD and HD trucks.
11. **Industrial Emissions.** Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. **High Speed Rail.** Support implementation of a high speed rail system.
13. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. **High Global Warming Potential Gases.** Adopt measures to reduce high warming global potential gases.
15. **Recycling and Waste.** Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. **Sustainable Forests.** Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO2E/YR.
17. **Water.** Continue efficiency programs and use cleaner energy sources to move and treat water.

18. **Agriculture.** In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 15 summarizes the proposed project's consistency with the State Scoping Plan. As summarized, the proposed project will not conflict with any of the provisions of the Scoping Plan and in fact supports four of the action categories through energy efficiency, water conservation, and recycling.

Table 15
Scoping Plan Consistency Summary

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	**Not Applicable.** These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect assisted living facilities.
Light-Duty Vehicle Standards	T-1	**Not Applicable.** This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	**Consistent.** The project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	**Not Applicable.** Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	**Not Applicable.** Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	**Not Applicable.** The project will not result in substantial emissions of greenhouse gas emissions; therefore, transportation related emissions reductions are not required.
Vehicle Efficiency Measures	T-4	**Not Applicable.** Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	**Not applicable.** Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.
	T-6	
Million Solar Roofs Program	E-4	**Not Applicable.** Sets goal for use of

		solar systems throughout the state.
Medium- & Heavy-Duty Vehicles	T-7	**Not applicable.** Medium-duty and heavy-duty trucks and trailers will not operate from the assisted living facility.
	T-8	
Industrial Emissions	I-1	**Not Applicable.** These measures are applicable to large industrial facilities (> 500,000 MTCOE2/YR) and other intensive uses such as refineries.
	I-2	
	I-3	
	I-4	
	I-5	
High Speed Rail	T-9	**Not Applicable.** Supports increased mobility choice.
Green Building Strategy	GB-1	**Consistent.** The project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN requirements.
High Global Warming Potential Gases	H-1	**Not Applicable.** The proposed project is not a substantial source of high GWP emissions and will comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-2	
	H-3	
	H-4	
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	**Consistent.** The project will be required to recycle a minimum of 50 percent from construction activities and operations per State requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	**Not Applicable.** The project site is not forested and the project will not result in the loss of any forest land.
Water	W-1	**Consistent.** The project will include use of low-flow fixtures and efficient landscaping per State requirements.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	**Not Applicable.** The project is not an agricultural use.

7.5 Energy Conservation

7.5.1 Introduction

This energy conservation analysis has been prepared pursuant to California Public Resources Code Section 21100(b)(3) and Appendix F of the California Environmental Quality Act (CEQA) Guidelines.

The purpose of this analysis is to assess the short- and long-term energy demand of the proposed project, identify proposed and required conservation measures, and assess the extent to which the proposed project would conserve energy. Project energy demand will not be wasteful, inefficient, or unnecessary if it does not increase energy demand over typical construction and operating requirements.

Energy demand and conservation effectiveness are primarily based on demand surveys utilized in the California Emissions Estimator Model (CalEEMod). CalEEMod estimates energy demand for purposes of modeling greenhouse gas emissions.

Appendix F of the State CEQA Guidelines states that the goal of assessing energy conservation in a project is to ensure the wise and efficient use of energy. Energy efficiency is achieved by decreasing energy consumption, decreasing reliance on fossil fuels, and increasing use of renewable energy sources. The guidelines for analysis of energy conservation provided in Appendix F of the State CEQA Guidelines are provided herein.

7.5.2 CEQA Appendix F: Energy Conservation

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

(1) decreasing overall per capita energy consumption,
(2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and
(3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

II. EIR Contents

Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances specific items may not apply or additional items may be needed. Where items listed below are applicable or relevant to the project, they should be considered in the EIR.

A. Project Description may include the following items:

1. *Energy consuming equipment and processes which will be used during construction, operation and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.*
2. *Total energy requirements of the project by fuel type and end use.*
3. *Energy conservation equipment and design features.*
4. *Identification of energy supplies that would serve the project.*
5. *Total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode.*

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

C. Environmental Impacts may include:

1. *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*
2. *The effects of the project on local and regional energy supplies and on requirements for additional capacity.*
3. *The effects of the project on peak and base period demands for electricity and other forms of energy.*
4. *The degree to which the project complies with existing energy standards.*
5. *The effects of the project on energy resources.*
6. *The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.*

D. Mitigation Measures may include:

1. *Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.*
2. *The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste.*
3. *The potential for reducing peak energy demand.*
4. *Alternate fuels (particularly renewable ones) or energy systems.*
5. *Energy conservation which could result from recycling efforts.*

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.

G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.
H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the project's energy costs over the project's lifetime.
I. Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

7.5.3 Energy Demand

Short-term energy demand would result from construction of the proposed project. This would include energy demand from worker and vendor vehicle trips and construction equipment usage. Long-term energy demand would result from operation of the proposed project. This would include energy demand from vehicle trips, electricity and natural gas usage, and water and wastewater conveyance. This section quantifies the energy needs of these activities.

Construction Activities

Worker and vendor trips have been estimated based on the construction schedule assumptions used in the preparation of the project air quality and climate change report. The construction schedule for the proposed project was estimated used CalEEMod defaults with an anticipated start date in early 2015. Vendor trips are based on construction vendor trip data compiled by the Sacramento Metropolitan Air Quality Management District. Fuel consumption from worker and vendor trips are estimated by evaluating the number of vehicle trips and travel distances required to complete each construction phase. Construction is scheduled to occur in the years 2015-2016 based on the construction phasing schedule. Fuel economy for the worker vehicle fleet mix is estimated at 35.4 miles per gallon (mpg) in 2015 and 36.6 mpg in 2016, based on estimates prepared by the California Air Resources Board (ARB).[37] Fuel efficiency for the vendor and hauling heavy duty fleet mix is estimated using data provided by the National Highway Traffic Safety Administration (NHTSA) in the Environmental Impact Statement (EIS) for the adopted national medium- and heavy-duty vehicle fuel consumption standard.[38] Worker vehicles are assumed to be gasoline and vendor/hauling vehicles are assumed to be diesel. Fuel demand for worker and vendor trips for each construction phase activity is calculated as follows:

$$Fuel = \frac{Trips * Length}{Economy} * Days$$

Where:

Fuel = Total Fuel Demand (gallons)
Trips = Daily Worker/Vendor Trips
Length = Trip Length (miles)
Economy = Fuel Economy of Vehicle Fleet (miles/gallon)
Days = Total Days of Activity

Fuel demand for hauling trips for each demolition activity is calculated as follows:

$$Fuel = \frac{Trips * Length}{Economy} * Days$$

Where:

Fuel = Total Fuel Demand (gallons)
Trips = Daily Hauler Trips
Length = Trip Length (miles)
Economy = Fuel Economy of Vehicle Fleet (miles/gallon)
Days = Total Days of Activity

Calculations for total worker, vendor, and hauler fuel consumption are provided in Table 16 (Construction Worker Gasoline Demand), Table 17 (Construction Vendor Diesel Demand), and Table 18 (Construction Hauler Fuel Construction). Total gasoline consumption from worker trips is estimated to be 60,257.41 gallons and estimated total diesel consumption is estimated at 76,059.26 gallons.

Table 16
Construction Worker Gasoline Demand

Phase	Trips	Trip Length	Total Miles	Fuel Economy	gal/day	Total Days	Total Demand
Site Preparation	18	14.7	264.6	35.4	7.47	10	74.75
Grading	20	14.7	294.0	35.4	8.31	35	290.68
Building Construction	385	14.7	5,659.5	35.4	159.87	370	59,152.97
Paving	15	14.7	220.5	36.6	6.02	20	120.49
Architectural Coating	77	14.7	1,131.9	36.6	30.93	20	618.52
Total Worker Gasoline Use (gal)							60,257.41

Table 17
Construction Vendor Diesel Demand

Phase	Trips	Trip Length	Total Miles	Fuel Efficiency	gal/day	Total Days	Total Demand
Building Construction	150	6.9	1,035	5.4	191.67	370	70,916.67
Total Vendor Diesel Use (gal)							70.916.67

Table 18
Construction Hauler Diesel Demand

Phase	Trips	Trip Length	Total Miles	Fuel Efficiency	Total Demand
Grading	2,777	10	27,770	5.4	5,142.59
Total Hauler Diesel Use (gal)					5,142.59

Diesel fuel consumption by construction equipment has been estimated based on the construction schedule and equipment usage assumptions used in the preparation of the project air quality and climate change analysis. The construction schedule and equipment assumptions are based on SCAQMD construction survey data that accounts for equipment needs at over 50 construction sites. Fuel usage is determined by evaluating the

anticipated usage of each piece of equipment at an estimated fuel use rate of 0.04 gallons per horsepower hour.[39] Equipment fuel demand for each construction phase activity is calculated as follows:

```
Fuel = HP * Load * Rate * Pieces * Hrs * Days

Where:

Fuel = Total Fuel Demand (gallons)
HP = Horsepower of Equipment
Load = Load Factor of Equipment
Pieces = Number of Equipment Required for Activity
Hrs = Hours per Day Equipment is in Operation
Days = Total Days of Activity
```

Calculations for total construction equipment diesel consumption are provided in Table 19 (Construction Equipment Diesel Demand). Total diesel consumption after all construction phases is estimated to be 47,763.23 gallons.

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Table 19
Construction Equipment Diesel Demand

Phase and Activity	Equipment Type	Horse Power	Load Factor	Fuel Rate	Fuel Use/Hr	No. Equipment	Hrs/Day	Total Days	Total Fuel Use
Grading	Excavators	162	0.38	0.04	2.46	2	8	35	1,378.94
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	4	8	10	459.39
Building Construction	Generators Sets	84	0.74	0.04	2.49	1	8	370	7,359.74
Grading	Rubber Tired Dozers	255	0.40	0.04	4.08	1	8	35	1,142.40
Grading	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	2	8	35	803.94
Building Construction	Cranes	226	0.39	0.04	3.53	1	7	370	9,131.30
Building Construction	Forklifts	89	0.20	0.04	0.71	3	8	370	6,322.56
Building Construction	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	3	7	370	11,154.61
Grading	Graders	174	0.41	0.04	2.85	1	8	35	799.01
Paving	Pavers	125	0.42	0.04	2.10	2	8	20	672.00
Paving	Rollers	80	0.38	0.04	1.22	2	8	20	389.12
Paving	Paving Equipment	130	0.36	0.04	1.87	2	8	20	599.04
Architectural Coating	Air Compressors	78	0.48	0.04	1.50	1	8	20	239.62
Site Preparation	Rubber Tired Dozers	255	0.40	0.04	4.08	3	8	10	979.20
Grading	Scrapers	361	0.48	0.04	6.93	2	8	35	3,881.47
Building Construction	Welders	46	0.45	0.04	0.83	1	8	370	2,450.88
Total Construction Equipment Diesel Demand (gal)									47,763.23

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Operational Activities

Mobile Sources

Employees, vendors, and customers of the proposed project will result in the generation of vehicle trips to and from the project site. This will result in the use of gasoline and diesel fuels over the life of the proposed project. Vehicle trips from the proposed project were estimated in the project traffic study. Similar to construction worker and vendor trips, fuel consumption by operation-related vehicles will depend on the number of trips and the length of the trip. Operational trip type, trip length, and fleet mix were generated in CalEEMod from data provided by ARB and SCAQMD. 77 percent of trips are assumed to be employee home to work (H-W) trips and 23 percent are assumed to be commercial-nonwork (C-NW) trips to reflect goods deliveries. Based on the annual fleet mix provided in the model, 77 percent are considered passenger vehicles and are assumed to run on gasoline. The remaining 23 percent of vehicles represent medium-heavy duty to heavy-duty vehicles and are assumed to run on diesel. Annual operational fuel demand was calculated as follows:

$$Fuel_{TT} = \frac{Trips * TTP_{TT} * Type * TL_{TT}}{Economy} * 365\ Days$$

Where:

Fuel = Total Annual Fuel Demand (gallons)
Trips = Total Daily Trips
TTP = Total Trip Percentage
Type = Ratio of Fleet by Fuel Type
Economy = Fuel Economy of Vehicle Fleet (miles/gallon)
TT = Trip Type

Calculations for annual mobile source fuel consumption are provided in Table 20 (Mobile Source Gasoline Demand) and Table 21 (Mobile Source Diesel Demand). Mobile sources from the proposed project will require approximately 99,606 gallons of gasoline per year and 194,293 gallons of diesel per year beginning in 2017.

Table 20
Mobile Source Gasoline Demand

Trip Type	Daily Trips	Trip Length	Daily Miles	Fuel Economy	gal/day	Total Days	Total Demand
Employee	579	16.6	9,606	35.2	273	365	99,606
Total Operational Gasoline Demand (gal)							99,606

Table 21
Mobile Source Diesel Demand

Trip Type	Daily Trips	Trip Length	Daily Miles	Fuel Economy	gal/day	Total Days	Total Demand
Trucks	173	17.4	3,008	5.65	532	365	194,293
Total Operational Diesel Demand (gal)							194,293

Electricity and Natural Gas Use
Electricity and natural gas would be required to provide energy to the proposed assisted living facility for indoor and outdoor lighting, office equipment, building cooling and heating, kitchen operations, and water heating. Energy demand was estimated using CalEEMod default calculations. The annual increase in electricity demand will be approximately 1,647,636 kilowatt hours per year (kWh/yr) and natural gas demand by 957,286 thousand British Thermal Units per year (kBTU/yr).

Water and Wastewater
Electricity will indirectly be required to treat and convey water to the project site and convey wastewater away from the project site. Water demand for the proposed project was estimated using CalEEMod default calculations. Electricity demand for water-related energy is estimated using the CEC *Refining Estimates of Water-Related Energy Use in California*.[40] Water demand is estimated to increase by approximately 2.47 million gallons per year (MGY) (without consideration of CALGREEN 2011 building code requirements). Wastewater discharges were estimated at 0.47 million gallons per year (80 percent of indoor water demand). Indirect energy demand for water and wastewater purposes is calculated as follows:

$$Indirect_W = (D_W * Supply) + (D_W * Treat) + (D_W * Distribute)$$

Where:

Indirect = Indirect Electricity Demand (kWh/year)
D = Demand/Discharge (million gallons per year)
Supply = Electricity Required to Supply (kWh)
Treat = Electricity Required to Treat (kWh)
Distribute = Electricity Required to Convey (kWh)
W = Water or Wastewater

Indirect electricity demand for water and wastewater treatment and conveyance is detailed in Table 22 (Indirect Electricity Demand). Water and wastewater treatment and conveyance will increase by approximately 28,365 kWh/yr of electricity.

Table 22
Indirect Electricity Demand

Source	MGY	Supply	Treat	Distribute	Total
Water	2.47	9,727	111	1,272	6,576
Wastewater	0.47	--	1,911		905
Total Indirect Demand (kWh/yr)					28,365

Energy Demand by Source

Short- and long-term energy demand is summarized in Table 23 (Energy Demand by Source). Electricity demand has been summarized by production source, based on the *Emissions and Generation Resource Integrated Database* (eGRID) for Southern California Edison (SCE).[41] Construction-related demand has been amortized over a 30-year period to compare to annual operational emissions.

7.5.4 Energy Conservation

The proposed project will be subject to state water efficiency regulations pursuant to the California Building Code (CBC) that will reduce long-term project energy demand. These requirements would reduce wasteful, inefficient, and unnecessary consumption of energy over the long-term. The following quantifies energy demand reductions pursuant to these requirements.

California Building Code

Pursuant to the CBC CALGREEN requirements, the proposed project will be subject to the following requirements:[42]

- 20 percent reduction in water demand (5.303.2)
- 20 percent reduction in wastewater discharges (5.303.4)

Reduce Water and Wastewater Demand (5.303.2 & 5.303.4)
The minimum 20 percent reduction in water demand and wastewater discharges would decrease indoor water demand and wastewater discharges. This would result in a concurrent reduction in energy demand to supply, treat, and convey water and wastewater.

Agua Mansa Master Plan Mitigation Measures

The project is subject to Mitigation Measures AQ-2 and AQ-4 that were adopted in the certified Agua Mansa Master Plan EIR. Mitigation Measure AQ-2 requires implementation of construction measures to reduce pollutant emissions from construction activities. In particular to energy conservation, construction equipment will be required to be properly tuned and thus reducing diesel fuel consumption through better performance. Furthermore, Mitigation Measure AQ-4 includes a list of energy efficiency measures that will be incorporated into the project. These include use of automated time clocks or sensors for building cooling and heating, energy efficient street lights, cool roofs, window glazing, wall insulation, and efficient ventilation. Implementation of these mitigation measures will further reduce energy demand from construction and operational activities.

7.5.5 Conclusion

With implementation of existing regulations, energy demand for the proposed project will not be wasteful, inefficient, or unnecessary.

Table 23
Energy Demand by Source

Activity	Gasoline (gal/yr)	Diesel (gal/yr)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)				
				Coal	Oil	Natural Gas	Nuclear	Hydro
Construction								
Worker	2,009	--	--	--	--	--	--	--
Vendor/Hauler	--	2,525	--	--	--	--	--	--
Equipment	--	129	--	--	--	--	--	--
Operational								
Mobile	99,906	194,293	--	--	--	--	--	--
Natural Gas	--	--	957,286	--	--	--	--	--
Direct Electricity	--	--	--	532,959	1,453	1,089	872,484	239,650
Indirect Electricity	--	--	--	9,175	25	19	15,020	4,126
Total	101,614	196,957	957,286	542,134	1,478	1,108	887,505	243,776

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8 Mitigation Measures

No mitigation measures are required.

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Appendix A CalEEMod Outputs

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Agua Mansa Supplemental EIR

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	447.33	1000sqft	10.27	447,330.00	0
Other Non-Asphalt Surfaces	133.12	1000sqft	3.06	133,119.00	0
Parking Lot	7.74	Acre	7.74	337,154.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - Adjust for Cloer Disposal Facility

Grading -

Architectural Coating -

Vehicle Trips - Adjust Trips Per Traffic Study
Adjust Truck Trip Length Per NCHRP Study
Adjust Trip % Per Traffic Study

Vechicle Emission Factors - Fleet Mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Water And Wastewater - Outdoor water per Department of Water Resources Water Budget
Interior water per Kaiser Study
No Septic Tanks or Lagoons

Sequestration -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	133,120.00	133,119.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	195.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00

tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MHD	0.02	0.46
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00

tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.40
tblVehicleTrips	CNW_TTP	41.00	23.00
tblVehicleTrips	CW_TTP	59.00	77.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
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	IndoorWaterUseRate	103,445,062.50	591,874.00
tblWater	OutdoorWaterUseRate	0.00	1,879,790.00
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					
2015	0.8217	6.3709	7.3715	0.0123	0.7513	0.3183	1.0696	0.2496	0.2970	0.5466	0.0000	1,060.3148	1,060.3148	0.1216	0.0000	1,062.8682
2016	7.4283	4.1150	5.4059	0.0101	0.4579	0.2074	0.6653	0.1232	0.1943	0.3175	0.0000	845.4019	845.4019	0.0798	0.0000	847.0778
Total	**8.2500**	**10.4860**	**12.7773**	**0.0223**	**1.2092**	**0.5257**	**1.7349**	**0.3728**	**0.4914**	**0.8642**	**0.0000**	**1,905.7167**	**1,905.7167**	**0.2014**	**0.0000**	**1,909.9461**

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					
2015	0.8217	6.3709	7.3715	0.0123	0.7513	0.3183	1.0696	0.2496	0.2970	0.5466	0.0000	1,060.3144	1,060.3144	0.1216	0.0000	1,062.8678
2016	7.4283	4.1150	5.4059	0.0101	0.4579	0.2074	0.6653	0.1232	0.1943	0.3175	0.0000	845.4016	845.4016	0.0798	0.0000	847.0775
Total	**8.2500**	**10.4860**	**12.7773**	**0.0223**	**1.2092**	**0.5257**	**1.7349**	**0.3728**	**0.4914**	**0.8642**	**0.0000**	**1,905.7160**	**1,905.7160**	**0.2014**	**0.0000**	**1,909.9453**

	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**

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	4.0008	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155
Energy	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	522.5823	522.5823	0.0227	5.4200e-003	524.7384
Mobile	1.1165	12.0340	13.2679	0.0501	2.0261	0.2345	2.2605	0.5817	0.2157	0.7974	0.0000	4,223.6989	4,223.6989	0.0655	0.0000	4,225.0739
Waste						0.0000	0.0000		0.0000	0.0000	85.3557	0.0000	85.3557	5.0444	0.0000	191.2876
Water						0.0000	0.0000		0.0000	0.0000	0.2094	8.1819	8.3913	1.1000e-003	5.3000e-004	8.5796
Total	**5.1224**	**12.0810**	**13.3150**	**0.0504**	**2.0261**	**0.2381**	**2.2641**	**0.5817**	**0.2193**	**0.8010**	**85.5651**	**4,754.4777**	**4,840.0428**	**5.1336**	**5.9500e-003**	**4,949.6949**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.0008	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155
Energy	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	522.5823	522.5823	0.0227	5.4200e-003	524.7384
Mobile	1.1165	12.0340	13.2679	0.0501	2.0261	0.2345	2.2605	0.5817	0.2157	0.7974	0.0000	4,223.6989	4,223.6989	0.0655	0.0000	4,225.0739
Waste						0.0000	0.0000		0.0000	0.0000	85.3557	0.0000	85.3557	5.0444	0.0000	191.2876
Water						0.0000	0.0000		0.0000	0.0000	0.2094	8.1819	8.3913	1.0900e-003	5.3000e-004	8.5793
Total	**5.1224**	**12.0810**	**13.3150**	**0.0504**	**2.0261**	**0.2381**	**2.2641**	**0.5817**	**0.2193**	**0.8010**	**85.5651**	**4,754.4777**	**4,840.0428**	**5.1336**	**5.9500e-003**	**4,949.6946**

	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**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	143.1300
Total	**143.1300**

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	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	4/1/2015	5	35	
3	Building Construction	Building Construction	4/2/2015	8/31/2016	5	370	
4	Paving	Paving	9/1/2016	9/28/2016	5	20	
5	Architectural Coating	Architectural Coating	9/29/2016	10/26/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 885,845; Non-Residential Outdoor: 295,282 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	385.00	150.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	77.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	**4.0000e-004**	**5.9000e-004**	**6.1000e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9582**	**0.9582**	**5.0000e-005**	**0.0000**	**0.9594**

3.2 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6505**	**18.6505**	**5.5700e-003**	**0.0000**	**18.7675**

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	**4.0000e-004**	**5.9000e-004**	**6.1000e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9582**	**0.9582**	**5.0000e-005**	**0.0000**	**0.9594**

3.3 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1186	1.3833	0.8897	1.0800e-003		0.0665	0.0665		0.0612	0.0612	0.0000	102.9739	102.9739	0.0307	0.0000	103.6195
Total	**0.1186**	**1.3833**	**0.8897**	**1.0800e-003**	**0.1518**	**0.0665**	**0.2183**	**0.0629**	**0.0612**	**0.1242**	**0.0000**	**102.9739**	**102.9739**	**0.0307**	**0.0000**	**103.6195**

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	1.5600e-003	2.2800e-003	0.0237	5.0000e-005	3.8400e-003	3.0000e-005	3.8700e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.7264	3.7264	2.1000e-004	0.0000	3.7308
Total	**1.5600e-003**	**2.2800e-003**	**0.0237**	**5.0000e-005**	**3.8400e-003**	**3.0000e-005**	**3.8700e-003**	**1.0200e-003**	**3.0000e-005**	**1.0500e-003**	**0.0000**	**3.7264**	**3.7264**	**2.1000e-004**	**0.0000**	**3.7308**

3.3 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1186	1.3833	0.8897	1.0800e-003		0.0665	0.0665		0.0612	0.0612	0.0000	102.9737	102.9737	0.0307	0.0000	103.6193
Total	**0.1186**	**1.3833**	**0.8897**	**1.0800e-003**	**0.1518**	**0.0665**	**0.2183**	**0.0629**	**0.0612**	**0.1242**	**0.0000**	**102.9737**	**102.9737**	**0.0307**	**0.0000**	**103.6193**

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	1.5600e-003	2.2800e-003	0.0237	5.0000e-005	3.8400e-003	3.0000e-005	3.8700e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.7264	3.7264	2.1000e-004	0.0000	3.7308
Total	**1.5600e-003**	**2.2800e-003**	**0.0237**	**5.0000e-005**	**3.8400e-003**	**3.0000e-005**	**3.8700e-003**	**1.0200e-003**	**3.0000e-005**	**1.0500e-003**	**0.0000**	**3.7264**	**3.7264**	**2.1000e-004**	**0.0000**	**3.7308**

3.4 Building Construction - 2015

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	0.3586	2.9429	1.8370	2.6300e-003		0.2074	0.2074		0.1951	0.1951	0.0000	239.1145	239.1145	0.0600	0.0000	240.3743
Total	**0.3586**	**2.9429**	**1.8370**	**2.6300e-003**		**0.2074**	**0.2074**		**0.1951**	**0.1951**	**0.0000**	**239.1145**	**239.1145**	**0.0600**	**0.0000**	**240.3743**

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	0.1482	1.5111	1.8430	3.2000e-003	0.0904	0.0251	0.1155	0.0258	0.0231	0.0489	0.0000	293.1831	293.1831	2.3400e-003	0.0000	293.2322
Worker	0.1681	0.2463	2.5588	5.0900e-003	0.4140	3.7100e-003	0.4177	0.1099	3.4000e-003	0.1133	0.0000	401.7082	401.7082	0.0227	0.0000	402.1846
Total	**0.3163**	**1.7574**	**4.4018**	**8.2900e-003**	**0.5044**	**0.0288**	**0.5332**	**0.1357**	**0.0265**	**0.1622**	**0.0000**	**694.8913**	**694.8913**	**0.0250**	**0.0000**	**695.4168**

3.4 Building Construction - 2015

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	0.3586	2.9429	1.8370	2.6300e-003		0.2074	0.2074		0.1951	0.1951	0.0000	239.1142	239.1142	0.0600	0.0000	240.3740
Total	**0.3586**	**2.9429**	**1.8370**	**2.6300e-003**		**0.2074**	**0.2074**		**0.1951**	**0.1951**	**0.0000**	**239.1142**	**239.1142**	**0.0600**	**0.0000**	**240.3740**

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	0.1482	1.5111	1.8430	3.2000e-003	0.0904	0.0251	0.1155	0.0258	0.0231	0.0489	0.0000	293.1831	293.1831	2.3400e-003	0.0000	293.2322
Worker	0.1681	0.2463	2.5588	5.0900e-003	0.4140	3.7100e-003	0.4177	0.1099	3.4000e-003	0.1133	0.0000	401.7082	401.7082	0.0227	0.0000	402.1846
Total	**0.3163**	**1.7574**	**4.4018**	**8.2900e-003**	**0.5044**	**0.0288**	**0.5332**	**0.1357**	**0.0265**	**0.1622**	**0.0000**	**694.8913**	**694.8913**	**0.0250**	**0.0000**	**695.4168**

3.4 Building Construction - 2016

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	0.2963	2.4801	1.6101	2.3300e-003		0.1712	0.1712		0.1608	0.1608	0.0000	210.6736	210.6736	0.0523	0.0000	211.7709
Total	**0.2963**	**2.4801**	**1.6101**	**2.3300e-003**		**0.1712**	**0.1712**		**0.1608**	**0.1608**	**0.0000**	**210.6736**	**210.6736**	**0.0523**	**0.0000**	**211.7709**

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	0.1161	1.1848	1.5209	2.8300e-003	0.0803	0.0185	0.0988	0.0229	0.0170	0.0399	0.0000	257.4102	257.4102	1.8800e-003	0.0000	257.4496
Worker	0.1343	0.1972	2.0515	4.5200e-003	0.3675	3.1300e-003	0.3706	0.0976	2.8800e-003	0.1005	0.0000	344.2944	344.2944	0.0185	0.0000	344.6835
Total	**0.2504**	**1.3820**	**3.5724**	**7.3500e-003**	**0.4478**	**0.0216**	**0.4694**	**0.1205**	**0.0199**	**0.1404**	**0.0000**	**601.7046**	**601.7046**	**0.0204**	**0.0000**	**602.1331**

3.4 Building Construction - 2016

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	0.2963	2.4801	1.6101	2.3300e-003		0.1712	0.1712		0.1608	0.1608	0.0000	210.6734	210.6734	0.0523	0.0000	211.7706
Total	**0.2963**	**2.4801**	**1.6101**	**2.3300e-003**		**0.1712**	**0.1712**		**0.1608**	**0.1608**	**0.0000**	**210.6734**	**210.6734**	**0.0523**	**0.0000**	**211.7706**

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	0.1161	1.1848	1.5209	2.8300e-003	0.0803	0.0185	0.0988	0.0229	0.0170	0.0399	0.0000	257.4102	257.4102	1.8800e-003	0.0000	257.4496
Worker	0.1343	0.1972	2.0515	4.5200e-003	0.3675	3.1300e-003	0.3706	0.0976	2.8800e-003	0.1005	0.0000	344.2944	344.2944	0.0185	0.0000	344.6835
Total	**0.2504**	**1.3820**	**3.5724**	**7.3500e-003**	**0.4478**	**0.0216**	**0.4694**	**0.1205**	**0.0199**	**0.1404**	**0.0000**	**601.7046**	**601.7046**	**0.0204**	**0.0000**	**602.1331**

3.5 Paving - 2016

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0310**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.8000e-004**	**9.1900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5419**	**1.5419**	**8.0000e-005**	**0.0000**	**1.5436**

3.5 Paving - 2016

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0310**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.8000e-004**	**9.1900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5419**	**1.5419**	**8.0000e-005**	**0.0000**	**1.5436**

3.6 Architectural Coating - 2016

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	6.8432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**6.8468**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

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	3.0900e-003	4.5300e-003	0.0472	1.0000e-004	8.4500e-003	7.0000e-005	8.5200e-003	2.2400e-003	7.0000e-005	2.3100e-003	0.0000	7.9148	7.9148	4.3000e-004	0.0000	7.9238
Total	**3.0900e-003**	**4.5300e-003**	**0.0472**	**1.0000e-004**	**8.4500e-003**	**7.0000e-005**	**8.5200e-003**	**2.2400e-003**	**7.0000e-005**	**2.3100e-003**	**0.0000**	**7.9148**	**7.9148**	**4.3000e-004**	**0.0000**	**7.9238**

3.6 Architectural Coating - 2016

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	6.8432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**6.8468**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

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	3.0900e-003	4.5300e-003	0.0472	1.0000e-004	8.4500e-003	7.0000e-005	8.5200e-003	2.2400e-003	7.0000e-005	2.3100e-003	0.0000	7.9148	7.9148	4.3000e-004	0.0000	7.9238
Total	**3.0900e-003**	**4.5300e-003**	**0.0472**	**1.0000e-004**	**8.4500e-003**	**7.0000e-005**	**8.5200e-003**	**2.2400e-003**	**7.0000e-005**	**2.3100e-003**	**0.0000**	**7.9148**	**7.9148**	**4.3000e-004**	**0.0000**	**7.9238**

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	1.1165	12.0340	13.2679	0.0501	2.0261	0.2345	2.2605	0.5817	0.2157	0.7974	0.0000	4,223.6989	4,223.6989	0.0655	0.0000	4,225.0739
Unmitigated	1.1165	12.0340	13.2679	0.0501	2.0261	0.2345	2.2605	0.5817	0.2157	0.7974	0.0000	4,223.6989	4,223.6989	0.0655	0.0000	4,225.0739

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	751.51	751.51	751.51	4,591,284	4,591,284
Total	751.51	751.51	751.51	4,591,284	4,591,284

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
Other Non-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
Unrefrigerated Warehouse-No	16.60	0.00	17.40	77.00	0.00	23.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.795700	0.000000	0.000000	0.000000	0.034600	0.000000	0.464000	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	471.4979	471.4979	0.0217	4.4800e-003	473.3431
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	471.4979	471.4979	0.0217	4.4800e-003	473.3431
NaturalGas Mitigated	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	51.0844	51.0844	9.8000e-004	9.4000e-004	51.3953
NaturalGas Unmitigated	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	51.0844	51.0844	9.8000e-004	9.4000e-004	51.3953

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					
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	0.0000
Unrefrigerated Warehouse-No Rail	957286	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	51.0844	51.0844	9.8000e-004	9.4000e-004	51.3953
Other Non-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		**5.1600e-003**	**0.0469**	**0.0394**	**2.8000e-004**		**3.5700e-003**	**3.5700e-003**		**3.5700e-003**	**3.5700e-003**	**0.0000**	**51.0844**	**51.0844**	**9.8000e-004**	**9.4000e-004**	**51.3953**

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					
Unrefrigerated Warehouse-No Rail	957286	5.1600e-003	0.0469	0.0394	2.8000e-004		3.5700e-003	3.5700e-003		3.5700e-003	3.5700e-003	0.0000	51.0844	51.0844	9.8000e-004	9.4000e-004	51.3953
Other Non-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
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	0.0000
Total		**5.1600e-003**	**0.0469**	**0.0394**	**2.8000e-004**		**3.5700e-003**	**3.5700e-003**		**3.5700e-003**	**3.5700e-003**	**0.0000**	**51.0844**	**51.0844**	**9.8000e-004**	**9.4000e-004**	**51.3953**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	296696	84.9045	3.9000e-003	8.1000e-004	85.2368
Unrefrigerated Warehouse-No Rail	1.35094e+006	386.5933	0.0178	3.6800e-003	388.1063
Total		**471.4979**	**0.0217**	**4.4900e-003**	**473.3431**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	296696	84.9045	3.9000e-003	8.1000e-004	85.2368
Unrefrigerated Warehouse-No Rail	1.35094e+006	386.5933	0.0178	3.6800e-003	388.1063
Total		**471.4979**	**0.0217**	**4.4900e-003**	**473.3431**

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	4.0008	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155
Unmitigated	4.0008	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.4000e-004	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155
Total	**4.0008**	**7.0000e-005**	**7.6500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0146**	**0.0146**	**4.0000e-005**	**0.0000**	**0.0155**

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	tons/yr										MT/yr					
Architectural Coating	0.6843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.3158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.4000e-004	7.0000e-005	7.6500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0146	0.0146	4.0000e-005	0.0000	0.0155
Total	**4.0008**	**7.0000e-005**	**7.6500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0146**	**0.0146**	**4.0000e-005**	**0.0000**	**0.0155**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.3913	1.0900e-003	5.3000e-004	8.5793
Unmitigated	8.3913	1.1000e-003	5.3000e-004	8.5796

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 1.87979	5.9764	2.7000e-004	6.0000e-005	5.9998
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.591874 / 0	2.4148	8.2000e-004	4.8000e-004	2.5798
Total		**8.3913**	**1.0900e-003**	**5.4000e-004**	**8.5796**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 1.87979	5.9764	2.7000e-004	6.0000e-005	5.9998
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.591874 / 0	2.4148	8.2000e-004	4.8000e-004	2.5794
Total		**8.3913**	**1.0900e-003**	**5.4000e-004**	**8.5793**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	85.3557	5.0444	0.0000	191.2876
Unmitigated	85.3557	5.0444	0.0000	191.2876

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	420.49	85.3557	5.0444	0.0000	191.2876
Total		**85.3557**	**5.0444**	**0.0000**	**191.2876**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	420.49	85.3557	5.0444	0.0000	191.2876
Total		**85.3557**	**5.0444**	**0.0000**	**191.2876**

9.0 Operational Offroad

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

10.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	143.1300	0.0000	0.0000	143.1300

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	195	143.1300	0.0000	0.0000	143.1300
Total		**143.1300**	**0.0000**	**0.0000**	**143.1300**

Agua Mansa Supplemental EIR

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	447.33	1000sqft	10.27	447,330.00	0
Other Non-Asphalt Surfaces	133.12	1000sqft	3.06	133,119.00	0
Parking Lot	7.74	Acre	7.74	337,154.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Architectural Coating -

Vehicle Trips - Adjust Trips Per Traffic Study
Adjust Truck Trip Length Per NCHRP Study
Adjust Trip % Per Traffic Study

Vechicle Emission Factors - Fleet Mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Water And Wastewater - Outdoor water per Department of Water Resources Water Budget
Interior water per Kaiser Study
No Septic Tanks or Lagoons

Construction Phase -

Grading - Adjut Earth Movement for 2 Passes

Sequestration -

Trips and VMT - Adjust for Cloer Disposal Facility

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialImported	0.00	22,212.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	195.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00

tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MHD	0.02	0.46
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00

tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.40
tblVehicleTrips	CNW_TTP	41.00	23.00
tblVehicleTrips	CW_TTP	59.00	77.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
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	IndoorWaterUseRate	103,445,062.50	591,874.00
tblWater	OutdoorWaterUseRate	0.00	1,879,790.00
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					
2015	7.9294	92.4714	65.5323	0.1141	18.2675	4.0197	21.3575	9.9840	3.6980	12.8269	0.0000	10,742.2388	10,742.2388	1.9754	0.0000	10,783.7217
2016	685.0045	43.5377	58.4409	0.1140	5.2408	2.2149	7.4557	1.4083	2.0761	3.4843	0.0000	10,522.1485	10,522.1485	0.9203	0.0000	10,541.4747
Total	**692.9339**	**136.0091**	**123.9732**	**0.2281**	**23.5083**	**6.2345**	**28.8132**	**11.3923**	**5.7740**	**16.3112**	**0.0000**	**21,264.3873**	**21,264.3873**	**2.8957**	**0.0000**	**21,325.1964**

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					
2015	7.9294	92.4714	65.5323	0.1141	18.2675	4.0197	21.3575	9.9840	3.6980	12.8269	0.0000	10,742.2388	10,742.2388	1.9754	0.0000	10,783.7217
2016	685.0045	43.5377	58.4409	0.1140	5.2408	2.2149	7.4557	1.4083	2.0761	3.4843	0.0000	10,522.1485	10,522.1485	0.9203	0.0000	10,541.4747
Total	**692.9339**	**136.0091**	**123.9732**	**0.2281**	**23.5083**	**6.2345**	**28.8132**	**11.3923**	**5.7740**	**16.3112**	**0.0000**	**21,264.3873**	**21,264.3873**	**2.8957**	**0.0000**	**21,325.1964**

	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**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Energy	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Mobile	3.2430	26.9671	46.4022	0.1612	9.8667	0.4504	10.3171	2.6447	0.4144	3.0591		14,207.4152	14,207.4152	0.3365		14,214.4820
Total	**25.1954**	**27.2248**	**46.6794**	**0.1627**	**9.8667**	**0.4702**	**10.3369**	**2.6447**	**0.4342**	**3.0789**		**14,516.0971**	**14,516.0971**	**0.3428**	**5.6600e-003**	**14,525.0492**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Energy	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Mobile	3.2430	26.9671	46.4022	0.1612	9.8667	0.4504	10.3171	2.6447	0.4144	3.0591		14,207.4152	14,207.4152	0.3365		14,214.4820
Total	**25.1954**	**27.2248**	**46.6794**	**0.1627**	**9.8667**	**0.4702**	**10.3369**	**2.6447**	**0.4342**	**3.0789**		**14,516.0971**	**14,516.0971**	**0.3428**	**5.6600e-003**	**14,525.0492**

	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	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	4/1/2015	5	35	
3	Building Construction	Building Construction	4/2/2015	8/31/2016	5	370	
4	Paving	Paving	9/1/2016	9/28/2016	5	20	
5	Architectural Coating	Architectural Coating	9/29/2016	10/26/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 885,845; Non-Residential Outdoor: 295,282 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Paving Equipment	2	8.00	130	0.36
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,777.00	14.70	6.90	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	385.00	150.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	77.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119		222.0162
Total	**0.0830**	**0.1039**	**1.2894**	**2.5500e-003**	**0.2012**	**1.7700e-003**	**0.2030**	**0.0534**	**1.6200e-003**	**0.0550**		**221.7657**	**221.7657**	**0.0119**		**222.0162**

3.2 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119		222.0162
Total	**0.0830**	**0.1039**	**1.2894**	**2.5500e-003**	**0.2012**	**1.7700e-003**	**0.2030**	**0.0534**	**1.6200e-003**	**0.0550**		**221.7657**	**221.7657**	**0.0119**		**222.0162**

3.3 Grading - 2015

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					8.7451	0.0000	8.7451	3.6074	0.0000	3.6074			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**8.7451**	**3.8022**	**12.5473**	**3.6074**	**3.4980**	**7.1054**		**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

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	1.0621	13.3093	13.2597	0.0301	0.6918	0.2155	0.9073	0.1895	0.1982	0.3877		3,057.9826	3,057.9826	0.0257		3,058.5224
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	**1.1543**	**13.4247**	**14.6924**	**0.0330**	**0.9154**	**0.2175**	**1.1328**	**0.2488**	**0.2000**	**0.4488**		**3,304.3889**	**3,304.3889**	**0.0390**		**3,305.2071**

3.3 Grading - 2015

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					8.7451	0.0000	8.7451	3.6074	0.0000	3.6074			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**8.7451**	**3.8022**	**12.5473**	**3.6074**	**3.4980**	**7.1054**	**0.0000**	**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

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	1.0621	13.3093	13.2597	0.0301	0.6918	0.2155	0.9073	0.1895	0.1982	0.3877		3,057.9826	3,057.9826	0.0257		3,058.5224
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	**1.1543**	**13.4247**	**14.6924**	**0.0330**	**0.9154**	**0.2175**	**1.1328**	**0.2488**	**0.2000**	**0.4488**		**3,304.3889**	**3,304.3889**	**0.0390**		**3,305.2071**

3.4 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

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	1.4175	14.7400	16.2604	0.0327	0.9372	0.2549	1.1920	0.2669	0.2344	0.5012		3,309.3396	3,309.3396	0.0260		3,309.8856
Worker	1.7756	2.2220	27.5782	0.0546	4.3034	0.0379	4.3413	1.1413	0.0347	1.1760		4,743.3221	4,743.3221	0.2552		4,748.6804
Total	**3.1932**	**16.9621**	**43.8386**	**0.0872**	**5.2405**	**0.2927**	**5.5333**	**1.4081**	**0.2691**	**1.6772**		**8,052.6616**	**8,052.6616**	**0.2812**		**8,058.5660**

3.4 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

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	1.4175	14.7400	16.2604	0.0327	0.9372	0.2549	1.1920	0.2669	0.2344	0.5012		3,309.3396	3,309.3396	0.0260		3,309.8856
Worker	1.7756	2.2220	27.5782	0.0546	4.3034	0.0379	4.3413	1.1413	0.0347	1.1760		4,743.3221	4,743.3221	0.2552		4,748.6804
Total	**3.1932**	**16.9621**	**43.8386**	**0.0872**	**5.2405**	**0.2927**	**5.5333**	**1.4081**	**0.2691**	**1.6772**		**8,052.6616**	**8,052.6616**	**0.2812**		**8,058.5660**

3.4 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.2530	13.0269	14.9619	0.0326	0.9374	0.2115	1.1490	0.2670	0.1945	0.4615		3,272.9692	3,272.9692	0.0235		3,273.4624
Worker	1.6028	2.0045	24.9724	0.0545	4.3034	0.0360	4.3394	1.1413	0.0331	1.1744		4,579.8929	4,579.8929	0.2348		4,584.8233
Total	**2.8558**	**15.0314**	**39.9343**	**0.0872**	**5.2408**	**0.2475**	**5.4883**	**1.4083**	**0.2276**	**1.6358**		**7,852.8621**	**7,852.8621**	**0.2583**		**7,858.2857**

3.4 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.2530	13.0269	14.9619	0.0326	0.9374	0.2115	1.1490	0.2670	0.1945	0.4615		3,272.9692	3,272.9692	0.0235		3,273.4624
Worker	1.6028	2.0045	24.9724	0.0545	4.3034	0.0360	4.3394	1.1413	0.0331	1.1744		4,579.8929	4,579.8929	0.2348		4,584.8233
Total	**2.8558**	**15.0314**	**39.9343**	**0.0872**	**5.2408**	**0.2475**	**5.4883**	**1.4083**	**0.2276**	**1.6358**		**7,852.8621**	**7,852.8621**	**0.2583**		**7,858.2857**

3.5 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	1.0139					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1037**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
Total	**0.0624**	**0.0781**	**0.9730**	**2.1200e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**178.4374**	**178.4374**	**9.1500e-003**		**178.6295**

3.5 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	1.0139					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1037**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
Total	**0.0624**	**0.0781**	**0.9730**	**2.1200e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**178.4374**	**178.4374**	**9.1500e-003**		**178.6295**

3.6 Architectural Coating - 2016

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	684.3155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**684.6839**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.3206	0.4009	4.9945	0.0109	0.8607	7.1900e-003	0.8679	0.2283	6.6100e-003	0.2349		915.9786	915.9786	0.0470		916.9647
Total	**0.3206**	**0.4009**	**4.9945**	**0.0109**	**0.8607**	**7.1900e-003**	**0.8679**	**0.2283**	**6.6100e-003**	**0.2349**		**915.9786**	**915.9786**	**0.0470**		**916.9647**

3.6 Architectural Coating - 2016

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	684.3155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**684.6839**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.3206	0.4009	4.9945	0.0109	0.8607	7.1900e-003	0.8679	0.2283	6.6100e-003	0.2349		915.9786	915.9786	0.0470		916.9647
Total	**0.3206**	**0.4009**	**4.9945**	**0.0109**	**0.8607**	**7.1900e-003**	**0.8679**	**0.2283**	**6.6100e-003**	**0.2349**		**915.9786**	**915.9786**	**0.0470**		**916.9647**

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	3.2430	26.9671	46.4022	0.1612	9.8667	0.4504	10.3171	2.6447	0.4144	3.0591		14,207.4152	14,207.4152	0.3365		14,214.4820
Unmitigated	3.2430	26.9671	46.4022	0.1612	9.8667	0.4504	10.3171	2.6447	0.4144	3.0591		14,207.4152	14,207.4152	0.3365		14,214.4820

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	751.51	751.51	751.51	4,591,284	4,591,284
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	751.51	751.51	751.51	4,591,284	4,591,284

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
Unrefrigerated Warehouse-No	16.60	0.00	17.40	77.00	0.00	23.00	100	0	0
Other Non-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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.795700	0.000000	0.000000	0.000000	0.034600	0.000000	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
NaturalGas Unmitigated	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310

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					
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
Unrefrigerated Warehouse-No Rail	2622.7	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Other Non-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		**0.0283**	**0.2571**	**0.2160**	**1.5400e-003**		**0.0195**	**0.0195**		**0.0195**	**0.0195**		**308.5532**	**308.5532**	**5.9100e-003**	**5.6600e-003**	**310.4310**

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					
Unrefrigerated Warehouse-No Rail	2.6227	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Other Non-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		**0.0283**	**0.2571**	**0.2160**	**1.5400e-003**		**0.0195**	**0.0195**		**0.0195**	**0.0195**		**308.5532**	**308.5532**	**5.9100e-003**	**5.6600e-003**	**310.4310**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Unmitigated	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363

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	3.7497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.1686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9000e-003	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Total	**21.9241**	**5.8000e-004**	**0.0612**	**0.0000**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**		**0.1287**	**0.1287**	**3.6000e-004**		**0.1363**

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	3.7497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.1686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9000e-003	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Total	**21.9241**	**5.8000e-004**	**0.0612**	**0.0000**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**		**0.1287**	**0.1287**	**3.6000e-004**		**0.1363**

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 Vegetation

Agua Mansa Supplemental EIR

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	447.33	1000sqft	10.27	447,330.00	0
Other Non-Asphalt Surfaces	133.12	1000sqft	3.06	133,119.00	0
Parking Lot	7.74	Acre	7.74	337,154.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Architectural Coating -

Vehicle Trips - Adjust Trips Per Traffic Study
Adjust Truck Trip Length Per NCHRP Study
Adjust Trip % Per Traffic Study

Vechicle Emission Factors - Fleet Mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Vechicle Emission Factors - Fleet mix per Traffic Study

Water And Wastewater - Outdoor water per Department of Water Resources Water Budget
Interior water per Kaiser Study
No Septic Tanks or Lagoons

Construction Phase -

Grading - Adjut Earth Movement for 2 Passes

Sequestration -

Trips and VMT - Adjust for Cloer Disposal Facility

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialImported	0.00	22,212.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	195.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDA	0.51	0.80
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00

tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD1	0.04	0.03
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	LHD2	6.6300e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MCY	4.3480e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MH	2.1040e-003	0.00
tblVehicleEF	MHD	0.02	0.46
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	OBUS	1.9410e-003	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00
tblVehicleEF	SBUS	5.9400e-004	0.00

tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleEF	UBUS	2.5060e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.40
tblVehicleTrips	CNW_TTP	41.00	23.00
tblVehicleTrips	CW_TTP	59.00	77.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
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	IndoorWaterUseRate	103,445,062.50	591,874.00
tblWater	OutdoorWaterUseRate	0.00	1,879,790.00
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					
2015	8.0230	92.9166	67.6875	0.1104	18.2675	4.0211	21.3575	9.9840	3.6993	12.8269	0.0000	10,420.5398	10,420.5398	1.9760	0.0000	10,462.0351
2016	685.0116	44.0641	59.4882	0.1103	5.2408	2.2171	7.4579	1.4083	2.0781	3.4863	0.0000	10,210.2544	10,210.2544	0.9210	0.0000	10,229.5952
Total	**693.0346**	**136.9806**	**127.1757**	**0.2208**	**23.5083**	**6.2382**	**28.8154**	**11.3923**	**5.7774**	**16.3132**	**0.0000**	**20,630.7942**	**20,630.7942**	**2.8970**	**0.0000**	**20,691.6303**

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					
2015	8.0230	92.9166	67.6875	0.1104	18.2675	4.0211	21.3575	9.9840	3.6993	12.8269	0.0000	10,420.5398	10,420.5398	1.9760	0.0000	10,462.0351
2016	685.0116	44.0641	59.4882	0.1103	5.2408	2.2171	7.4579	1.4083	2.0781	3.4863	0.0000	10,210.2544	10,210.2544	0.9210	0.0000	10,229.5952
Total	**693.0346**	**136.9806**	**127.1757**	**0.2208**	**23.5083**	**6.2382**	**28.8154**	**11.3923**	**5.7774**	**16.3132**	**0.0000**	**20,630.7942**	**20,630.7942**	**2.8970**	**0.0000**	**20,691.6303**

	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**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Energy	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Mobile	3.3399	28.0333	47.0495	0.1555	9.8667	0.4518	10.3185	2.6447	0.4156	3.0604		13,760.6272	13,760.6272	0.3373		13,767.7097
Total	**25.2923**	**28.2910**	**47.3267**	**0.1571**	**9.8667**	**0.4715**	**10.3382**	**2.6447**	**0.4354**	**3.0801**		**14,069.3091**	**14,069.3091**	**0.3435**	**5.6600e-003**	**14,078.2769**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Energy	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Mobile	3.3399	28.0333	47.0495	0.1555	9.8667	0.4518	10.3185	2.6447	0.4156	3.0604		13,760.6272	13,760.6272	0.3373		13,767.7097
Total	**25.2923**	**28.2910**	**47.3267**	**0.1571**	**9.8667**	**0.4715**	**10.3382**	**2.6447**	**0.4354**	**3.0801**		**14,069.3091**	**14,069.3091**	**0.3435**	**5.6600e-003**	**14,078.2769**

	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	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	4/1/2015	5	35	
3	Building Construction	Building Construction	4/2/2015	8/31/2016	5	370	
4	Paving	Paving	9/1/2016	9/28/2016	5	20	
5	Architectural Coating	Architectural Coating	9/29/2016	10/26/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 885,845; Non-Residential Outdoor: 295,282 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	162	0.38
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Paving Equipment	2	8.00	130	0.36
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,777.00	14.70	6.90	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	385.00	150.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	77.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119		208.2664
Total	**0.0850**	**0.1141**	**1.1926**	**2.3900e-003**	**0.2012**	**1.7700e-003**	**0.2030**	**0.0534**	**1.6200e-003**	**0.0550**		**208.0159**	**208.0159**	**0.0119**		**208.2664**

3.2 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119		208.2664
Total	**0.0850**	**0.1141**	**1.1926**	**2.3900e-003**	**0.2012**	**1.7700e-003**	**0.2030**	**0.0534**	**1.6200e-003**	**0.0550**		**208.0159**	**208.0159**	**0.0119**		**208.2664**

3.3 Grading - 2015

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					8.7451	0.0000	8.7451	3.6074	0.0000	3.6074			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**8.7451**	**3.8022**	**12.5473**	**3.6074**	**3.4980**	**7.1054**		**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

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	1.1534	13.7431	15.5225	0.0300	0.6918	0.2170	0.9088	0.1895	0.1995	0.3890		3,043.8459	3,043.8459	0.0263		3,044.3981
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	**1.2478**	**13.8699**	**16.8475**	**0.0327**	**0.9154**	**0.2189**	**1.1343**	**0.2488**	**0.2013**	**0.4501**		**3,274.9747**	**3,274.9747**	**0.0396**		**3,275.8052**

3.3 Grading - 2015

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					8.7451	0.0000	8.7451	3.6074	0.0000	3.6074			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	**6.7751**	**79.0467**	**50.8400**	**0.0618**	**8.7451**	**3.8022**	**12.5473**	**3.6074**	**3.4980**	**7.1054**	**0.0000**	**6,486.2433**	**6,486.2433**	**1.9364**		**6,526.9080**

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	1.1534	13.7431	15.5225	0.0300	0.6918	0.2170	0.9088	0.1895	0.1995	0.3890		3,043.8459	3,043.8459	0.0263		3,044.3981
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	**1.2478**	**13.8699**	**16.8475**	**0.0327**	**0.9154**	**0.2189**	**1.1343**	**0.2488**	**0.2013**	**0.4501**		**3,274.9747**	**3,274.9747**	**0.0396**		**3,275.8052**

3.4 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

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	1.5571	15.1232	19.2858	0.0325	0.9372	0.2580	1.1951	0.2669	0.2372	0.5041		3,281.7344	3,281.7344	0.0267		3,282.2958
Worker	1.8188	2.4414	25.5080	0.0511	4.3034	0.0379	4.3413	1.1413	0.0347	1.1760		4,449.2282	4,449.2282	0.2552		4,454.5866
Total	**3.3759**	**17.5645**	**44.7937**	**0.0836**	**5.2405**	**0.2959**	**5.5364**	**1.4081**	**0.2719**	**1.6801**		**7,730.9627**	**7,730.9627**	**0.2819**		**7,736.8824**

3.4 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

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	1.5571	15.1232	19.2858	0.0325	0.9372	0.2580	1.1951	0.2669	0.2372	0.5041		3,281.7344	3,281.7344	0.0267		3,282.2958
Worker	1.8188	2.4414	25.5080	0.0511	4.3034	0.0379	4.3413	1.1413	0.0347	1.1760		4,449.2282	4,449.2282	0.2552		4,454.5866
Total	**3.3759**	**17.5645**	**44.7937**	**0.0836**	**5.2405**	**0.2959**	**5.5364**	**1.4081**	**0.2719**	**1.6801**		**7,730.9627**	**7,730.9627**	**0.2819**		**7,736.8824**

3.4 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.3734	13.3559	17.9585	0.0324	0.9374	0.2137	1.1512	0.2670	0.1965	0.4635		3,245.5417	3,245.5417	0.0242		3,246.0494
Worker	1.6385	2.2018	23.0231	0.0511	4.3034	0.0360	4.3394	1.1413	0.0331	1.1744		4,295.4264	4,295.4264	0.2348		4,300.3568
Total	**3.0119**	**15.5577**	**40.9815**	**0.0835**	**5.2408**	**0.2497**	**5.4905**	**1.4083**	**0.2296**	**1.6379**		**7,540.9680**	**7,540.9680**	**0.2590**		**7,546.4062**

3.4 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.3734	13.3559	17.9585	0.0324	0.9374	0.2137	1.1512	0.2670	0.1965	0.4635		3,245.5417	3,245.5417	0.0242		3,246.0494
Worker	1.6385	2.2018	23.0231	0.0511	4.3034	0.0360	4.3394	1.1413	0.0331	1.1744		4,295.4264	4,295.4264	0.2348		4,300.3568
Total	**3.0119**	**15.5577**	**40.9815**	**0.0835**	**5.2408**	**0.2497**	**5.4905**	**1.4083**	**0.2296**	**1.6379**		**7,540.9680**	**7,540.9680**	**0.2590**		**7,546.4062**

3.5 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	1.0139					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1037**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
Total	**0.0638**	**0.0858**	**0.8970**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3543**	**167.3543**	**9.1500e-003**		**167.5464**

3.5 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	1.0139					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1037**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
Total	**0.0638**	**0.0858**	**0.8970**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3543**	**167.3543**	**9.1500e-003**		**167.5464**

3.6 Architectural Coating - 2016

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	684.3155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**684.6839**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.3277	0.4404	4.6046	0.0102	0.8607	7.1900e-003	0.8679	0.2283	6.6100e-003	0.2349		859.0853	859.0853	0.0470		860.0714
Total	**0.3277**	**0.4404**	**4.6046**	**0.0102**	**0.8607**	**7.1900e-003**	**0.8679**	**0.2283**	**6.6100e-003**	**0.2349**		**859.0853**	**859.0853**	**0.0470**		**860.0714**

3.6 Architectural Coating - 2016

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	684.3155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**684.6839**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.3277	0.4404	4.6046	0.0102	0.8607	7.1900e-003	0.8679	0.2283	6.6100e-003	0.2349		859.0853	859.0853	0.0470		860.0714
Total	**0.3277**	**0.4404**	**4.6046**	**0.0102**	**0.8607**	**7.1900e-003**	**0.8679**	**0.2283**	**6.6100e-003**	**0.2349**		**859.0853**	**859.0853**	**0.0470**		**860.0714**

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	3.3399	28.0333	47.0495	0.1555	9.8667	0.4518	10.3185	2.6447	0.4156	3.0604		13,760.6272	13,760.6272	0.3373		13,767.7097
Unmitigated	3.3399	28.0333	47.0495	0.1555	9.8667	0.4518	10.3185	2.6447	0.4156	3.0604		13,760.6272	13,760.6272	0.3373		13,767.7097

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	751.51	751.51	751.51	4,591,284	4,591,284
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	751.51	751.51	751.51	4,591,284	4,591,284

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
Unrefrigerated Warehouse-No	16.60	0.00	17.40	77.00	0.00	23.00	100	0	0
Other Non-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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.795700	0.000000	0.000000	0.000000	0.034600	0.000000	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
NaturalGas Unmitigated	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310

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					
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
Unrefrigerated Warehouse-No Rail	2622.7	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Other Non-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		**0.0283**	**0.2571**	**0.2160**	**1.5400e-003**		**0.0195**	**0.0195**		**0.0195**	**0.0195**		**308.5532**	**308.5532**	**5.9100e-003**	**5.6600e-003**	**310.4310**

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					
Unrefrigerated Warehouse-No Rail	2.6227	0.0283	0.2571	0.2160	1.5400e-003		0.0195	0.0195		0.0195	0.0195		308.5532	308.5532	5.9100e-003	5.6600e-003	310.4310
Other Non-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		**0.0283**	**0.2571**	**0.2160**	**1.5400e-003**		**0.0195**	**0.0195**		**0.0195**	**0.0195**		**308.5532**	**308.5532**	**5.9100e-003**	**5.6600e-003**	**310.4310**

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	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Unmitigated	21.9241	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363

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	3.7497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.1686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9000e-003	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Total	**21.9241**	**5.8000e-004**	**0.0612**	**0.0000**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**		**0.1287**	**0.1287**	**3.6000e-004**		**0.1363**

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	3.7497					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	18.1686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.9000e-003	5.8000e-004	0.0612	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1287	0.1287	3.6000e-004		0.1363
Total	**21.9241**	**5.8000e-004**	**0.0612**	**0.0000**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**		**0.1287**	**0.1287**	**3.6000e-004**		**0.1363**

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 Vegetation

Appendix B Carbon Monoxide Hotspot Screening

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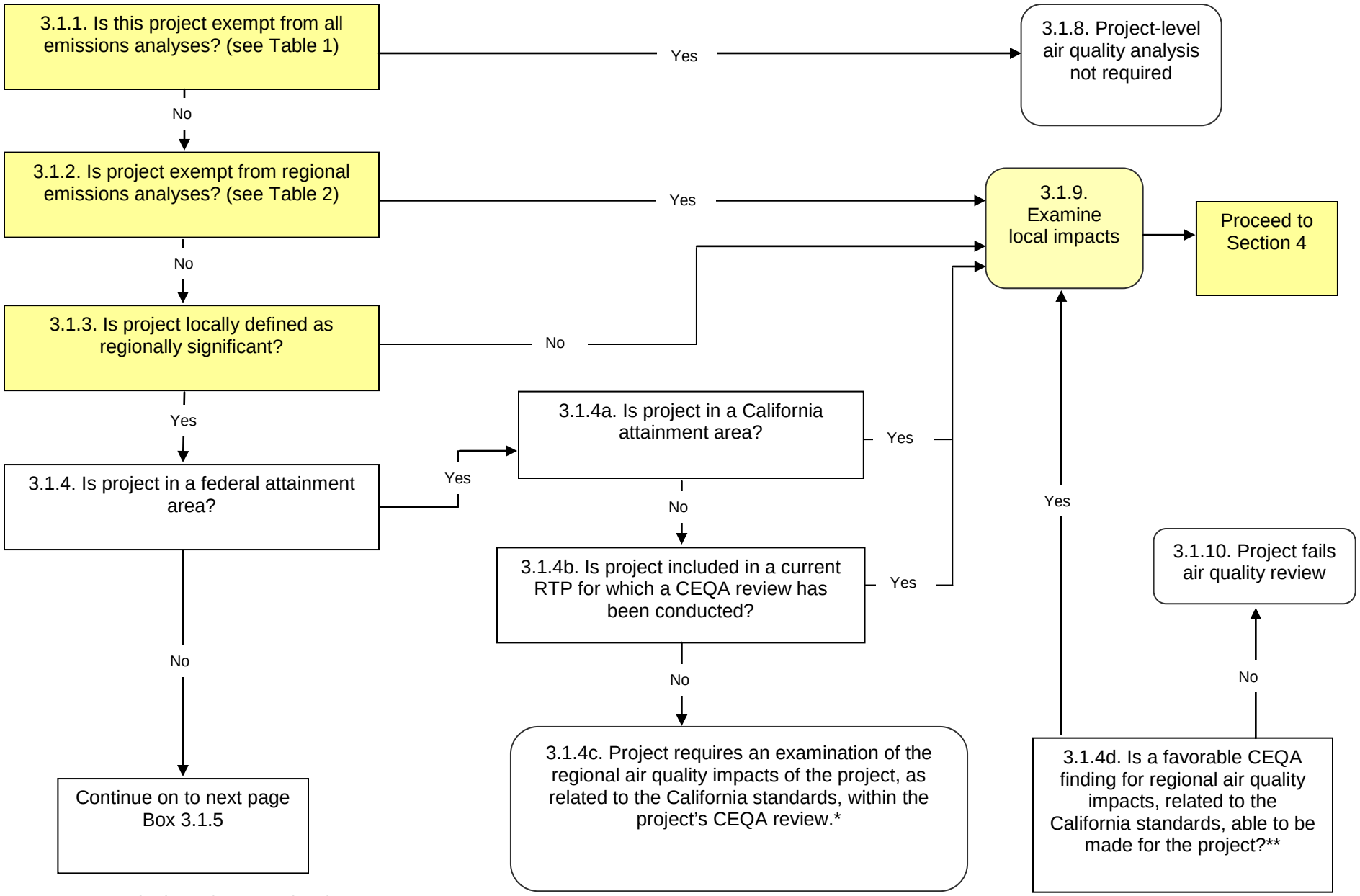
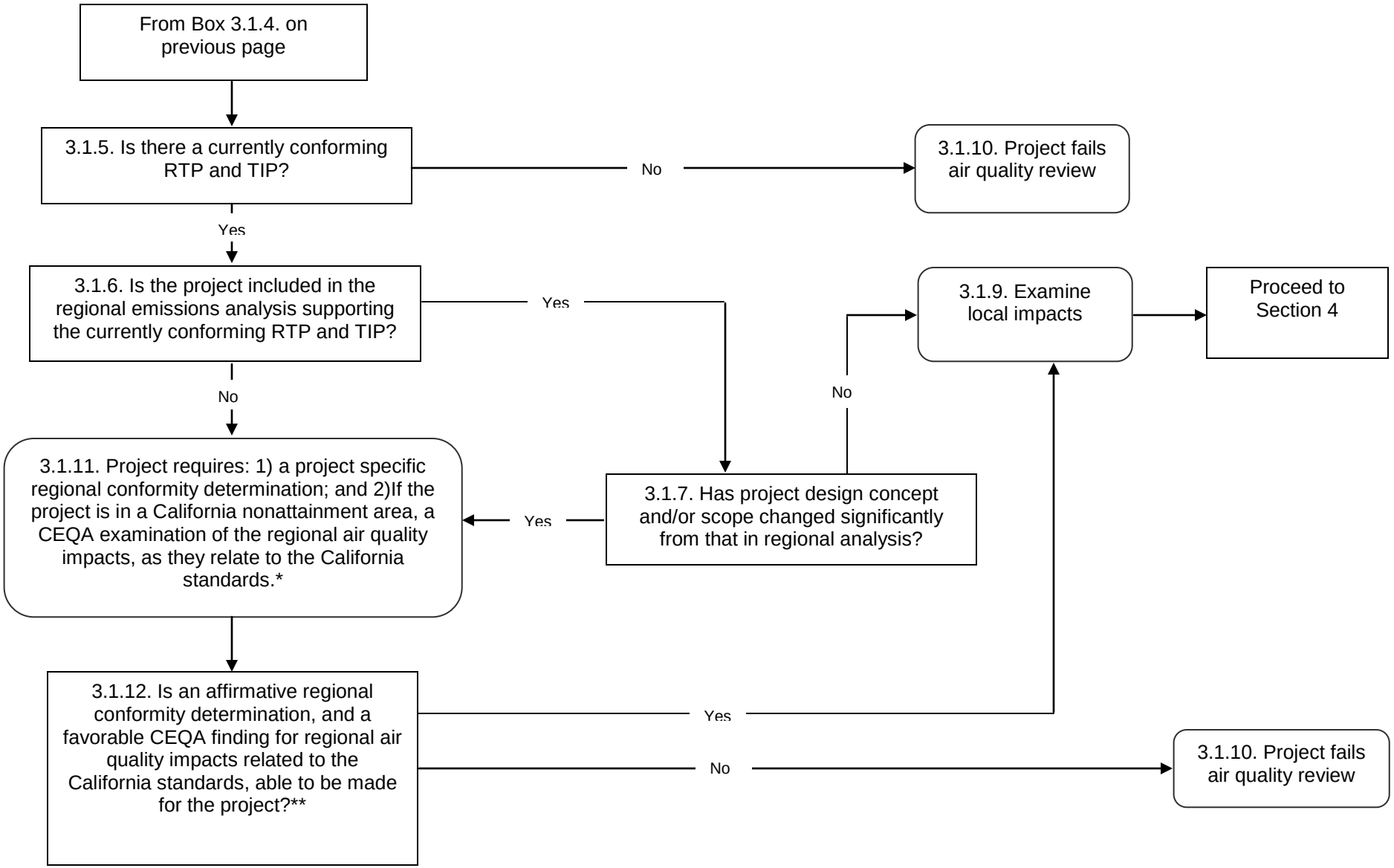
13343 Agua Mansa Building 1



* In consultation w/MPO and Caltrans

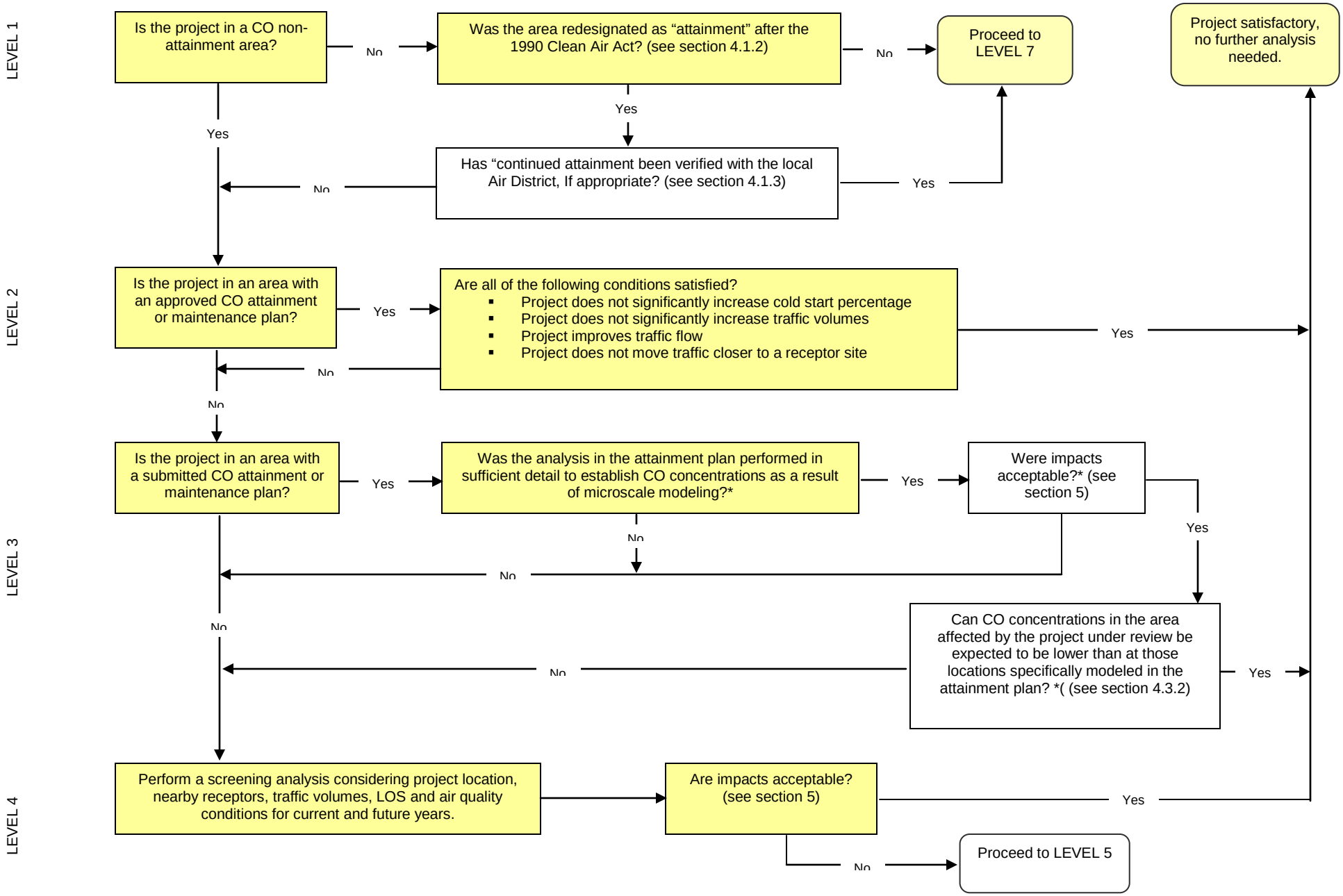
** In consultation w/MPO, local air district, CARB and Caltrans

13343 Agua Mansa Building 1



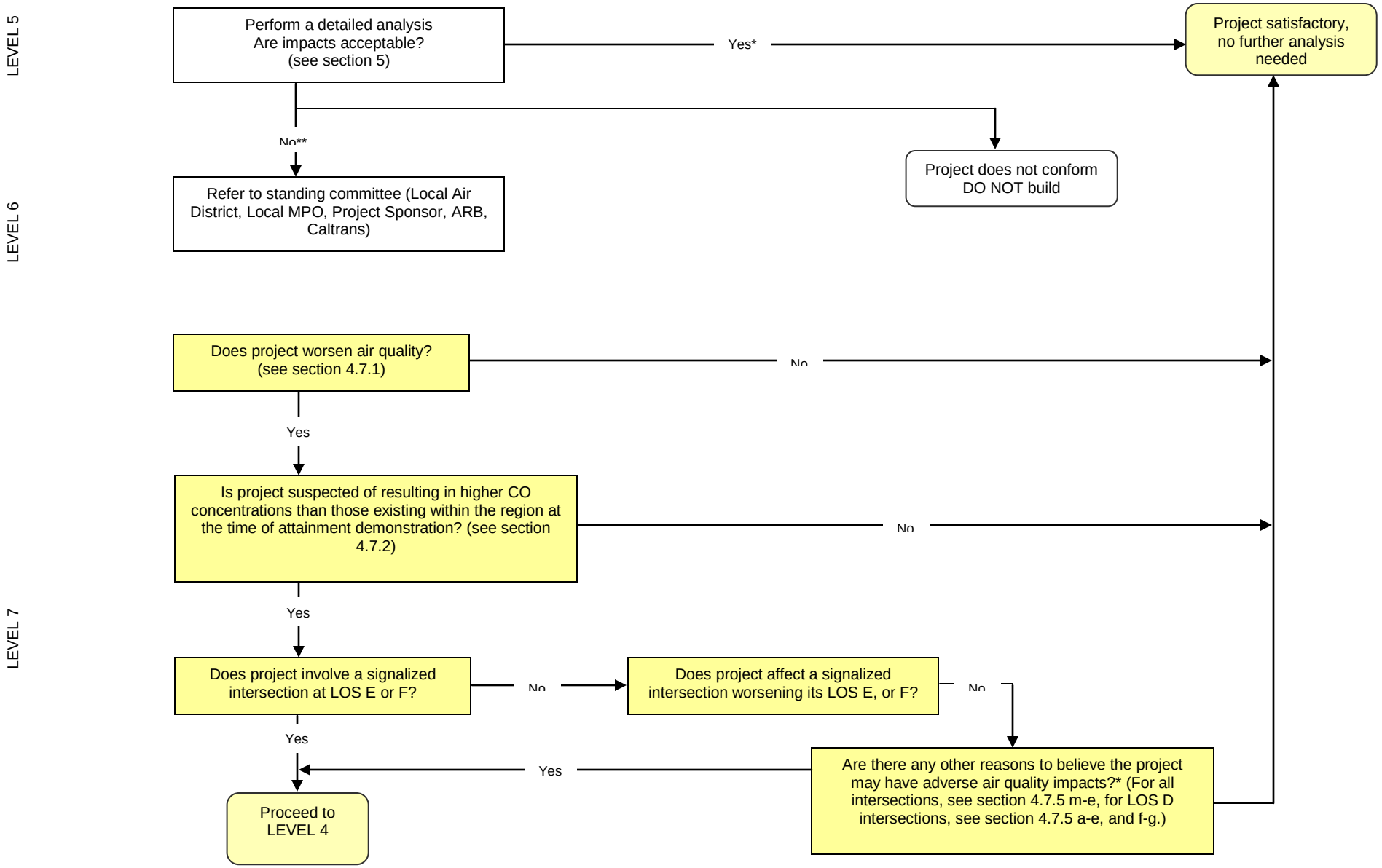
* In consultation w/MPO and Caltrans
** In consultation w/MPO, local air district, CARB and Caltrans

13343 Agua Mansa Building 1



* Consultation with MPO and Local Air District required in addition to normal NEPA/CEQA requirements
** Consultation with MPO, Local Air District, CARB and Caltrans (District & Headquarters) required in addition to normal NEPA/CEQA requirements

13343 Agua Mansa Building 1



* Consultation with MPO and Local Air District required in addition to normal NEPA/CEQA requirements
** Consultation with MPO, Local Air District, CARB and Caltrans (District & Headquarters) required in addition to normal NEPA/CEQA requirements

Agua Mansa Commerce Center Building 1

Health Risk Assessment

September 2014 (13343)

Prepared for:

City of Colton
Planning Division
659 N. La Cadena Drive
Colton, California 92324

Prepared by:

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Riverside, California 92507

This document is formatted for double-sided printing to conserve natural resources.

Agua Mansa Commerce Center
Building 1
Health Risk Assessment

September 2014

City of Colton

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1 Executive Summary

1.1 Project Description

The project includes construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. The project is a modification to the previously approved Agua Mansa Commerce Center Master Plan. The project will add 13.23 acres to the Master Plan, increasing the master Plan area from 94.18 acres to 107.13 acres. The proposed building includes 263 standard and handicap parking spaces, 99 trailer spaces, and 83 dock doors. Diesel particulate matter (DPM) emissions will occur from truck movement along proposed drive aisles, truck movement along local roadways, and from truck idling at loading/unloading docks. The project is located on the at the northeast corner of Riverside Avenue and Miguel Bustamante Parkway in the City of Colton, Latitude 34° 1' 57" North, Longitude 117° 21' 48" West, Universal Transverse Mercator (UTM) coordinates Zone 11N, 466452 Easting, 3765819 Northing, World Geodetic System (WGS) 1984 (see Exhibit 1, Regional Context and Vicinity Map).

1.2 Risk Assessment

Discrete and grid receptor concentrations are detailed in the AERMOD output files. The highest off-site concentration of DPM will occur at U.S. Express located at 2250 South Riverside Avenue (UTM 4466317 Easting, 3766020 Northing) and immediately north of the project site. As summarized in Table 6 (Cancer and Non-Cancer Risk), incremental increases at this commercial use are less than the threshold of 10 in one million established by SCAQMD. The non-cancer hazard index at this commercial use is 0.00568. This hazard index value is less than the threshold of 1.0 established by SCAQMD. The calculations in Table 6 show that no receptor will be exposed to an increase in cancer or non-cancer health risks in excess of SCAQMD thresholds. The cancer and non-cancer risk calculations provided show that no receptor will be exposed to an increase in cancer or non-cancer health risks in excess of SCAQMD thresholds.

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2 Introduction

This health risk assessment includes models and analysis of operation-related emissions of diesel particulate matter from the proposed Agua Mansa Commerce Center Building 1. The project includes construction of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres located in Colton, California.

The health risk assessment provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (http://www.aqmd.gov/ceqa/handbook/mobile_toxic/diesel_analysis.doc). Modeling of diesel particulate matter emissions utilizes the following software:

- EMFAC2011-HD
- BPIPPRM (DATED 04274)
- AERMOD v 14134

This report has been prepared for use by the Lead Agency to assess potential project-related toxic emissions impacts in compliance with the State CEQA Statutes and Guidelines, particularly with respect to the sensitive receptors issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This report was prepared under the direction of Pamela Steele (Principal) by Christopher Brown (Director of Environmental Services) and Olivia Chan (Primary Analyst) of MIG | Hogle-Ireland under contract to the City of Colton.

Pamela Steele
Principal

Christopher Brown
Director of Environmental Services

Olivia Chan
Primary Analyst

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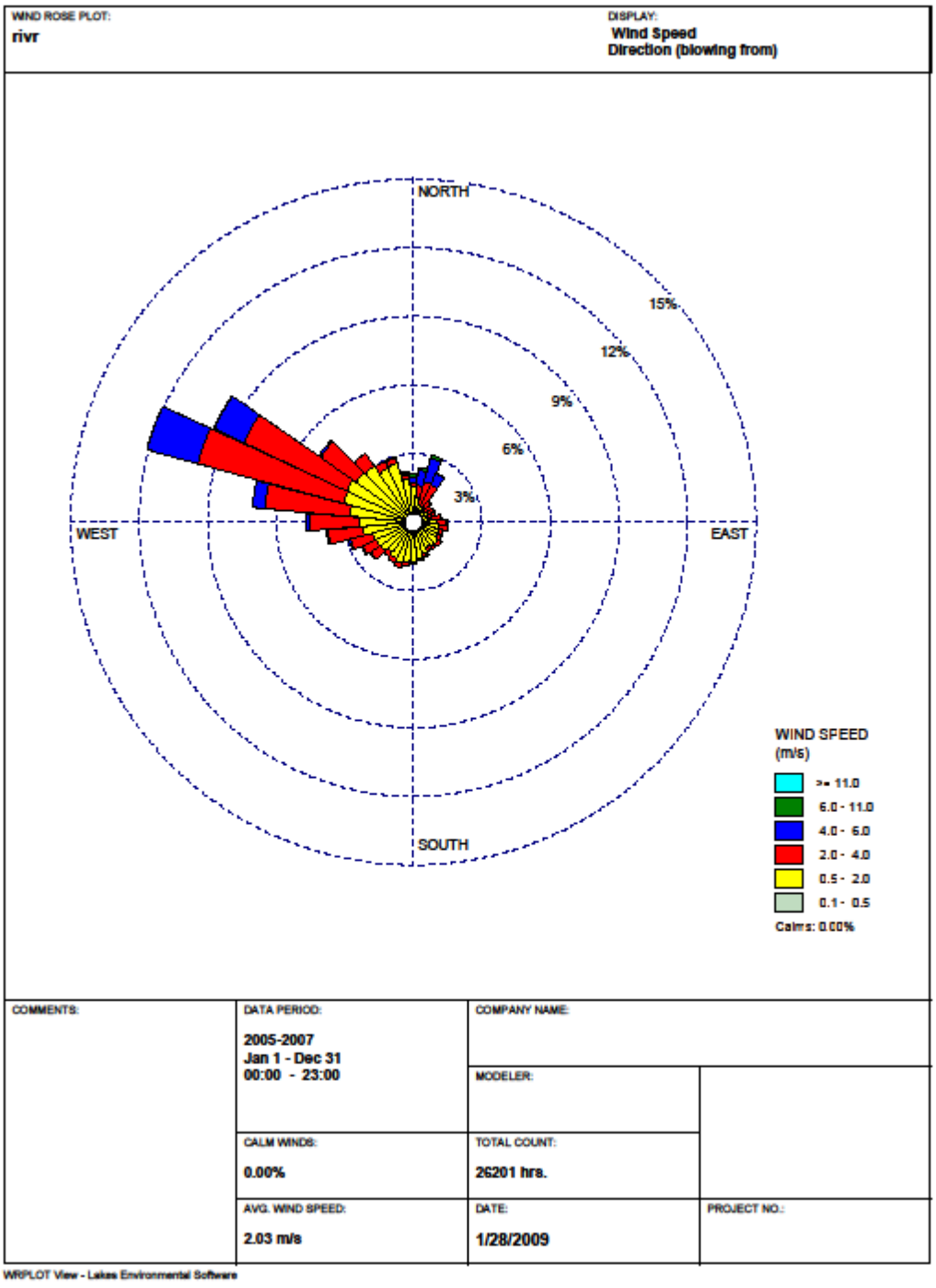
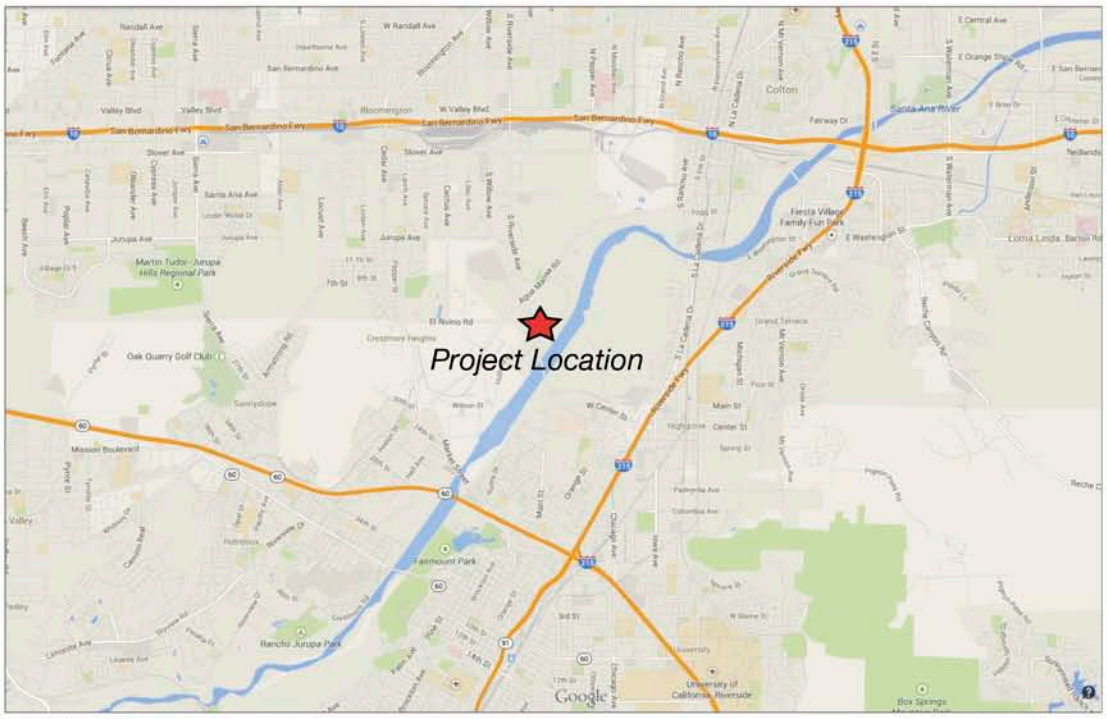
3 Environmental Setting

The proposed project is located in the City of Colton, San Bernardino County, California. The City of Colton and the broader San Bernardino Valley is defined by a semi-arid Mediterranean climate with hot, dry summers and mild, relatively wet winters. Annual rainfall averages 9.86 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.3° Fahrenheit (F). The warmest month is August with an average monthly high of 94.4° F. The annual average maximum temperature is 79.0° F and the annual average minimum temperature is 50.5° F. Colton is located at an elevation of approximately 1000 feet above mean sea level (AMSL). The project site is located at an approximate elevation of 853 AMSL.[2] Figure 1 (Riverside Wind Rose) summarizes wind direction and speed patterns for the Riverside area.[3] Wind generally blows from the northwest.

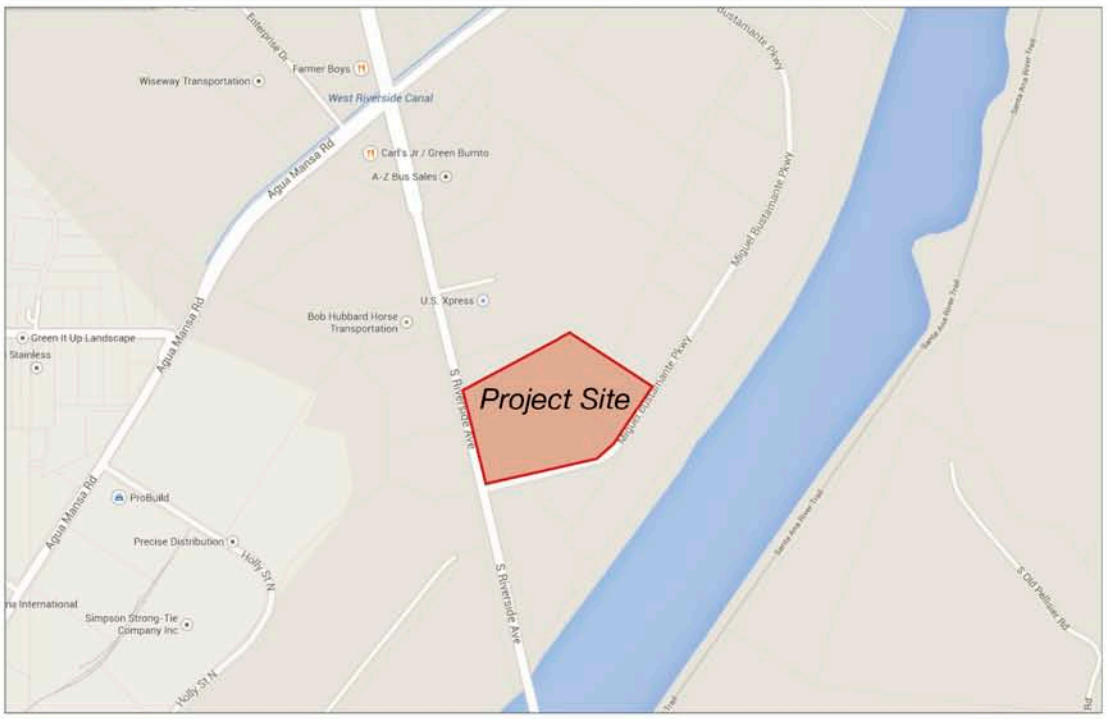
Figure 1
Riverside Wind Rose





Source: Google Maps

Regional



Source: Google Maps

Vicinity

Not to Scale

Exhibit 1 Regional and Vicinity Map

Agua Mansa Commercial Center Building 1
City of Colton, California

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4 Regulatory Framework

4.1 Air Toxics

State requirements specifically address air toxics issues through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the State air toxics program and the Air Toxics Hot Spots Information and Assessment Act (AB 2588). The air quality regulations developed from these bills have been modified recently to incorporate the Federal regulations associated with the Federal Clean Air Act Amendments of 1990. The Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) was enacted in September 1987. Under this bill, stationary sources of emissions are required to report the types and quantities of certain substances that their facilities routinely release into the air.

The SCAQMD is required to prepare an annual report on the status and forecast of air toxic *hotspots* pursuant to Section 44363 of the California Health and Safety Code. SCAQMD monitors facilities that are not exempt from the fee and reporting requirements of AB 2588.

Some facilities are covered under *umbrella* permits that address industry-wide categories. SCAQMD has issued general permits for the following seven activities:

- Retail gasoline dispensing
- Perchloroethylene dry cleaning
- Auto body shops
- Fiberglass molding
- Printing
- Metal plating
- Wood stripping and finishing

Emissions inventories and risk assessment guidelines have been prepared for the seven industry-wide categories. Approximately 1,400 auto body shops, 3,200 gasoline stations, and 1,400 perchloroethylene dry cleaners within the District are covered under these umbrella permits.

Depending on the severity of the facilities' toxic air contaminant (TAC) releases, SCAQMD requires either public notification of toxic hot spots or preparation of a risk reduction plan, as follows:

	Cancer Risk (per million)	Acute Risk	Chronic Risk
Action Risk Level	>= 25	>= 3.0	>= 3.0
Public Notification Level	>= 10	>= 1.0	>= 1.0
Exempt	<1	<0.1	<0.1

The proposed warehouse use does not include use of stationary emergency or prime compression ignition internal combustion engines, portable diesel engines, or other equipment subject to AB 2588.

4.2 Truck and Bus Regulation

In December 2008, the California Air Resources Board (ARB) approved the *Truck and Bus Regulations* as part of their rulemaking authority and adopted in Title 13 (Motor Vehicles) of the California Code of Regulations (CCR).[4] These regulations are applicable to all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) of 14,000 pounds or more (Class 4 or greater) that are privately or federally owned and for privately and publically owned school buses.[5] These regulations are designed to reduce emissions of particulate matter and oxides of nitrogen from existing diesel vehicles operating in California. Compliance scheduling is phased for light and heavy vehicles depending on the age of the vehicle engine. Full compliance across vehicle ratings is set in 2023. Regulations affect the following areas:

- Auxiliary Power Units
- Port and Rail Yard Trucks
- Emissions Control Label Inspection
- Greenhouse Gas Emissions Reductions
- Heavy-Duty Diesel Vehicle Inspection
- Idling Reduction
- Periodic Smoke Inspection
- Public and Utility Agencies
- Public Transit Agencies
- School Bus Fleets
- Solid Waste Collection Vehicles
- Transport Refrigeration Units

Starting in 2015, lighter trucks (between 14,000 and 26,000 GVWR) will be required to replace the vehicle and/or engine if the engine manufacture date is from 1995 or earlier. Newer engines will be required to be replaced on a graduated scale until 2023 when all engines will be required to meet model year 2010 emissions or equivalent. Heavier truck operators (greater than 26,000 GVWR) have options for meeting the regulation requirements through 2023. Vehicles with engine years earlier than 1994 and 1995 will be required to be replaced in 2015 and 2016, respectively. Operators with engine years between 1996 and 2006 have the option to install a particulate filter before being required to replace the engine towards the compliance deadline. Later engines are considered compliant in 2023 when they demonstrate 2010 emissions levels or equivalent.

Idling restrictions were established in 2008 and apply to vehicles greater than 10,000 GVWR (Class 3 or greater). These restrictions limit idling to five minutes or less before manual or automatic shutdown must be initiated. Engine models manufactured in 2008 and thereafter are required to be equipped with a non-programmable engine shutdown mechanism that automatically shuts off the engine after five minutes of idling.

5 Exposure Assessment

The following discussion summarizes the *Required Source Information* identified in Table 1 of the SCAQMD health risk assessment guidance.

5.1 Facility and Surroundings

5.1.1 Location

The project is located at the northeast corner of Riverside Avenue and Miguel Bustamonte parkway in the City of Colton, Latitude 34° 1' 57" North, Longitude 117° 21' 48" West, Universal Transverse Mercator (UTM) coordinates Zone 11N, 466452 Easting, 3765819 Northing, World Geodetic System (WGS) 1984 (see Exhibit 1, Regional Context and Vicinity Map).

5.1.2 Local Land Use

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as “sensitive receptors.” Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The proposed facility is located in a generally industrial area with commercial uses located to the north and industrial uses to the west of the project site. There are no schools located within a quarter mile of the project site. Exhibit 2 (Radius Map) identifies existing development in the project vicinity based on assessor’s parcel data.

5.1.3 Facility Plot Plan

The project consists of a speculative warehouse distribution facility that contains 12,000 square feet of office space and 435,330 square feet of warehouse space totaling 447,330 square feet of building area on 21.07 acres. Diesel particulate matter emissions will occur from truck movement along proposed drive aisles, truck movement along local roadways, and from truck idling at loading/unloading docks.

5.1.4 Operating Schedule

Tenants for the proposed buildings are unknown at this time, thus, operating schedules are assumed at 24 hours a day, 365 days a year, as a worst-case scenario.

5.2 Mobile Emissions Sources

5.2.1 Hazard Identification

Warehouses result in the generation of heavy diesel truck traffic and have been linked with high emissions of diesel particulate matter (DPM) that was established as an air toxic contaminant by ARB in 1998.[6] DPM was identified as a toxic air contaminant (TAC) because of its potential to cause cancer, premature deaths, and other health problems. Health hazards associated with DPM are especially hazardous for children because their

lungs are still developing, and the elderly who may have other serious health problems. Health risks from DPM occur exclusively through the inhalation pathway.

5.2.2 Hourly Emissions Rate

Table 1 (Trip Generation) summarizes the estimated average daily traffic (ADT) volumes generated by the project based on the traffic impact analysis prepared by Kunzman Associates, Inc.[7] The proposed warehouse was modeled with an estimated daily trip rate of 1.68 per 1,000 square feet. For this analysis, it is assumed that the building will operate 24 hours a day.

Table 1
Trip Generation

Vehicle Type	ADT	AHT
Passenger	598	25
2 Axle Trucks	26	2
3 Axel Trucks	35	2
4 Axel Trucks	93	4
Source: Kunzman Associates, Inc. 2014		

Running and idling emissions rates for diesel particulate matter were modeled using EMFAC2011-HD (see Appendix A). EMFAC2011 was run for calendar year 2017 at 10 miles per hour (MPH) for diesel powered light-heavy duty (LHD1), medium-heavy duty (MHD), and heavy-heavy duty (HHD) trucks using an aggregate of model years to generate the emissions factors for on-site truck movement. Idling emissions for MHD and HHD trucks were also modeled for calendar year 2017. EMFAC2011 was used for on-road emissions factors at 30 MPH for HHD trucks and 40 MPH for all other trucks. Emissions factors were converted into units of grams per second per square meter of area for drive aisle movement and on-road movement in order to be input into AERMOD. Idling emissions are presented in grams per second. Trip distribution for on- and off-site movements is provided in the project traffic study. Table 2 (Emissions Factors) summarizes the emissions factors for each area of the on- and off-site area.

Table 2
Emissions Factors

Source	Emissions Factor*
Building	
North Aisle 1	0.000000001999
North Aisle 2	0.000000001011
Northeast Aisle	0.000000010073
Southeast Aisle	0.000000014690
South Aisle 1	0.000000010314
South Aisle 2	0.000000001400
West Aisle	0.000000019749
Truck Bay North	0.000001957778
Truck Bay South	0.000001957778
Roadways	
Riverside Avenue North	0.000000005658
Riverside Avenue	0.000000007920
Riverside Avenue South	0.000000006763
Agua Mansa Road West	0.000000005309
Agua Mansa Road East	0.000000003741
Miguel Bustamante Parkway North	0.000000003762
Miguel Bustamante Parkway	0.000000007337
Miguel Bustamante Parkway South	0.000000011490
* grams per second per square meters ($g/s/m^2$) for vehicle movement and grams per second (g/s) for idling emissions	

5.2.3 Source Location

On-site emissions sources are identified in Exhibit 3 (On-Site Emissions) and Exhibit 4 (Off-Site Emissions). Table 3 (Source Locations) provides the Universal Transverse Mercator (UTM) coordinates for the southwest corner of each area source. Although SCAQMD recommends emissions be modeled as area or volume sources, the idling sources were input a point source from the center of the docking bay to account for building downwash.

Table 3
Source Locations

Source	UTM (Zone 11N)	
	Easting	Northing
Building		
North Aisle 1	466273	3765892
North Aisle 2	466339	3765873
Northeast Aisle	466500	3765948
Southeast Aisle	466586	3765742
South Aisle 1	466343	3765693
South Aisle 2	466378	3765668
West Aisle	466327	3765699
Truck Bay North	466481	3765740
Truck Bay South	466430	3765897
Roadways		
Riverside Avenue North	466096	3766477
Riverside Avenue	466294	3765648
Riverside Avenue South	466388	3765241
Agua Mansa Road West	465823	3766210
Agua Mansa Road East	466511	3766894
Miguel Bustamante Parkway North	466946	3766496
Miguel Bustamante Parkway	466587	3765728
Miguel Bustamante Parkway South	466318	3765624

5.2.4 Source Treatment

The source height for all emissions sources is 14 feet (4.2 meters), the approximate height of a truck exhaust. On- and off-site vehicle movement was modeled as area sources and idling emissions were modeled as point sources. Idling exhaust release characteristics were assumed with an exit temperature of 366.48° Kelvin, exit velocity of 50 meters per second (m/s), and an exhaust diameter of 1.08 meters.

5.2.5 Area Dimensions

All on- and off-site vehicle movement emissions sources are modeled as an area source in AERMOD. Table 4 (Area Dimensions) identifies the dimensions used in the model.

Table 4
Area Dimensions

Source	Length (m)	Width (m)
Building		
North Aisle 1	63.5	7.8
North Aisle 2	168.0	55.5
Northeast Aisle	178.5	7.8
Southeast Aisle	122.4	7.8
South Aisle 1	30.0	7.8
South Aisle 2	201.6	55.5
West Aisle	7.8	213.6
Roadways		
Riverside Avenue North	27.9	308.0
Riverside Avenue	22.8	838.5
Riverside Avenue South	22.8	410.9
Agua Mansa Road West	355.4	22.2
Agua Mansa Road East	303.3	21.0
Miguel Bustamante Parkway North	21.0	579.0
Miguel Bustamante Parkway	21.0	833.6
Miguel Bustamante Parkway South	21.0	274.1

5.3 Air Dispersion Modeling

Cancer risk and non-cancer health risks to receptors within one-quarter mile of the project site were estimated using the EPA AERMOD model and guidance provided by SCAQMD in the *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions* white paper.[8] AERMOD is the EPA regulatory dispersion model that provides multiple source Gaussian plume models with maximum ground-level concentrations for point, area, flare, and volume sources. AERMOD replaced the Industrial Source Complex (ISC3) model in 2005 as the EPA regulatory model. The composite emissions factor for idling trucks and on-site truck movement was estimated using Emissions Factor 2011 (EMFAC2011). EMFAC2011 was developed by ARB to calculate emissions inventories for mobile vehicles operating in California based on raw vehicle data. The dimensions of the proposed buildings were modeled using Building Profile Input Program Prime (BPIPPRM) (see Appendix C).

5.3.1 Meteorological Data

Meteorological data was prepared by SCAQMD for the Riverside station using AERMET version 12345 (available at http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/aermod-table-1). Surface characteristics for the Riverside station include a surface albedo of 0.18, surface roughness of 0.314 meters, and a Bowen ratio of 1.0. The station is located at UTM Zone 11 North, 461.64 kilometers (km) easting and 3762.10 km northing at an elevation of 250 meters above sea level.

5.3.2 Discrete Receptors

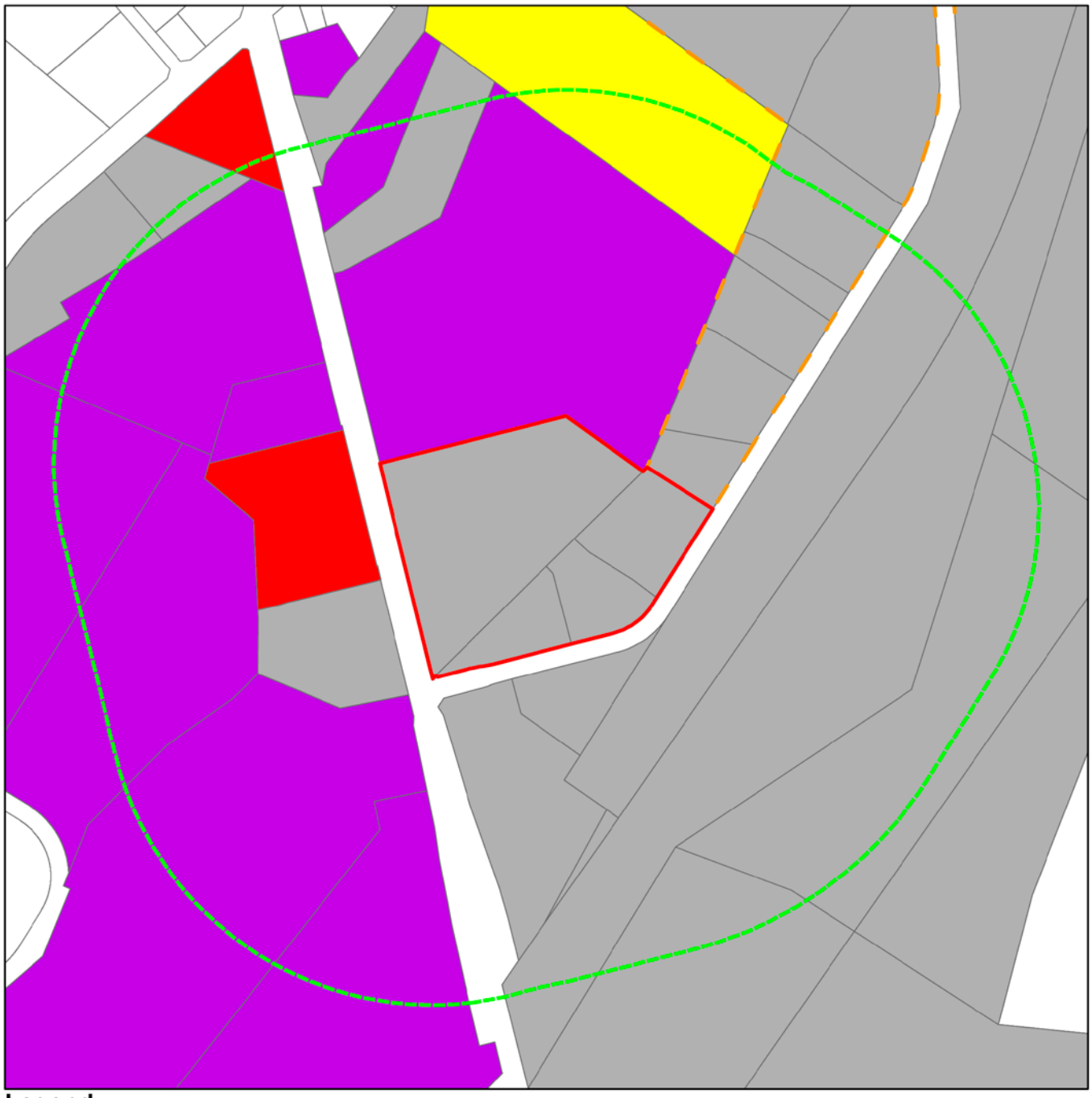
Nine (9) discrete receptors within one-quarter mile of the project site were input into the model. This includes industrial and commercial uses. Table 5 (Discrete Receptor Locations) includes the coordinates for each receptor. Exhibit 5 (Discrete Receptors) identifies the location of each receptor.

5.3.3 Receptor Grid

Emissions were modeled in a 1,500-foot receptor grid network at 100 meter transects around the project site. This resulted in a 225 point grid identifying concentrations around the project site (see Exhibit 6, Grid Receptor Concentrations).

Table 5
Discrete Receptor Locations

UTM (Zone 11 N)		UTM (Zone 11 N)	
Easting (m)	**Northing (m)**	**Easting (m)**	**Northing (m)**
466317	3766020	465922	3765704
466442	3766226	465659	3765366
466239	3766299	466004	3765359
466041	3766126	466142	3765218
465750	3765787		



Legend

- One-Quarter Mile
- Building 1 Site
- Master Plan Site

Land Use

TYPEUSE

- Vacant
- Industrial
- Commercial
- Residential
- Parcels

0 210 420 840 1,260 1,680 Feet

N

Not to Scale

Exhibit 2 Radius Map

Agua Mansa Commercial Center Building 1
City of Colton, California

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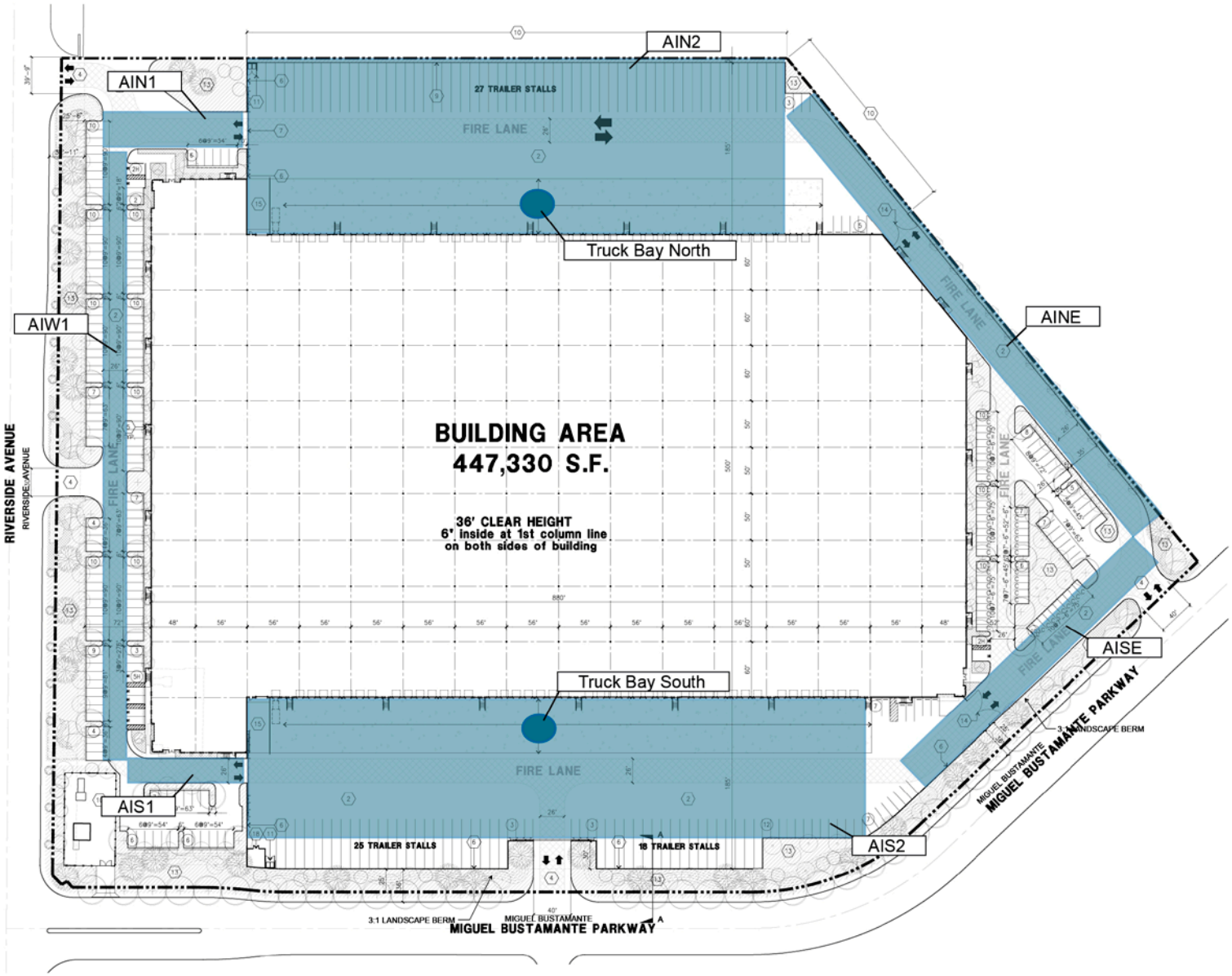

Not to Scale

Source: HPA Architects

Exhibit 3 On-Site Emissions

Agua Mansa Commercial Center Building 1
City of Colton, California

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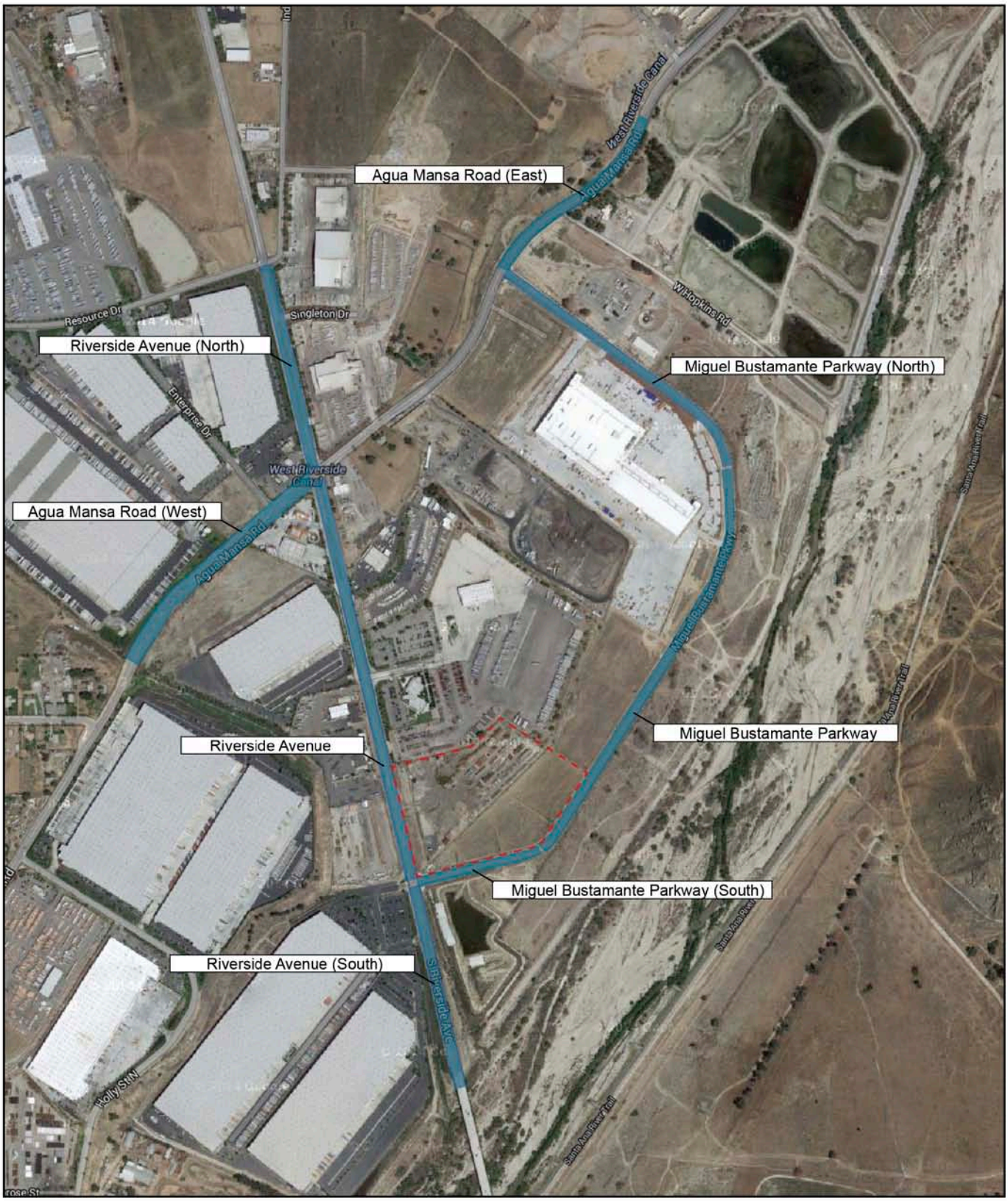

Project Site

Off-Site Emission Sources

Not to Scale

Source: Google Earth

Exhibit 4 Off-Site Emissions

Agua Mansa Commercial Center Building 1

City of Colton, California

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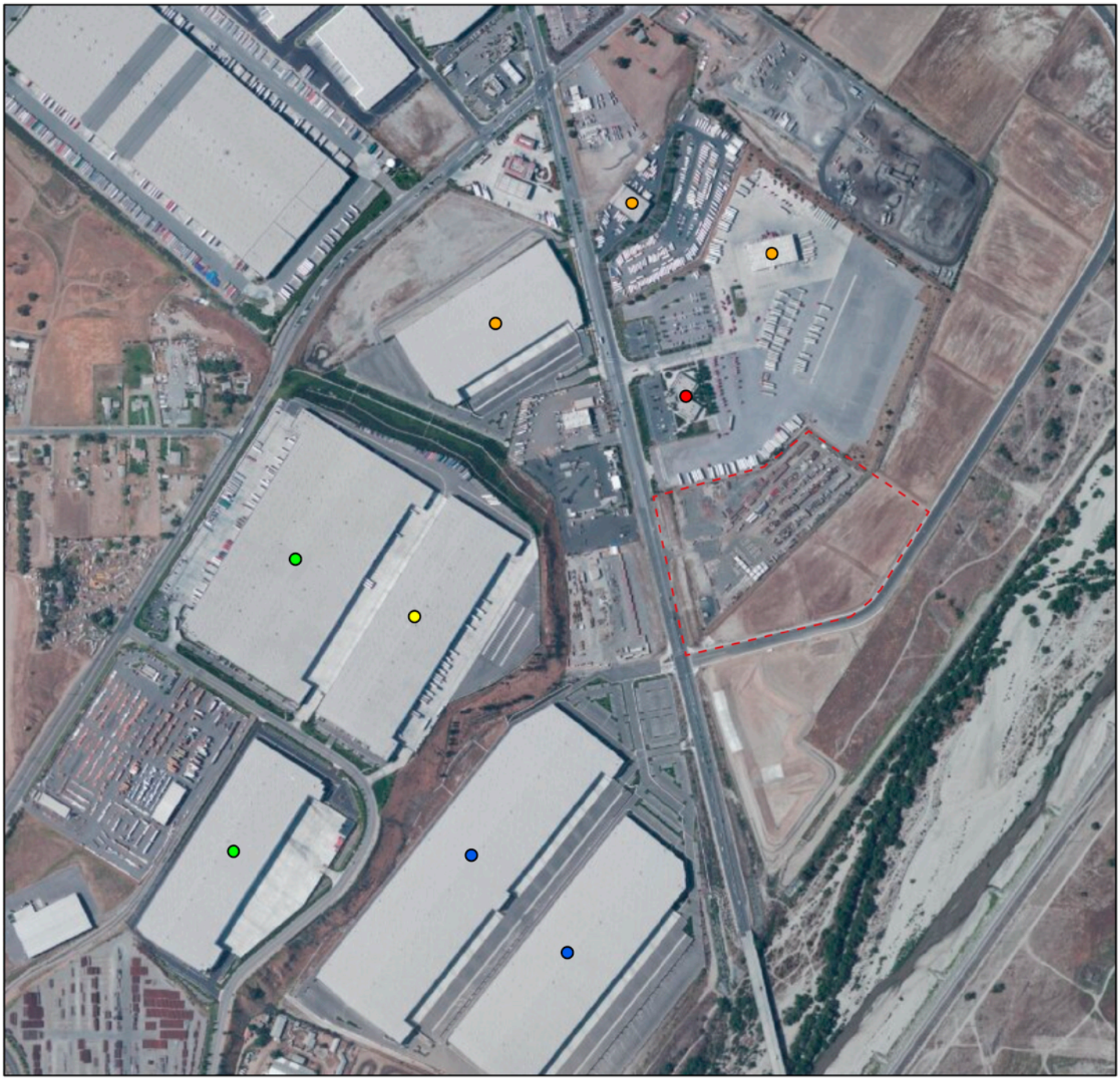

0 85 170 340 510 680
Meters

N

Legend

Average Concentration (ug/m³)

- 0.000290 - 0.001010
- 0.001011 - 0.002020
- 0.002021 - 0.002620
- 0.002621 - 0.009060
- 0.009061 - 0.028420

Project Site

Exhibit 5 Discrete Receptors

Agua Mansa Commercial Center Building 1
City of Colton, California

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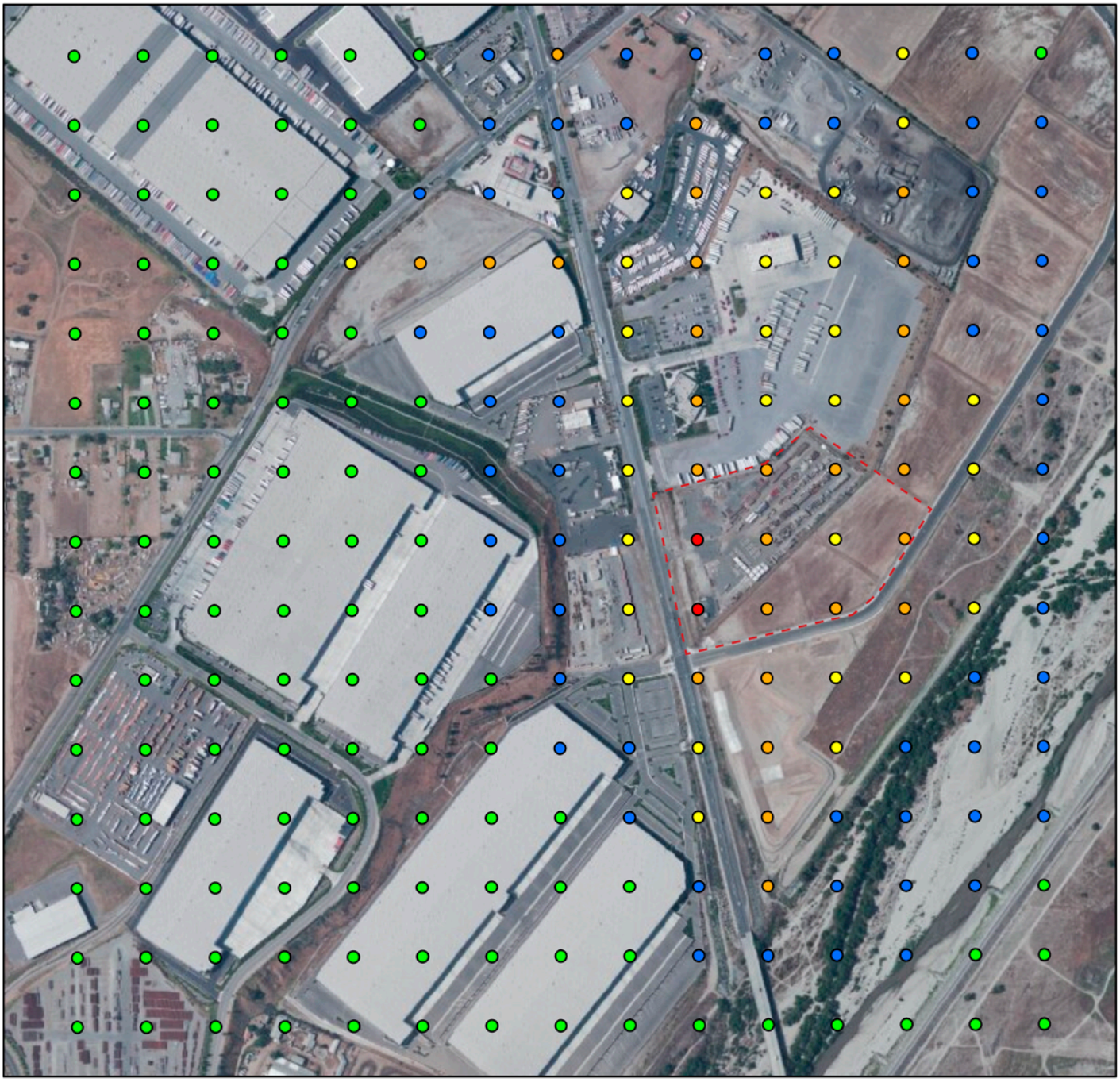

Legend

Average Concentration (ug/m³)

- 0.000590 - 0.003500
- 0.003501 - 0.007890
- 0.007891 - 0.015130
- 0.015131 - 0.036940
- 0.036941 - 0.065880
- Project Site

0 85 170 340 510 680 Meters

N

Exhibit 6 Grid Receptor Concentrations

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City of Colton, California

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6 Risk Assessment

Cancer risk and non-cancer health risks to sensitive receptors within one-quarter mile and within 1,000 feet of on- and off-site area sources were estimated using the EPA AERMOD model and guidance provided by SCAQMD in the *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions* white paper.[9]

SCAQMD has established thresholds for emissions of toxic air contaminants. Toxic air emissions from a project are considered potentially significant if maximum incremental cancer risk is greater than 10 persons in 1,000,000 (1E-05). Cancer risk is determined by calculating the annual average toxic concentration ($\mu g/m^3$) and multiplying it by the unit risk factor (URF) for the toxic and the lifetime exposure adjustment (LEA) of the receptor. URF represents the estimated probability that a person will contract cancer as a result of inhalation of a toxic of 1 $\mu g/m^3$ continuously over 70 years. Because some receptors are exposed to toxics for less than 70 years (i.e. off-site workers), the LEA adjusts the receptors' exposure to represent actual exposure time. The LEA for residential uses and other sensitive receptors is 1, representing an assumed exposure of 70 continuous years. When a facility and its equipment operate continuously (i.e., 24 hrs/day and 365 days/yr), the LEA for an off-site worker is 0.14. For all other facility operating schedules, the LEA for an off-site worker is 0.66. In this report, industrial uses are assumed to operate continuously and commercial uses are assumed to operate during regular business hours (i.e. 8:00AM to 5:00PM). Cancer risk is estimated using the following equation:

$$CR_{DPM} = C_{DPM} * URF_{DPM} * LEA$$

where,

CR_{DPM} Cancer risk from diesel particulate matter; the probability of an individual developing cancer as a result of exposure to DPM

C_{DPM} Annual average DPM concentration in $\mu g/m^3$

URF_{DPM} Unit risk factor for DPM; estimated probability that a person will contract cancer as a result of inhalation of a DPM concentration of 1 $\mu g/m^3$ continuously over a period pf 70 years

LEA Lifetime exposure adjustment; values range from 0.14 to 1.0; see the discussion below

Acute and chronic non-cancer risks are considered significant if the project toxic air contaminant emissions result in a hazard index greater than or equal to 1. The hazard index is determined by calculating the average annual toxic concentration ($\mu g/m^3$) divided by the reference exposure level (REL) for a particular toxic. The REL is the concentration at which no adverse health impacts are anticipated and is established by OEHHA. The chronic REL for DPM was established by OEHHA as 5 $\mu g/m^3$. Non-cancer risk is estimated using the following equation:

$$HI_{DPM} = C_{DPM}/REL_{DPM}$$

where,

HI_{DPM} Hazard Index; an expression of the potential for non-cancer health effects.

C_{DPM} Annual average DPM concentration ($\mu g/m^3$)

REL_{DPM} Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

Discrete and grid receptor concentrations are detailed in the AERMOD output files and mapped on Exhibit 5 and Exhibit 6. The highest off-site concentration of DPM will occur at U.S. Express located at 2250 South Riverside Avenue (UTM 4466317 Easting, 3766020 Northing) and immediately north of the project site. As summarized in Table 6 (Cancer and Non-Cancer Risk), incremental increases at this commercial use are less than the threshold of 10 in one million established by SCAQMD. The non-cancer hazard index at this commercial use is 0.00568. This hazard index value is less than the threshold of 1.0 established by SCAQMD. The calculations in Table 6 show that no receptor will be exposed to an increase in cancer or non-cancer health risks in excess of SCAQMD thresholds. The cancer and non-cancer risk calculations provided show that no receptor will be exposed to an increase in cancer or non-cancer health risks in excess of SCAQMD thresholds.

Table 6
Cancer and Non-Cancer Risk

UTM							
E	**N**	**Concentration**	**URF**	**LEA**	**Cancer Risk**	**REL**	**Hazard Index**
466317	3766020	0.02842	0.0003	0.66	5.627E-06	5	0.00568
466442	3766226	0.00863	0.0003	0.66	1.709E-06	5	0.00173
466239	3766299	0.00906	0.0003	0.66	1.794E-06	5	0.00181
466041	3766126	0.00650	0.0003	0.14	2.730E-07	5	0.00130
465750	3765787	0.00029	0.0003	0.14	1.218E-08	5	0.00006
465922	3765704	0.00262	0.0003	0.14	1.100E-07	5	0.00052
465659	3765366	0.00101	0.0003	0.14	4.242E-08	5	0.00020
466004	3765359	0.00188	0.0003	0.14	7.896E-08	5	0.00038
466142	3765218	0.00202	0.0003	0.14	8.484E-08	5	0.00040
				Thresholds	1.000E-05		1.000

7 References

[1] Western Regional Climate Center. Period of Record Monthly Climate Summary: Riverside Citrus Exp St, California (047473). http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7473 [July 2014]

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[8] South Coast Air Quality Management District. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. August 2003

[9] South Coast Air Quality Management District. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. August 2003

Appendix A EMFAC2011 Outputs

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EMFAC2011 Emission Rates
Region Type: Air Basin
Region: South Coast
Calendar Year: 2017
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed (miles/hr)	PM10_RUNEX (gms/mile)
South Coast	2017	Annual	LHD1	DSL	Aggregated	5	0.095476677
South Coast	2017	Annual	LHD1	DSL	Aggregated	10	0.088685472
South Coast	2017	Annual	LHD1	DSL	Aggregated	15	0.070533998
South Coast	2017	Annual	LHD1	DSL	Aggregated	20	0.057531335
South Coast	2017	Annual	LHD1	DSL	Aggregated	25	0.046934523
South Coast	2017	Annual	LHD1	DSL	Aggregated	30	0.039428274
South Coast	2017	Annual	LHD1	DSL	Aggregated	35	0.033641715
South Coast	2017	Annual	LHD1	DSL	Aggregated	40	0.029691586
South Coast	2017	Annual	LHD1	DSL	Aggregated	45	0.026743946
South Coast	2017	Annual	LHD1	DSL	Aggregated	50	0.024508131
South Coast	2017	Annual	LHD1	DSL	Aggregated	55	0.023073137
South Coast	2017	Annual	LHD1	DSL	Aggregated	60	0.022749935
South Coast	2017	Annual	LHD1	DSL	Aggregated	65	0.021970206
South Coast	2017	Annual	LHD1	DSL	Aggregated	70	0.018941854
South Coast	2017	Annual	T6	DSL	Aggregated	5	0.189340438
South Coast	2017	Annual	T6	DSL	Aggregated	10	0.144171492
South Coast	2017	Annual	T6	DSL	Aggregated	15	0.108767847
South Coast	2017	Annual	T6	DSL	Aggregated	20	0.08049826
South Coast	2017	Annual	T6	DSL	Aggregated	25	0.072354846
South Coast	2017	Annual	T6	DSL	Aggregated	30	0.067534767
South Coast	2017	Annual	T6	DSL	Aggregated	35	0.066038021
South Coast	2017	Annual	T6	DSL	Aggregated	40	0.06786461
South Coast	2017	Annual	T6	DSL	Aggregated	45	0.073014533
South Coast	2017	Annual	T6	DSL	Aggregated	50	0.08148779
South Coast	2017	Annual	T6	DSL	Aggregated	55	0.093284381
South Coast	2017	Annual	T6	DSL	Aggregated	60	0.108404307
South Coast	2017	Annual	T6	DSL	Aggregated	65	0.126847566
South Coast	2017	Annual	T6	DSL	Aggregated	70	0.14861416
South Coast	2017	Annual	T7	DSL	Aggregated	5	0.125061177
South Coast	2017	Annual	T7	DSL	Aggregated	10	0.103741329
South Coast	2017	Annual	T7	DSL	Aggregated	15	0.086200879
South Coast	2017	Annual	T7	DSL	Aggregated	20	0.066610052
South Coast	2017	Annual	T7	DSL	Aggregated	25	0.066123718
South Coast	2017	Annual	T7	DSL	Aggregated	30	0.064018554
South Coast	2017	Annual	T7	DSL	Aggregated	35	0.064707774
South Coast	2017	Annual	T7	DSL	Aggregated	40	0.068191378
South Coast	2017	Annual	T7	DSL	Aggregated	45	0.074469367
South Coast	2017	Annual	T7	DSL	Aggregated	50	0.08354174
South Coast	2017	Annual	T7	DSL	Aggregated	55	0.095408497
South Coast	2017	Annual	T7	DSL	Aggregated	60	0.110069639
South Coast	2017	Annual	T7	DSL	Aggregated	65	0.127525165
South Coast	2017	Annual	T7	DSL	Aggregated	70	0.147775075

Process	Area	GAI	CalYr	Season	Veh	Fuel	MdlYr	Speed_bin	PM10
IDLEX	San Bernardino (SC)	62	2017	a	HHDT	DSL	All	All	0.003389901
IDLEX	San Bernardino (SC)	62	2017	a	MHDT	DSL	All	All	0.000268172

Appendix B BPIP Outputs

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Agua Mansa

BPIP (Dated: 04274)

DATE : 7/31/2014
TIME : 15:46: 6
Agua Mansa

==========
BPIP PROCESSING INFORMATION:
==========

The P flag has been set for preparing downwash related data for a model run utilizing the PRIME algorithm.

Inputs entered in METERS will be converted to meters using a conversion factor of 1.0000. Output will be in meters.

The UTMP variable is set to UTMY. The input is assumed to be in UTM coordinates. BPIP will move the UTM origin to the first pair of UTM coordinates read. The UTM coordinates of the new origin will be subtracted from all the other UTM coordinates entered to form this new local coordinate system.

Plant north is set to 0.00 degrees with respect to True North.

Agua Mansa

PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
BAY1	4.12	0.00	32.00	65.00

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP Technical Support Document. Determinant 3 may be investigated for additional stack height credit. Final values result after Determinant 3 has been taken into consideration.

** Results were derived from Equation 1 on page 6 of GEP Technical Support Document. Values have been adjusted for any stack-building base elevation differences.

Note: Criteria for determining stack heights for modeling emission limitations for a source can be found in Table 3.1 of the GEP Technical Support Document.

BPIP (Dated: 04274)

DATE : 7/31/2014
TIME : 15:46: 6

Agua Mansa

BPIP output is in meters

SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDHGT	BAY1	12.80	12.80	12.80	12.80	12.80	12.80
SO	BUILDWID	BAY1	303.59	309.96	306.92	294.54	273.22	243.59
SO	BUILDWID	BAY1	206.57	197.47	212.00	244.20	268.99	285.60
SO	BUILDWID	BAY1	293.53	292.54	284.45	273.76	263.66	288.00
SO	BUILDWID	BAY1	303.59	309.96	306.92	294.54	273.22	243.59
SO	BUILDWID	BAY1	206.57	197.47	212.00	244.20	268.99	285.60
SO	BUILDWID	BAY1	293.53	292.54	284.45	273.76	263.66	288.00
SO	BUILDLEN	BAY1	244.20	268.99	285.60	293.53	292.54	284.45
SO	BUILDLEN	BAY1	273.76	263.66	288.00	303.59	309.96	306.92
SO	BUILDLEN	BAY1	294.54	273.22	243.59	206.57	197.47	212.00
SO	BUILDLEN	BAY1	244.20	268.99	285.60	293.53	292.54	284.45
SO	BUILDLEN	BAY1	273.76	263.66	288.00	303.59	309.96	306.92
SO	BUILDLEN	BAY1	294.54	273.22	243.59	206.57	197.47	212.00
SO	XBADJ	BAY1	-62.72	-84.53	-103.78	-119.87	-132.31	-140.74
SO	XBADJ	BAY1	-144.90	-152.67	-182.00	-205.80	-223.35	-234.12
SO	XBADJ	BAY1	-237.77	-234.19	-223.50	-206.02	-182.28	-173.00
SO	XBADJ	BAY1	-181.49	-184.46	-181.82	-173.66	-160.23	-143.71
SO	XBADJ	BAY1	-128.87	-110.99	-106.00	-97.79	-86.61	-72.80
SO	XBADJ	BAY1	-56.77	-39.03	-20.09	-0.55	-15.19	-39.00
SO	YBADJ	BAY1	54.01	68.37	80.66	90.50	97.58	101.71
SO	YBADJ	BAY1	102.74	83.54	67.00	59.38	49.96	39.02
SO	YBADJ	BAY1	26.90	13.96	1.48	-8.02	-20.84	-38.00
SO	YBADJ	BAY1	-54.01	-68.37	-80.66	-90.50	-97.58	-101.71
SO	YBADJ	BAY1	-102.74	-83.54	-67.00	-59.38	-49.96	-39.02
SO	YBADJ	BAY1	-26.90	-13.96	-1.48	8.02	20.84	38.00

Agua Mansa

BPIP (Dated: 04274)
DATE : 7/31/2014
TIME : 15:46: 6
Agua Mansa

==========
BPIP PROCESSING INFORMATION:
==========

  The P flag has been set for preparing downwash related data
         for a model run utilizing the PRIME algorithm.

  Inputs entered in METERS   will be converted to meters using
   a conversion factor of   1.0000. Output will be in meters.

  The UTMP variable is set to UTMY. The input is assumed to be in
    UTM coordinates. BPIP will move the UTM origin to the first pair of
    UTM coordinates read. The UTM coordinates of the new origin will
    be subtracted from all the other UTM coordinates entered to form
    this new local coordinate system.

  The new local coordinates will be displayed in parentheses just below
    the UTM coordinates they represent.

  Plant north is set to   0.00 degrees with respect to True North.

==========
INPUT SUMMARY:
==========

Number of buildings to be processed :   1

BLD   has 1 tier(s) with a base elevation of   0.00 METERS

BUILDING NAME	TIER NUMBER	BLDG-TIER NUMBER	TIER HEIGHT	NO. OF CORNERS	CORNER COORDINATES X	Y
BLD	1	1	12.80	9	466341.00	3765701.00 meters
					(0.00	0.00) meters
					466299.00	3765893.00 meters
					(-42.00	192.00) meters
					466337.00	3765898.00 meters
					(-4.00	197.00) meters
					466339.00	3765873.00 meters
					(-2.00	172.00) meters
					466545.00	3765913.00 meters
					(204.00	212.00) meters
					466569.00	3765875.00 meters
					(228.00	174.00) meters
					466587.00	3765778.00 meters
					(246.00	77.00) meters
					466367.00	3765723.00 meters
					(26.00	22.00) meters
					466370.00	3765705.00 meters
					(29.00	4.00) meters

Number of stacks to be processed : 1

STACK NAME	STACK BASE	STACK HEIGHT	STACK COORDINATES X	Y
BAY1	0.00	4.12 METERS	466481.00	3765740.00 meters
			(140.00	39.00) meters

No stacks have been detected as being atop any structures.

Overall GEP Summary Table
(Units: meters)

StkNo: 1 Stk Name:BAY1 Stk Ht: 4.12 Prelim. GEP Stk.Ht: 65.00
GEP: BH: 12.80 PBW: 198.20 *Eqn1 Ht: 32.00
*adjusted for a Stack-Building elevation difference of 0.00
No. of Tiers affecting Stk: 1 Direction occurred: 86.25
Bldg-Tier nos. contributing to GEP: 1

Summary By Direction Table
(Units: meters)

Dominate stand alone tiers:

Drtcn: 10.00

StkNo: 1 Stk Name:BAY1 Stack Ht: 4.12
GEP: BH: 12.80 PBW: 198.20 *Equation 1 Ht: 32.00
Single tier MAX: BH: 12.80 PBW: 303.59 PBL: 244.20 *Wake Effect Ht: 32.00
Relative Coordinates of Projected Width Mid-point: XADJ: -62.72 YADJ: 54.01

*adjusted for a Stack-Building elevation difference of 0.00
BldNo: 1 Bld Name:BLD TierNo: 1

Drtcn: 20.00

StkNo: 1 Stk Name:BAY1 Stack Ht: 4.12
GEP: BH: 12.80 PBW: 198.20 *Equation 1 Ht: 32.00
Single tier MAX: BH: 12.80 PBW: 309.96 PBL: 268.99 *Wake Effect Ht: 32.00
Relative Coordinates of Projected Width Mid-point: XADJ: -84.53 YADJ: 68.37

*adjusted for a Stack-Building elevation difference of 0.00
BldNo: 1 Bld Name:BLD TierNo: 1

Drtcn: 30.00

StkNo: 1 Stk Name:BAY1 Stack Ht: 4.12
GEP: BH: 12.80 PBW: 198.20 *Equation 1 Ht: 32.00
Single tier MAX: BH: 12.80 PBW: 306.92 PBL: 285.60 *Wake Effect Ht: 32.00
Relative Coordinates of Projected Width Mid-point: XADJ: -103.78 YADJ: 80.66

*adjusted for a Stack-Building elevation difference of 0.00
BldNo: 1 Bld Name:BLD TierNo: 1

Drtcn: 40.00

```
StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 294.54  PBL: 293.53  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -119.87  YADJ:   90.50

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn:  50.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 273.22  PBL: 292.54  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -132.31  YADJ:   97.58

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn:  60.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 243.59  PBL: 284.45  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -140.74  YADJ:  101.71

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn:  70.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 206.57  PBL: 273.76  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -144.90  YADJ:  102.74

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn:  80.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 197.47  PBL: 263.66  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -152.67  YADJ:   83.54

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn:  90.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 212.00  PBL: 288.00  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -182.00  YADJ:   67.00

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 100.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 244.20  PBL: 303.59  *Wake Effect Ht:   32.00
```

```
    Relative Coordinates of Projected Width Mid-point: XADJ: -205.80  YADJ:   59.38

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 110.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 268.99  PBL: 309.96  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -223.35  YADJ:   49.96

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 120.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 285.60  PBL: 306.92  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -234.12  YADJ:   39.02

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 130.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 293.53  PBL: 294.54  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -237.77  YADJ:   26.90

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 140.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 292.54  PBL: 273.22  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -234.19  YADJ:   13.96

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 150.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 284.45  PBL: 243.59  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -223.50  YADJ:    1.48

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 160.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 273.76  PBL: 206.57  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -206.02  YADJ:   -8.02

         *adjusted for a Stack-Building elevation difference of    0.00
```

```
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 170.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 263.66  PBL: 197.47  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -182.28  YADJ:  -20.84

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 180.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 288.00  PBL: 212.00  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -173.00  YADJ:  -38.00

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 190.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 303.59  PBL: 244.20  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -181.49  YADJ:  -54.01

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 200.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 309.96  PBL: 268.99  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -184.46  YADJ:  -68.37

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 210.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 306.92  PBL: 285.60  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -181.82  YADJ:  -80.66

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 220.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 294.54  PBL: 293.53  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -173.66  YADJ:  -90.50

         *adjusted for a Stack-Building elevation difference of    0.00
              BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 230.00
```

```
StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 273.22  PBL: 292.54  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -160.23  YADJ:  -97.58

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 240.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 243.59  PBL: 284.45  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -143.71  YADJ: -101.71

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 250.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 206.57  PBL: 273.76  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -128.87  YADJ: -102.74

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 260.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 197.47  PBL: 263.66  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -110.99  YADJ:  -83.54

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 270.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 212.00  PBL: 288.00  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ: -106.00  YADJ:  -67.00

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 280.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 244.20  PBL: 303.59  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -97.79  YADJ:  -59.38

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 290.00

StkNo:  1  Stk Name:BAY1                                Stack Ht:    4.12
               GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
```

```
    Single tier MAX:  BH:  12.80  PBW: 268.99  PBL: 309.96  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -86.61  YADJ:  -49.96

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 300.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 285.60  PBL: 306.92  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -72.80  YADJ:  -39.02

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 310.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 293.53  PBL: 294.54  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -56.77  YADJ:  -26.90

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 320.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 292.54  PBL: 273.22  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -39.03  YADJ:  -13.96

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 330.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 284.45  PBL: 243.59  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -20.09  YADJ:   -1.48

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 340.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 273.76  PBL: 206.57  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:   -0.55  YADJ:    8.02

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 350.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 263.66  PBL: 197.47  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -15.19  YADJ:   20.84
```

```
         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1

Drtcn: 360.00

StkNo:  1  Stk Name:BAY1                              Stack Ht:    4.12
                GEP:  BH:  12.80  PBW: 198.20   *Equation 1 Ht:   32.00
    Single tier MAX:  BH:  12.80  PBW: 288.00  PBL: 212.00  *Wake Effect Ht:   32.00
    Relative Coordinates of Projected Width Mid-point: XADJ:  -39.00  YADJ:   38.00

         *adjusted for a Stack-Building elevation difference of    0.00
               BldNo:  1  Bld Name:BLD       TierNo:  1


Dominant combined buildings:  None
```

Appendix C AERMOD Output

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```
CO STARTING
   TITLEONE  13343 Agua Mansa
   MODELOPT  CONC FLAT
   AVERTIME  PERIOD
   URBANOPT  4380878 RSBOMSA
   POLLUTID  PM10
   RUNORNOT  RUN
CO FINISHED

SO STARTING
   ELEVUNIT  METERS

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AIN1  AREA    466273  3765892   0
   URBANSRC  AIN1

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AIN2  AREA    466339  3765873   0
   URBANSRC  AIN2

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AINE  AREA    466500  3765948   0
   URBANSRC  AINE

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AISE  AREA    466586  3765742   0
   URBANSRC  AISE

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AIS2  AREA    466378  3765668   0
   URBANSRC  AIS2

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AIS1  AREA    466343  3765693   0
   URBANSRC  AIS1

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  AIW1  AREA    466327  3765699   0
   URBANSRC  AIW1

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  BAY1  POINT   466481  3765740   0
   URBANSRC  BAY1

**                          E       N         Z
**                        ------  -------   ----
   LOCATION  BAY2  POINT   466430  3765897   0
   URBANSRC  BAY2

**                          E       N         Z
**                        ------  -------   ----
```

```
   LOCATION  RIVN  AREA    466096  3766477   0
   URBANSRC  RIVN

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  RIVM  AREA    466294  3765648   0
   URBANSRC  RIVM

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  RIVS  AREA    466388  3765241   0
   URBANSRC  RIVS

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  AGMW  AREA    465823  3766210   0
   URBANSRC  AGMW

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  AGME  AREA    466511  3766894   0
   URBANSRC  AGME

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  MIGN  AREA    466946  3766496   0
   URBANSRC  MIGN

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  MIGM  AREA    466587  3765728   0
   URBANSRC  MIGM

**                           E       N         Z
**                         ------  -------   ----
   LOCATION  MIGS  AREA    466318  3765624   0
   URBANSRC  MIGS

** Area Source          EF             HT   XIN   YIN    ANG
** Parameters:         -------------  ---- -----  ------ ---
   SRCPARAM  AIN1      0.000000001999 4.12   63.5    7.8 0.0
   SRCPARAM  AIN2      0.000000001011 4.12  168.0   55.5 0.0
   SRCPARAM  AINE      0.000000010073 4.12  178.5    7.8 0.0
   SRCPARAM  AISE      0.000000014690 4.12  122.4    7.8 0.0
   SRCPARAM  AIS2      0.000000001400 4.12  201.6   55.5 0.0
   SRCPARAM  AIS1      0.000000010314 4.12   30.0    7.8 0.0
   SRCPARAM  AIW1      0.000000019749 4.12    7.8  213.6 0.0
   SRCPARAM  RIVN      0.000000005658 4.12   27.9  308.0 0.0
   SRCPARAM  RIVM      0.000000007920 4.12   22.8  838.5 0.0
   SRCPARAM  RIVS      0.000000006763 4.12   22.8  410.9 0.0
   SRCPARAM  AGMW      0.000000005309 4.12  355.4   22.2 0.0
   SRCPARAM  AGME      0.000000003741 4.12  303.3   21.0 0.0
   SRCPARAM  MIGN      0.000000003762 4.12   21.0  579.0 0.0
   SRCPARAM  MIGM      0.000000007337 4.12   21.0  833.6 0.0
   SRCPARAM  MIGS      0.000000011490 4.12   21.0  274.1 0.0

** Point Source         EF             HT   TMP     V  D
** Parameters:         -------------- ---- ------- -- ------
   SRCPARAM  BAY1      0.000001957778 4.12 366.483 50 0.1016
```

```
   SRCPARAM  BAY2      0.000001957778 4.12 366.483 50 0.1016

** Building Downwash
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDHGT BAY1       12.80   12.80   12.80   12.80   12.80   12.80
SO BUILDWID BAY1      303.59  309.96  306.92  294.54  273.22  243.59
SO BUILDWID BAY1      206.57  197.47  212.00  244.20  268.99  285.60
SO BUILDWID BAY1      293.53  292.54  284.45  273.76  263.66  288.00
SO BUILDWID BAY1      303.59  309.96  306.92  294.54  273.22  243.59
SO BUILDWID BAY1      206.57  197.47  212.00  244.20  268.99  285.60
SO BUILDWID BAY1      293.53  292.54  284.45  273.76  263.66  288.00
SO BUILDLEN BAY1      244.20  268.99  285.60  293.53  292.54  284.45
SO BUILDLEN BAY1      273.76  263.66  288.00  303.59  309.96  306.92
SO BUILDLEN BAY1      294.54  273.22  243.59  206.57  197.47  212.00
SO BUILDLEN BAY1      244.20  268.99  285.60  293.53  292.54  284.45
SO BUILDLEN BAY1      273.76  263.66  288.00  303.59  309.96  306.92
SO BUILDLEN BAY1      294.54  273.22  243.59  206.57  197.47  212.00
SO XBADJ    BAY1      -62.72  -84.53 -103.78 -119.87 -132.31 -140.74
SO XBADJ    BAY1     -144.90 -152.67 -182.00 -205.80 -223.35 -234.12
SO XBADJ    BAY1     -237.77 -234.19 -223.50 -206.02 -182.28 -173.00
SO XBADJ    BAY1     -181.49 -184.46 -181.82 -173.66 -160.23 -143.71
SO XBADJ    BAY1     -128.87 -110.99 -106.00  -97.79  -86.61  -72.80
SO XBADJ    BAY1      -56.77  -39.03  -20.09   -0.55  -15.19  -39.00
SO YBADJ    BAY1       54.01   68.37   80.66   90.50   97.58  101.71
SO YBADJ    BAY1      102.74   83.54   67.00   59.38   49.96   39.02
SO YBADJ    BAY1       26.90   13.96    1.48   -8.02  -20.84  -38.00
SO YBADJ    BAY1      -54.01  -68.37  -80.66  -90.50  -97.58 -101.71
SO YBADJ    BAY1     -102.74  -83.54  -67.00  -59.38  -49.96  -39.02
SO YBADJ    BAY1      -26.90  -13.96   -1.48    8.02   20.84   38.00

   SRCGROUP  ALL
SO FINISHED

RE STARTING
RE GRIDCART NET1 STA
                XYINC 465433 15 100 3765114 15 100
RE GRIDCART NET1 END

**          E       N
**          ------  ------
RE DISCCART 466317 3766020
RE DISCCART 466442 3766226
RE DISCCART 466239 3766299
RE DISCCART 466041 3766126
RE DISCCART 465750 3763787
RE DISCCART 465922 3765704
RE DISCCART 465659 3765366
RE DISCCART 466004 3765359
RE DISCCART 466142 3765218

RE FINISHED

ME STARTING
   SURFFILE  rivr8.sfc
   PROFFILE  rivr8.pfl
```

```
   SURFDATA  0     2012 Riverside,CA
   UAIRDATA  3190  2012 Riverside,CA
   PROFBASE  0.0  METERS
ME FINISHED

OU STARTING
   RECTABLE  ALLAVE  FIRST-THIRD
   MAXTABLE  ALLAVE  50
   SUMMFILE  AERTEST.SUM
   PLOTFILE  PERIOD ALL 13343ANN.PLT
OU FINISHED

 **********************************
 *** SETUP Finishes Successfully ***
 **********************************
```

**MODELOPTs: NonDFAULT CONC   FLAT

                                        ***   MODEL SETUP OPTIONS SUMMARY   ***
- -

**Model Is Setup For Calculation of Average CONCentration Values.

  -- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses URBAN Dispersion Algorithm for the SBL for   17 Source(s),
  for Total of   1 Urban Area(s):
  Urban Population =   4380878.0 ; Urban Roughness Length = 1.000 m

**Model Allows User-Specified Options:
       1. Stack-tip Downwash.
       2. Model Assumes Receptors on FLAT Terrain.
       3. Use Calms Processing Routine.
       4. Use Missing Data Processing Routine.
       5. No Exponential Decay.
       6. Urban Roughness Length of 1.0 Meter Used.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates PERIOD Averages Only

**This Run Includes: 17 Source(s);   1 Source Group(s); and   234 Receptor(s)

**The Model Assumes A Pollutant Type of: PM10

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
        Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   0.00 ; Decay Coef. =   0.000   ; Rot. Angle =   0.0
                 Emission Units = GRAMS/SEC   ; Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =   3.6 MB of RAM.

**File for Summary of Results: AERTEST.SUM

**MODELOPTs: NonDFAULT CONC   FLAT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
BAY1	0	0.19578E-05	466481.0	3765740.0	0.0	4.12	366.48	50.00	0.10	YES	YES	NO	
BAY2	0	0.19578E-05	466430.0	3765897.0	0.0	4.12	366.48	50.00	0.10	NO	YES	NO	

**MODELOPTs: NonDFAULT CONC FLAT

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
AIN1	0	0.19990E-08	466273.0	3765892.0	0.0	4.12	63.50	7.80	0.00	0.00	YES	
AIN2	0	0.10110E-08	466339.0	3765873.0	0.0	4.12	168.00	55.50	0.00	0.00	YES	
AINE	0	0.10073E-07	466500.0	3765948.0	0.0	4.12	178.50	7.80	0.00	0.00	YES	
AISE	0	0.14690E-07	466586.0	3765742.0	0.0	4.12	122.40	7.80	0.00	0.00	YES	
AIS2	0	0.14000E-08	466378.0	3765668.0	0.0	4.12	201.60	55.50	0.00	0.00	YES	
AIS1	0	0.10314E-07	466343.0	3765693.0	0.0	4.12	30.00	7.80	0.00	0.00	YES	
AIW1	0	0.19749E-07	466327.0	3765699.0	0.0	4.12	7.80	213.60	0.00	0.00	YES	
RIVN	0	0.56580E-08	466096.0	3766477.0	0.0	4.12	27.90	308.00	0.00	0.00	YES	
RIVM	0	0.79200E-08	466294.0	3765648.0	0.0	4.12	22.80	838.50	0.00	0.00	YES	
RIVS	0	0.67630E-08	466388.0	3765241.0	0.0	4.12	22.80	410.90	0.00	0.00	YES	
AGMW	0	0.53090E-08	465823.0	3766210.0	0.0	4.12	355.40	22.20	0.00	0.00	YES	
AGME	0	0.37410E-08	466511.0	3766894.0	0.0	4.12	303.30	21.00	0.00	0.00	YES	
MIGN	0	0.37620E-08	466946.0	3766496.0	0.0	4.12	21.00	579.00	0.00	0.00	YES	
MIGM	0	0.73370E-08	466587.0	3765728.0	0.0	4.12	21.00	833.60	0.00	0.00	YES	
MIGS	0	0.11490E-07	466318.0	3765624.0	0.0	4.12	21.00	274.10	0.00	0.00	YES	

**MODELOPTs: NonDFAULT CONC   FLAT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	AIN1 , AIN2 , AINE , AISE , AIS2 , AIS1 , AIW1 , BAY1 , BAY2 , RIVN , RIVM , RIVS , AGMW , AGME , MIGN , MIGM , MIGS ,

**MODELOPTs: NonDFAULT CONC   FLAT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: BAY1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	12.8,	303.6,	244.2,	-62.7,	54.0,	2	12.8,	310.0,	269.0,	-84.5,	68.4,
3	12.8,	306.9,	285.6,	-103.8,	80.7,	4	12.8,	294.5,	293.5,	-119.9,	90.5,
5	12.8,	273.2,	292.5,	-132.3,	97.6,	6	12.8,	243.6,	284.4,	-140.7,	101.7,
7	12.8,	206.6,	273.8,	-144.9,	102.7,	8	12.8,	197.5,	263.7,	-152.7,	83.5,
9	12.8,	212.0,	288.0,	-182.0,	67.0,	10	12.8,	244.2,	303.6,	-205.8,	59.4,
11	12.8,	269.0,	310.0,	-223.4,	50.0,	12	12.8,	285.6,	306.9,	-234.1,	39.0,
13	12.8,	293.5,	294.5,	-237.8,	26.9,	14	12.8,	292.5,	273.2,	-234.2,	14.0,
15	12.8,	284.4,	243.6,	-223.5,	1.5,	16	12.8,	273.8,	206.6,	-206.0,	-8.0,
17	12.8,	263.7,	197.5,	-182.3,	-20.8,	18	12.8,	288.0,	212.0,	-173.0,	-38.0,
19	12.8,	303.6,	244.2,	-181.5,	-54.0,	20	12.8,	310.0,	269.0,	-184.5,	-68.4,
21	12.8,	306.9,	285.6,	-181.8,	-80.7,	22	12.8,	294.5,	293.5,	-173.7,	-90.5,
23	12.8,	273.2,	292.5,	-160.2,	-97.6,	24	12.8,	243.6,	284.4,	-143.7,	-101.7,
25	12.8,	206.6,	273.8,	-128.9,	-102.7,	26	12.8,	197.5,	263.7,	-111.0,	-83.5,
27	12.8,	212.0,	288.0,	-106.0,	-67.0,	28	12.8,	244.2,	303.6,	-97.8,	-59.4,
29	12.8,	269.0,	310.0,	-86.6,	-50.0,	30	12.8,	285.6,	306.9,	-72.8,	-39.0,
31	12.8,	293.5,	294.5,	-56.8,	-26.9,	32	12.8,	292.5,	273.2,	-39.0,	-14.0,
33	12.8,	284.4,	243.6,	-20.1,	-1.5,	34	12.8,	273.8,	206.6,	-0.6,	8.0,
35	12.8,	263.7,	197.5,	-15.2,	20.8,	36	12.8,	288.0,	212.0,	-39.0,	38.0,

**MODELOPTs: NonDFAULT CONC   FLAT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: NET1   ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

465433.0, 465533.0, 465633.0, 465733.0, 465833.0, 465933.0, 466033.0, 466133.0, 466233.0, 466333.0,
466433.0, 466533.0, 466633.0, 466733.0, 466833.0,

*** Y-COORDINATES OF GRID ***
(METERS)

3765114.0, 3765214.0, 3765314.0, 3765414.0, 3765514.0, 3765614.0, 3765714.0, 3765814.0, 3765914.0, 3766014.0,
3766114.0, 3766214.0, 3766314.0, 3766414.0, 3766514.0,

**MODELOPTs: NonDFAULT CONC   FLAT

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(	466317.0,	3766020.0,	0.0,	0.0,	0.0);	(	466442.0,	3766226.0,	0.0,	0.0,	0.0);
(	466239.0,	3766299.0,	0.0,	0.0,	0.0);	(	466041.0,	3766126.0,	0.0,	0.0,	0.0);
(	465750.0,	3763787.0,	0.0,	0.0,	0.0);	(	465922.0,	3765704.0,	0.0,	0.0,	0.0);
(	465659.0,	3765366.0,	0.0,	0.0,	0.0);	(	466004.0,	3765359.0,	0.0,	0.0,	0.0);
(	466142.0,	3765218.0,	0.0,	0.0,	0.0);						

**MODELOPTs: NonDFAULT CONC FLAT

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

**MODELOPTs: NonDFAULT CONC FLAT

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: rivr8.sfc Met Version: 14134
Profile file: rivr8.pfl
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: RIVERSIDE,CA Name: RIVERSIDE,CA
Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-64.0	0.616	-9.000	-9.000	-999.	1157.	319.6	0.31	1.00	1.00	5.40	27.	9.1	287.5	5.5
08	01	01	1	02	-54.0	0.502	-9.000	-9.000	-999.	866.	204.9	0.31	1.00	1.00	4.50	40.	9.1	287.5	5.5
08	01	01	1	03	-16.4	0.152	-9.000	-9.000	-999.	347.	18.8	0.31	1.00	1.00	2.20	62.	9.1	287.0	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.31	1.00	1.00	3.10	67.	9.1	287.0	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.31	1.00	1.00	4.90	96.	9.1	286.4	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.31	1.00	1.00	3.10	342.	9.1	286.4	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.31	1.00	1.00	4.00	38.	9.1	287.0	5.5
08	01	01	1	08	-35.7	0.448	-9.000	-9.000	-999.	719.	220.9	0.31	1.00	0.53	4.00	62.	9.1	287.0	5.5
08	01	01	1	09	26.7	0.649	0.357	0.005	59.	1253.	-895.5	0.31	1.00	0.32	5.40	294.	9.1	288.1	5.5
08	01	01	1	10	76.5	0.503	0.700	0.009	157.	879.	-146.3	0.31	1.00	0.25	4.00	42.	9.1	289.2	5.5
08	01	01	1	11	123.5	0.418	1.124	0.012	404.	655.	-51.7	0.31	1.00	0.22	3.10	30.	9.1	290.9	5.5
08	01	01	1	12	130.9	0.715	1.311	0.005	605.	1451.	-245.0	0.31	1.00	0.21	5.80	37.	9.1	290.9	5.5
08	01	01	1	13	81.1	0.560	1.174	0.006	701.	1033.	-189.8	0.31	1.00	0.21	4.50	4.	9.1	290.9	5.5
08	01	01	1	14	76.4	0.604	1.171	0.005	739.	1124.	-252.5	0.31	1.00	0.23	4.90	13.	9.1	290.9	5.5
08	01	01	1	15	52.3	0.805	1.043	0.005	762.	1730.	-875.8	0.31	1.00	0.26	6.70	39.	9.1	290.9	5.5
08	01	01	1	16	11.1	0.377	0.624	0.011	767.	800.	-422.2	0.31	1.00	0.35	3.10	346.	9.1	290.4	5.5
08	01	01	1	17	-43.3	0.441	-9.000	-9.000	-999.	705.	173.6	0.31	1.00	0.63	4.00	9.	9.1	290.4	5.5
08	01	01	1	18	-29.0	0.400	-9.000	-9.000	-999.	608.	192.9	0.31	1.00	1.00	3.60	45.	9.1	289.9	5.5
08	01	01	1	19	-49.6	0.505	-9.000	-9.000	-999.	860.	227.3	0.31	1.00	1.00	4.50	25.	9.1	289.9	5.5
08	01	01	1	20	-64.0	0.730	-9.000	-9.000	-999.	1496.	533.1	0.31	1.00	1.00	6.30	60.	9.1	289.9	5.5
08	01	01	1	21	-29.1	0.400	-9.000	-9.000	-999.	736.	192.1	0.31	1.00	1.00	3.60	238.	9.1	288.8	5.5
08	01	01	1	22	-41.2	0.562	-9.000	-9.000	-999.	1010.	378.5	0.31	1.00	1.00	4.90	87.	9.1	287.5	5.5
08	01	01	1	23	-53.8	0.733	-9.000	-9.000	-999.	1504.	642.6	0.31	1.00	1.00	6.30	95.	9.1	287.0	5.5
08	01	01	1	24	-29.5	0.399	-9.000	-9.000	-999.	738.	189.5	0.31	1.00	1.00	3.60	37.	9.1	285.4	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
08	01	01	01	5.5	0	-999.	-99.00	287.6	99.0	-99.00	-99.00
08	01	01	01	9.1	1	27.	5.40	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

**MODELOPTs: NonDFAULT CONC   FLAT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   AIN1   , AIN2   , AINE   , AISE   , AIS2   ,
AIS1   , AIW1   , BAY1   , BAY2   , RIVN   , RIVM   , RIVS   , AGMW   ,
AGME   , MIGN   , MIGM   , MIGS   ,

*** NETWORK ID: NET1   ; NETWORK TYPE: GRIDCART ***

** CONC OF PM10   IN MICROGRAMS/M**3   **

Y-COORD (METERS)	X-COORD (METERS)								
	465433.00	465533.00	465633.00	465733.00	465833.00	465933.00	466033.00	466133.00	466233.00
3766514.00	0.00091	0.00106	0.00125	0.00152	0.00192	0.00263	0.00484	0.01824	0.00662
3766414.00	0.00099	0.00116	0.00139	0.00171	0.00216	0.00278	0.00387	0.00604	0.00789
3766314.00	0.00106	0.00126	0.00156	0.00206	0.00295	0.00391	0.00479	0.00583	0.00846
3766214.00	0.00110	0.00132	0.00168	0.00247	0.01028	0.01829	0.01953	0.01973	0.01046
3766114.00	0.00111	0.00132	0.00163	0.00215	0.00325	0.00480	0.00597	0.00713	0.00982
3766014.00	0.00110	0.00129	0.00156	0.00196	0.00257	0.00342	0.00445	0.00596	0.00980
3765914.00	0.00107	0.00126	0.00152	0.00187	0.00238	0.00311	0.00420	0.00613	0.01176
3765814.00	0.00104	0.00122	0.00146	0.00179	0.00226	0.00297	0.00410	0.00637	0.01365
3765714.00	0.00099	0.00115	0.00137	0.00167	0.00210	0.00273	0.00378	0.00589	0.01283
3765614.00	0.00093	0.00107	0.00127	0.00152	0.00188	0.00239	0.00320	0.00469	0.00848
3765514.00	0.00085	0.00098	0.00115	0.00136	0.00165	0.00205	0.00264	0.00363	0.00557
3765414.00	0.00078	0.00089	0.00103	0.00121	0.00144	0.00175	0.00222	0.00296	0.00432
3765314.00	0.00071	0.00080	0.00092	0.00106	0.00125	0.00150	0.00187	0.00243	0.00345
3765214.00	0.00065	0.00072	0.00082	0.00094	0.00109	0.00129	0.00156	0.00196	0.00259
3765114.00	0.00059	0.00065	0.00073	0.00083	0.00095	0.00111	0.00131	0.00158	0.00194

**MODELOPTs: NonDFAULT CONC   FLAT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   AIN1   , AIN2   , AINE   , AISE   , AIS2   ,
AIS1   , AIW1   , BAY1   , BAY2   , RIVN   , RIVM   , RIVS   , AGMW   ,
AGME   , MIGN   , MIGM   , MIGS   ,

*** NETWORK ID: NET1   ; NETWORK TYPE: GRIDCART ***

** CONC OF PM10   IN MICROGRAMS/M**3   **

Y-COORD (METERS)	X-COORD (METERS)					
	466333.00	466433.00	466533.00	466633.00	466733.00	466833.00
3766514.00	0.00623	0.00470	0.00619	0.01238	0.00433	0.00350
3766414.00	0.01961	0.00677	0.00780	0.01513	0.00547	0.00375
3766314.00	0.02150	0.00813	0.00881	0.01613	0.00617	0.00411
3766214.00	0.02242	0.00896	0.00953	0.01676	0.00670	0.00447
3766114.00	0.02301	0.00970	0.01026	0.01742	0.00721	0.00483
3766014.00	0.02409	0.01105	0.01202	0.01911	0.00806	0.00526
3765914.00	0.03694	0.01829	0.01686	0.02329	0.00941	0.00573
3765814.00	0.06588	0.01917	0.01485	0.02108	0.00940	0.00598
3765714.00	0.06493	0.02444	0.01871	0.02097	0.01123	0.00602
3765614.00	0.02806	0.02328	0.01213	0.00937	0.00715	0.00527
3765514.00	0.01036	0.01952	0.00908	0.00683	0.00549	0.00441
3765414.00	0.00799	0.01735	0.00746	0.00549	0.00446	0.00372
3765314.00	0.00657	0.01576	0.00623	0.00452	0.00371	0.00315
3765214.00	0.00403	0.00740	0.00462	0.00362	0.00306	0.00267
3765114.00	0.00249	0.00310	0.00306	0.00277	0.00249	0.00224

**MODELOPTs: NonDFAULT CONC   FLAT

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   AIN1   , AIN2   , AINE   , AISE   , AIS2   ,
AIS1   , AIW1   , BAY1   , BAY2   , RIVN   , RIVM   , RIVS   , AGMW   ,
AGME   , MIGN   , MIGM   , MIGS   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM10   IN MICROGRAMS/M**3   **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
466317.00	3766020.00	0.02842	466442.00	3766226.00	0.00863
466239.00	3766299.00	0.00906	466041.00	3766126.00	0.00650
465750.00	3763787.00	0.00029	465922.00	3765704.00	0.00262
465659.00	3765366.00	0.00101	466004.00	3765359.00	0.00188
466142.00	3765218.00	0.00202			

 **MODELOPTs: NonDFAULT CONC   FLAT

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF PM10   IN MICROGRAMS/M**3   **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.06588 AT (466333.00, 3765814.00, 0.00, 0.00, 0.00)	GC	NET1
	2ND HIGHEST VALUE IS	0.06493 AT (466333.00, 3765714.00, 0.00, 0.00, 0.00)	GC	NET1
	3RD HIGHEST VALUE IS	0.03694 AT (466333.00, 3765914.00, 0.00, 0.00, 0.00)	GC	NET1
	4TH HIGHEST VALUE IS	0.02842 AT (466317.00, 3766020.00, 0.00, 0.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.02806 AT (466333.00, 3765614.00, 0.00, 0.00, 0.00)	GC	NET1
	6TH HIGHEST VALUE IS	0.02444 AT (466433.00, 3765714.00, 0.00, 0.00, 0.00)	GC	NET1
	7TH HIGHEST VALUE IS	0.02409 AT (466333.00, 3766014.00, 0.00, 0.00, 0.00)	GC	NET1
	8TH HIGHEST VALUE IS	0.02329 AT (466633.00, 3765914.00, 0.00, 0.00, 0.00)	GC	NET1
	9TH HIGHEST VALUE IS	0.02328 AT (466433.00, 3765614.00, 0.00, 0.00, 0.00)	GC	NET1
	10TH HIGHEST VALUE IS	0.02301 AT (466333.00, 3766114.00, 0.00, 0.00, 0.00)	GC	NET1

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

**MODELOPTs: NonDFAULT CONC   FLAT

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   1 Warning Message(s)
A Total of   2006 Informational Message(s)

A Total of   43848 Hours Were Processed

A Total of   7 Calm Hours Identified

A Total of   1999 Missing Hours Identified (4.56 Percent)

   ******** FATAL ERROR MESSAGES ********
              *** NONE ***

   ********   WARNING MESSAGES   ********
MX W492   1 METEXT:SURFDATA YR .NE. 1st YR of file, adj to match file StartYR 2108

   ****
   *** AERMOD Finishes Successfully ***
   ****

Appendix C Phase I Environmental Site Assessment

975 5th Avenue Northwest, Issaquah, Washington 98027
Tel: (425) 295-0800 Fax: (425) 295-0850
www.farallonconsulting.com

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

AGUA MANSA COMMERCE CENTER
SOUTH RIVERSIDE AVENUE
COLTON, CALIFORNIA

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

Farallon PN: 1071-007 (Task 1)

Prepared For:
Prologis, Inc.
Pier One, Bay One
San Francisco, California 94111

April 18, 2014

Prepared by:

Scott Allin
Principal Environmental Scientist

Reviewed by:

Tina Huff
Senior Regulatory Specialist

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EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (Phase I ESA) Report was prepared by Farallon Consulting, L.L.C. (Farallon) for the Agua Mansa Commerce Center property on South Riverside Avenue in Colton, California (herein referred to as the Site).

This Phase I ESA Report was prepared for Prologis, Inc. (Prologis) in accordance with the Environmental Engagement Letter dated April 1, 2014. The scope of work for this Phase I ESA is consistent with ASTM International Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13). ASTM E1527-13 is intended to permit a user to satisfy the requirements to qualify for protection from potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act as the innocent landowner, contiguous property owner, or bona fide prospective purchaser. ASTM E1527-13 constitutes "all appropriate inquiry" into the previous ownership, uses, and environmental conditions of a property consistent with good commercial or customary practice, as defined in Section 9601(35)(B) of Title 42 of the U.S. Code. There were no significant deviations from or limitations to ASTM E1527-13 during the completion of this Phase I ESA. There were no significant data gaps encountered during the completion of this Phase I ESA Report.

The purpose of this Phase I ESA was to identify, as practicable, recognized environmental conditions on the Site or proximate to the Site that have caused and/or may cause an adverse environmental condition. This Phase I ESA Report provides the results of investigation into past and present ownership and uses of the Site, consistent with good commercial and/or customary practice.

The Site is located on the east side of South Riverside Avenue north of Miguel Bustamante Parkway in the city of Colton, San Bernardino County, California. The Site currently has no assigned address with local agencies. The Site resides on approximately 21 acres of land and is located at an approximate Latitude North 34.0320000 and Longitude West 117.3636000. According to the San Bernardino County Office of the Assessor website, the Site is located on Assessor Parcel Number (APN) 0260-091-087 (identified as Parcel 2), APN 260-221-01 (identified as Lot 3), APN 260-221-02 (identified as Lot 2), and APN 260-221-03 (identified as Lot 1).

The Site consists primarily of flat, vacant, dirt-covered land without landscaping. The Site is without structures or improvements, with the exception of an enclosed area in the southwestern corner of Parcel 2 that is occupied by a City of Colton sewage lift station. This asphalt-paved area is surrounded by chain-link fencing and includes a small masonry block building, a transformer, two pumps, and aboveground piping. The northern portion of Parcel 2 contains a gravel-covered parking lot with a concrete-lined strip used for stormwater diversion. The remainder of Parcel 2 is occupied by a construction storage yard with chain-link fencing along its perimeter, and gravel-covered access roads throughout the open storage yard. The southern portion of the Site (Lots 1, 2, and 3) consists of vacant flat land covered with weeds. Access to

the Site is gained from two driveways off South Riverside Avenue to the west, and one driveway off Miguel Bustamante Parkway to the south.

According to prior assessment documents reviewed during this Phase I ESA, the Site has never been developed, with the exception of the currently existing small structure associated with the City of Colton sewage lift station, and a possible residential structure on the currently undeveloped southern portion (Lots 1, 2, and 3) seen in a 1953 aerial photograph and depicted on a 1954 topographic map. Reviewed historical aerial photographs and topographic maps showed that by 1966 to at least 1995, the majority of the Site (with the exception of undeveloped Lots 1, 2, and 3) was part of a larger property that extended north and northeast. According to a 2005 Phase I ESA report prepared for the Site, undeveloped Lots 1, 2, and 3 were historically part of the Beckett Ranch property, and this portion of the Site was owned by Agua Mansa Farms in 1996.

At the time of the reconnaissance, Farallon did not observe storage or handling of hazardous substances, with the exception of minor amounts of vehicle maintenance-related materials on the CC Myers property. The materials were properly labeled and stored, with no evidence of spills or releases noted. No evidence of stained soil, stressed vegetation, fill material, aboveground or underground storage tanks, or significant chemical release was observed on the Site at the time of the site reconnaissance.

The Site is currently occupied by CC Myers Corporation (CC Myers), a bridge and highway construction company that has used the Site as a construction storage yard since early 2007. Stacks of various construction supplies and equipment (e.g., K-rails, steel beams, wood) are stored throughout the occupied area of the Site, and a perimeter chain-link fence surrounds the tenant's space. According to the interviewed tenant representative, minimal truck maintenance activities are performed on the Site. In the southwestern corner of the CC Myers leased space is a fenced-in area occupied by a City of Colton sewage lift station, which includes a small masonry block structure, an electrical transformer, pumps, and aboveground piping. At the time of the site reconnaissance, the northern portion of the Site was occupied by US Xpress and was being used as a parking lot for cars and trucks. The southern portion of the Site consisted of unoccupied graded land covered with weeds.

The Environmental Data Resources, Inc. (EDR) report prepared for the Site and vicinity did not identify the Site on any of the regulatory databases reviewed. Facilities in the vicinity of the Site were listed on various regulatory databases reviewed. Regulatory files for facilities in the vicinity of the Site were not reviewed due to the time constraints of this Phase I ESA; additional information may be available at local and state agencies. According to information obtained from EDR and based on their current regulatory status, topographic location, and or/relative distance to the Site, these facilities do not represent a recognized environmental condition for the Site.

Farallon performed a Phase I ESA for the Site in general conformance with the scope and limitations of ASTM E1527-13. This assessment did not reveal recognized environmental conditions in connection with the Site.

This Executive Summary is presented for convenience only and should not be used in lieu of information presented in the entire Phase I ESA Report.

1.0 INTRODUCTION

This Phase I Environmental Site Assessment (Phase I ESA) Report was prepared by Farallon Consulting, L.L.C. (Farallon) for the Agua Mansa Commerce Center property on South Riverside Avenue in Colton, California (herein referred to as the Site) (Figure 1). This section discusses the project purpose, scope of work, user reliance, deletions and deviations, limiting conditions, and data gaps, and the qualifications of the environmental professionals conducting and reviewing the Phase I ESA work.

This Phase I ESA Report was prepared for Prologis, Inc. (Prologis) (2014) in accordance with the Environmental Engagement Letter dated April 1, 2014. The scope of work for this Phase I ESA is consistent with ASTM International Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13).

1.1 PURPOSE

The purpose of the Phase I ESA was to identify, as practicable, recognized environmental conditions on the Site and within the appropriate study area that have caused and/or may cause an adverse environmental impact. ASTM E1527-13 is intended to permit a user to satisfy one of the requirements to qualify for protection from potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act as the innocent landowner, contiguous property owner, or bona fide prospective purchaser. ASTM E1527-13 constitutes "all appropriate inquiry" into the previous ownership, uses, and environmental conditions of a property consistent with good commercial or customary practice, as defined in Section 9601(35)(B) of Title 42 of the U.S. Code.

The objective of the Phase I ESA was to perform an appropriate inquiry into past and present ownership and uses of the Site, consistent with good commercial and/or customary practice. The Phase I ESA Report is to be used as a risk management tool to meet all appropriate inquiry requirements and the Comprehensive Environmental Response, Compensation, and Liability Act liability defense. The Phase I ESA does not guarantee that there are no impacts to the Site.

For the purpose of this Phase I ESA Report, the term "recognized environmental condition" is defined as the presence or likely presence of any hazardous substance or petroleum product on the Site under conditions that indicate a past or existing release or material threat of release of any hazardous substance into a structure on the Site, or into the ground, groundwater, or surface water of the Site. The term is not intended to include de minimis conditions that generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies.

1.2 SCOPE OF WORK

This Phase I ESA Report has been prepared in accordance with the scope of work presented in ASTM E1527-13 and the Environmental Engagement Letter between Prologis (2014) and

Farallon dated April 1, 2014. The Phase I ESA was performed in accordance with the *Master Services Agreement* between Prologis (2011) and Farallon dated August 4, 2011.

The scope of work for this Phase I ESA included a records review, literature research and review, a site reconnaissance, interviews with individuals familiar with the Site, interviews with local governmental officials, and preparation of this Phase I ESA Report.

1.3 USER RELIANCE

This Phase I ESA Report has been prepared for use solely by Prologis, and shall not be relied upon by or transferred to any other party, or used for any other purpose, without the express written authorization of Farallon.

1.4 DELETIONS AND DEVIATIONS

It was the intent of the Phase I ESA to make all appropriate inquiry into the previous ownership and uses of the Site consistent with good commercial or customary practice. It is the intent of this Phase I ESA Report to permit Prologis to satisfy one of the requirements to qualify for the innocent landowner defense to Comprehensive Environmental Response, Compensation, and Liability Act liability. This Phase I ESA did not deviate from the general requirements set forth in ASTM E1527-13, with the exception of the limited Phase II testing, or U.S. Environmental Protection Agency (EPA) all appropriate inquiry.

1.5 LIMITING CONDITIONS

A limiting condition encountered during completion of this Phase I ESA was Farallon's inability to thoroughly assess the condition of the ground surface of occupied portions of the Site due to the presence of stored material. Based on information obtained from the Site representative, this limitation is not expected to alter the conclusions presented herein.

1.6 DATA GAPS

Data gaps may affect the ability to identify recognized environmental conditions and Farallon's ability to render opinions and conclusions for presentation in the Phase I ESA Report. Farallon did not encounter significant data gaps during the completion of this Phase I ESA. The following notable data gaps were encountered: Prior assessment documents were referenced and summarized in documents reviewed by Farallon, but the original reports were not available for Farallon review. The absence of direct review of these documents is unlikely to alter the conclusions of this assessment based on the summaries of the unavailable documents provided in the documents reviewed.

1.7 PROFESSIONAL QUALIFICATIONS

The Phase I ESA was conducted by Mr. Scott Allin, and was reviewed and approved by Ms. Tina Huff. Both are environmental professionals with the specific education, training, and experience to qualify them to assess a property of the nature, history, and setting of the Site. Mr.

Allin and Ms. Huff have an understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions, and the ability to develop opinions regarding conditions indicative of a release or threatened release of hazardous substances and petroleum products. These environmental professionals have developed and performed all appropriate inquiry, in conformance with the standards and practices set forth in Part 312 of Title 40 of the Code of Federal Regulations. The professional qualifications of Mr. Allin and Ms. Huff are provided in Appendix A.

2.0 SITE DESCRIPTION

This section provides an overview of the Site, including its legal description, improvements, owner, zoning, utilities, and current use.

2.1 LEGAL DESCRIPTION

The Site is on the east side of South Riverside Avenue north of Miguel Bustamante Parkway in the city of Colton, San Bernardino County, California. The Site currently has no assigned address with local agencies. The Site resides on approximately 21 acres of land and is located at an approximate Latitude North 34.0320000 and Longitude West 117.3636000. According to the San Bernardino County Office of the Assessor (2014), the Site is located on Assessor Parcel Number (APN) 0260-091-087 (identified as Parcel 2), APN 260-221-01 (identified as Lot 3), APN 260-221-02 (identified as Lot 2), and APN 260-221-03 (identified as Lot 1). The parcels and lots are outlined on Figure 2.

2.2 SITE IMPROVEMENTS

The Site primarily consists of flat, vacant, dirt-covered land without landscaping. The Site is without structures or improvements, with the exception of an enclosed area in the southwestern corner of Parcel 2 that is occupied by a City of Colton sewage lift station. This asphalt-paved area is surrounded by chain-link fencing and includes a small masonry block building, a transformer, two pumps, and aboveground piping. Prologis representatives interviewed during this Phase I ESA did not know whether the sewage lift station is owned by Prologis or the City of Colton. The northern portion of Parcel 2 contains a gravel-covered parking lot with a concrete-lined strip used for stormwater diversion. The remainder of Parcel 2 is occupied by a construction storage yard with chain-link fencing along its perimeter, and gravel-covered access roads throughout the open storage yard. Parcel 2 contains approximately 11 acres of land.. The southern portion of the Site (Lots 1, 2, and 3) consists of approximately 8 acres of vacant flat land covered with weeds. Access to the Site is gained from two driveways off South Riverside Avenue to the west, and one driveway off Miguel Bustamante Parkway to the south.

Figure 2 presents a plan map of the Site. Additional details pertaining to the Site are provided in Section 6.2, Site Features. Site photographs are presented in Appendix B.

2.3 SITE OWNER

Farallon did not obtain a chain-of-title report for this Phase I ESA. According to the Site representative, the Site is currently owned by Prologis, who purchased the Site in phases between 2005 and 2008 (Farallon 2014a).

2.4 ZONING

According to documents prepared for prior assessments of the Site (URS Corporation [URS] 2005, 2008), the Site is zoned SP for Specific Plan, a zone given to the Agua Mansa Industrial

Corridor. Adjacent properties in all directions also are zoned SP, with the exception of the land along the Santa Ana River, which is zoned for open space.

2.5 UTILITIES

No utilities are provided to the Site. Electricity, water, and trash services are provided to the area by the City of Colton Public Utilities Department. Natural gas is provided to the area by Southern California Edison (SCE).

2.6 CURRENT USE

Parcel 2 is currently leased to CC Myers Corporation of Sacramento, California, (CC Myers) a bridge and highway construction company that has used the parcel as a construction storage yard since early 2007. Stacks of various construction supplies and equipment (e.g., K-rails, steel beams, wood) are stored throughout the parcel and a perimeter chain-link fence surrounds the tenant's space. According to the interviewed tenant representative, some minimal truck maintenance activities are performed on the Site, which includes the use of a 1,000-gallon waste oil aboveground storage tank (AST) (Farallon 2014a). Located in the southwestern corner of the CC Myers leased space is a fenced-in area occupied by a City of Colton sewage lift station, which includes a small masonry block structure, an electrical transformer, pumps, and aboveground piping. The northern portion of Parcel 2 is a driveway and parking area used by US Xpress. According to interviewees, US Xpress is not authorized to occupy the land, does not have a lease, and does not pay rent (Farallon 2014a). The southern portion of the Site (Lots 1, 2, and 3) consisted of unoccupied graded land covered with weeds at the time of the site reconnaissance.

3.0 REGIONAL DESCRIPTION

The physical setting of the Site, including topography, surface water, flood plains, geology, and hydrogeology, is described in this section. Properties surrounding the Site also are discussed.

3.1 TOPOGRAPHY

Farallon reviewed the U.S. Geological Survey topographic map for San Bernardino South, California from Environmental Data Resources, Inc. (EDR) (2007) obtained during a previous Phase I ESA conducted for an adjacent site. The map depicts the Site as relatively flat terrain, sloping gently to the south/southeast, at an elevation of approximately 853 feet above mean sea level. Steep hills are approximately 0.5 mile east of the Site.

3.2 SURFACE WATER

According to topographic maps reviewed during this Phase I ESA, the nearest surface water body is the Santa Ana River approximately 0.10 mile southeast of the Site (EDR 2007).

3.3 FLOOD PLAINS

According to EDR (2014), the Site is located within a 500-year floodplain (FEMA Map panel #06071C).

3.4 GEOLOGY

The Site is in the southern portion of the Transverse Ranges of southern California in the northeastern block of the Los Angeles Basin. This Site area is in the eastern portion of the San Gabriel Valley on the northern end of a broad alluvial plain (Perris Plain), which extends from the south side of the San Bernardino Mountains. The Site is north of the Jurupa Mountains in a relatively flat plain that gently dips to the southeast toward the Santa Ana River.

According to a prior assessment document (URS 2005), California Division of Mines and Geology maps indicate that the Site is underlain by Quaternary (recent) alluvium and alluvial wash deposits deposited on Pleistocene through Late Cretaceous marine and non-marine clastic sedimentary rocks. This general area is structurally complex, with a series of northerly plunging folds and northwest-trending faults primarily from the San Andreas and San Jacinto Fault Zones. According to a prior assessment document (URS 2005), the Site is not located within a fault ruptured hazard zone, as defined in the Alquist-Priolo Earthquake Fault Zoning Act.

3.5 HYDROGEOLOGY

No water wells were observed on the Site during the site reconnaissance. According to EDR (2014), eight water wells exist within 1 mile of the Site, the closest of which is a California well approximately 0.24 mile northwest. No well depth was reported.

The City of Colton Water Department (CCWD) stated that all potable water supplied to this area is obtained from deep groundwater wells in the underlying North Riverside Groundwater Basin (URS 2008). CCWD has identified areas of groundwater contamination, primarily by perchlorate, within City boundaries, including an area several miles northeast of the Site. Groundwater contamination has not been identified by CCWD under the Site. According to CCWD, there are no municipal wells within 1 mile of the Site. Based on topographic gradient, regional groundwater flow is expected to be toward the west/southwest (URS 2008). According to the GeoTracker website (State of California Water Resources Control Board 2014), groundwater in the Site vicinity occurs at a depth of approximately 100 feet below ground surface.

3.6 SURROUNDING PROPERTIES

The Site is bordered by the following properties:

- A commercial property occupied by US Xpress to the north and northeast, followed by other commercial developments. Bob Hubbard Horse Transportation exists to the northwest.
- South Riverside Avenue, followed by Kretzschmar Steel and a shipping container storage facility to the west, followed by commercial warehouse buildings to the west and southwest.
- Miguel Bustamante Parkway, followed by vacant land and the Santa Ana River and its easements to the south.
- Miguel Bustamante Parkway, followed by vacant land and the Santa Ana River and its easements to the east.

No visual evidence of recognized environmental conditions was observed on adjacent or nearby properties during the site reconnaissance. Additional discussion of off-Site environmental conditions is provided in Section 7.1.2, Surrounding Property Listings.

4.0 USER-PROVIDED INFORMATION

Farallon understands that the user of this Phase I ESA Report, Prologis, is seeking to follow the standards set forth in ASTM E1527-13 to complete an environmental assessment of the Site. The user has specific responsibilities for fulfilling ASTM E1527-13 requirements to help identify the possibility of recognized environmental conditions in connection with the Site. These responsibilities do not require the technical expertise of an environmental professional, and were not performed by the environmental professional who completed the Phase I ESA at the Site.

To facilitate fulfillment of the ASTM E1527-13 requirements identified below, Farallon (2014b) provided Prologis with a copy of the *Phase I Environmental Site Assessment User Questionnaire* (User Questionnaire) to complete. The completed User Questionnaire is provided in Appendix C of this Phase I ESA Report.

4.1 TITLE AND LIEN RECORDS

Prologis was requested to engage a title company or title professional to undertake a review of reasonably ascertainable recorded land title records and lien records for environmental liens or activity and use limitations currently recorded against or relating to the Site.

According to Prologis representative Ms. Janet Frentzel, environmental liens or environmental use limitations are not known to exist for the Site (Farallon 2014b).

4.2 EXPERIENCE AND SPECIALIZED KNOWLEDGE

Prologis is responsible for providing information based on experience and/or specialized knowledge that is material to recognized environmental conditions in connection with the Site. Prologis is responsible for communicating to Farallon during the completion of the Phase I ESA any information based on such experience and/or specialized knowledge.

Prologis representative Ms. Frentzel indicated that she has no experience or specialized knowledge material to recognized environmental conditions in connection with the Site (Farallon 2014b).

4.3 VALUATION

In a transaction involving the purchase of a parcel of commercial real estate, the purchaser is to assess the relationship of the purchase price of the Site to the fair market value of the Site if the Site was not affected by hazardous substances or petroleum products. Farallon requested Prologis to provide an explanation for a lower purchase price that does not reasonably reflect fair market value if the Site was not contaminated, and to provide a written record of such explanation.

According to Prologis representative Ms. Frentzel, the property valuation was not below fair market value for environmental purposes at the time of completion of the questionnaire (Farallon 2014b).

4.4 COMMONLY KNOWN INFORMATION

If the user is aware of Site information that is commonly known or reasonably ascertainable within the local community that is material to a recognized environmental condition in connection with the Site, it is the user's responsibility to communicate that information to Farallon. Farallon requested that Prologis provide information for the Site that is commonly known or reasonably ascertainable. Prologis provided general property improvement information, Site boundaries, and the prior assessment documents listed in Section 5.7, Prior Assessments.

4.5 PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT USERS

Farallon requested that Prologis provide a list of the users that may rely on this Phase I ESA Report. Prologis is the only user of this Phase I ESA Report.

5.0 SITE AND REGIONAL HISTORY

Farallon reviewed the following historical sources during completion of the Phase I ESA. Farallon also interviewed the Site representative during the site reconnaissance to obtain additional historical information regarding the Site and adjacent properties.

5.1 AERIAL PHOTOGRAPHS

Farallon reviewed aerial photographs of the Colton, California area dated 1931, 1938, 1953, 1966, 1977, 1989, 1995, and 2002. The historical aerial photographs were obtained from a prior assessment document (URS 2008). Copies of the aerial photographs are provided in Appendix D. Information obtained from the review of aerial photography is summarized below.

1938: The 1938 aerial photograph showed the Site and adjacent properties in all directions as undeveloped land in its natural state, and part of the Santa Ana River bed. The only existing roads appeared to be Agua Mansa Road to the north and South Riverside Avenue to the west. The surrounding area consisted of either vacant or agricultural land with only a few residences or farm-related structures.

1953: The 1953 aerial photograph showed the Site as mostly undeveloped vacant land with sporadic trees. A small structure, likely a residence based on its size and appearance, was seen near South Riverside Avenue on the southern portion of the Site. The adjacent properties in all directions appeared to be either vacant or agricultural land. Development in the surrounding area had increased slightly, but was limited to scattered small structures, likely residences and farm-related buildings, primarily along Agua Mansa Road to the north/northwest.

1966: The 1966 aerial photograph depicted the northern portion of the Site (currently occupied by a construction storage lot and a US Xpress parking lot) as the southern portion of a larger property to the north/northeast, the current site of US Xpress. Three small buildings were evident on the north-adjacent property. Material storage and potentially one small structure were present near the northern Site boundary. One small residential-style building was seen on the southwestern portion of the Site. Adjacent properties in all directions appeared to consist of vacant or agricultural land.

1977: No significant changes to the Site or adjacent properties were observed in the 1977 photograph, with the exception of an additional structure on the northeast-adjacent property. The surrounding area appeared generally the same, with some agricultural and ranch activities (horse tracks) observed.

1989: The Site remained part of a larger property that included north/northeast-adjacent properties. Some small structures or storage sheds were seen near the northern Site boundary. Adjacent properties appeared mostly unchanged. A large warehouse building was present to the north. A large horse track with several larger rectangular structures was seen across South Riverside Avenue to the southwest. Most of the surrounding area remained undeveloped.

1995: The Site remained part of a larger property that included north/northeast-adjacent properties. The west-adjacent property (current Kretzschmar Steel) was occupied by several mid-sized commercial structures adjacent to South Riverside Avenue. The surrounding area appeared generally the same as seen in the 1989 photograph.

2002: The 2002 aerial photograph depicted the Site and adjacent properties in all directions occupied with the currently existing uses. The Site was undeveloped and occupied with what appeared to be storage activities. The adjacent sites in all directions appeared to be occupied with currently existing uses, including the large office building used by US Xpress on the north-adjacent property. An increase in development was seen in the surrounding area.

Based on Farallon's review of aerial photographs, the Site was undeveloped vacant land from at least 1938 through 1954. From at least 1966 through 1995, the Site appeared to be part of a larger property that extended to the north and northeast. From at least 1966 until prior to 1995, a small residential-style building existed on the southwestern portion of the Site. By 2002, the Site appeared to be separated from the north/northeast-adjacent property and occupied with the current construction storage yard. No specific recognized environmental conditions were identified during the review of aerial photographs.

5.2 TOPOGRAPHIC MAPS

Farallon reviewed USGS Topographic Maps of Oakland West, California for the years 1901, 1954, 1967, 1973, and 1980. The historical topographic maps were obtained from a prior assessment document (URS 2008). Copies of the topographic maps are included in Appendix D. Information obtained from the review of topographic maps is summarized below:

1901: The 1901 topographic map depicted the general area of the Site and surrounding properties as undeveloped. The Santa Ana River was depicted in its natural state to the east and south. Few roads or railroads existed in the surrounding area, with occasional small structures (residences) scattered along them.

1954: The 1954 topographic map depicted the Site as undeveloped vacant land, with the exception of one small residential-style structure along South Riverside Avenue. The adjacent and surrounding area was depicted as undeveloped, with the exception of scattered small structures, mostly along Agua Mansa Road to the north.

1967: The 1967 topographic map depicted the Site and adjacent properties as vacant undeveloped land. An unimproved road extended through the Site from South Riverside Avenue to three small structures on the northeast-adjacent property. In general, the surrounding area was depicted as vacant land, with sporadic small structures and agricultural activities.

1973: The 1973 topographic map depicted the Site and adjacent properties unchanged from the 1967 map, with the exception of a fourth small structure depicted at the end of the unimproved road on the northeast-adjacent property. No other significant changes were noted from the 1967 map.

1980: No significant changes were noted from the 1973 map.

The topographic map observations were relatively consistent with those from the aerial photographs, and no specific recognized environmental conditions were identified on the topographic maps reviewed.

5.3 SANBORN MAPS

According to a prior assessment document, Sanborn map coverage does not exist for the Site area (URS 2005).

5.4 CITY DIRECTORIES

According to a City Directory Abstract obtained from EDR during a prior assessment of the Site, US Xpress Inc. at 2200 South Riverside Avenue, listed in the 2002 directory, was the only listing for addresses on South Riverside Avenue (URS 2008).

5.5 HISTORICAL SITE OCCUPANTS

According to prior assessment documents reviewed during this Phase I ESA (URS 2005, 2008), the Site has never been developed, with the exception of the currently existing small structure along South Riverside Avenue that is part of the City of Colton sewage lift station, and a possible residential structure in the currently undeveloped southern portion (Lot 1) seen in a 1953 aerial photograph and depicted on a 1954 topographic map. According to the 2005 Phase I ESA report, undeveloped Lots 1, 2, and 3 were historically part of the Beckett Ranch property, and this portion of the Site was owned by Agua Mansa Farms in 1996 (URS 2005). No other historical Site occupant information was obtained during this Phase I ESA.

5.6 HISTORICAL SITE OWNERSHIP

Farallon did not obtain a chain-of-title report for this Phase I ESA. Prologis purchased the Site in phases between 2005 and 2008. According to a prior assessment document prepared in 2008, the northern portions of the Site (i.e., all but undeveloped Lots 1, 2, and 3) were owned by US Xpress at that time, who had owned the Site since September 2000 (URS 2008). According to a prior assessment document prepared in 2005, undeveloped Lots 1, 2, and 3 were historically part of the Beckett Ranch property, and this portion of the Site was owned by Agua Mansa Farms in 1996 (URS 2005). No other historical Site ownership information was obtained during this Phase I ESA.

5.7 PRIOR ASSESSMENTS

Prologis provided Farallon with two prior assessment documents for review during this Phase I ESA. The findings from both documents are summarized below.

The 2005 Phase I ESA was an ASTM Standard (E1527-00) Phase I ESA that included Site Lots 1, 2, and 3, and an additional 63 acres east of the Site (URS 2005). During the 2005 Phase I

ESA, URS (2005) reviewed a document from a prior assessment titled *Preliminary Environmental Site Assessment, 71.94 Acres, APNS 260-091-77 and 260-091-78, Colton, California* dated July 14, 2005, prepared by C.H.J., Inc. (CHJ), reportedly for the Redevelopment Agency for the City of Colton. According to URS (2005), Site conditions during the Phase I ESA conducted by CHJ were similar to those at the time of the Phase I ESA conducted by URS, and the CHJ assessment did not identify specific recognized environmental conditions for the Site, but provided the following recommendations:

- On-Site debris should be removed and disposed of properly;
- If discolored soils, soils with an unusual odor, or undocumented subsurface structures or landfilled materials were encountered during debris removal or future development on the Site, CHJ or a similarly qualified firm should be contacted, and work should be discontinued in that particular area until an evaluation of the soils and/or structures could be made; and
- If groundwater development was proposed at the Site, additional investigations and research specific to groundwater quality at the Site and in the vicinity should be conducted.

The URS (2005) Phase I ESA did not identify recognized environmental conditions for the Site, but provided some notable issues related to the off-Site land east of the Site.

The 2008 assessment was an ASTM Standard (E1527-05) Phase I ESA that included the 11 acres of Parcel 2, the area of the Site currently occupied by CC Myers and the City of Colton sewage lift station (URS 2008). The 2008 Phase I ESA did not identify recognized environmental conditions for the Site, and conditions described were similar to those observed by Farallon during this Phase I ESA.

6.0 INTERVIEWS AND SITE INSPECTION

6.1 INTERVIEWS

Farallon conducted interviews with individuals familiar with the Site, and contacted relevant local governmental agencies to obtain additional Site information. The responses from the parties contacted are provided below.

6.1.1 Interview with Owner/Representative

Farallon (2014a) interviewed Mr. Steve Myers, owner representative with CC Myers, on April 3, 2014. Mr. Myers confirmed that the Site use has not changed since the previous Phase I ESA performed in 2008 (URS 2008). Mr. Myers stated that he has not been made aware of any pending, threatened, or past:

- Litigation relevant to hazardous substances or petroleum products in, on, or from the Site;
- Administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the Site; or
- Notices from a governmental entity regarding violations of environmental laws or liability relating to hazardous substances or petroleum products.

6.1.2 Interview with Operations Manager

The Site currently is not occupied by permanent structures, with the exception of a small masonry block structure within a sewage lift station area that is owned and maintained by the City of Colton. There is no Site Operations Manager.

6.2 SITE FEATURES

Farallon conducted a site reconnaissance on April 3, 2014 to observe the Site for physical evidence of recognized environmental conditions. The methodology used for the site reconnaissance and the observations made during the reconnaissance are discussed below. A description of the Site is provided in Section 2.2, Site Improvements. Photographs taken during the site reconnaissance are presented in Appendix B.

6.3 SITE INSPECTION METHODOLOGY

Farallon completed a walk around the perimeter and throughout common areas of the Site and inspected accessible areas. Farallon did not inspect the interior of the small masonry block building on the southwestern portion of Parcel 2 within the City of Colton sewage lift station area. No limitations were encountered during the inspection, with the exception of areas covered by vehicles or storage containers.

6.4 SITE INSPECTION OBSERVATIONS

Weather conditions at the time of the reconnaissance were overcast, with a temperature of approximately 65 degrees Fahrenheit. There were no weather-related access restrictions encountered during the site reconnaissance.

6.4.1 Interior Observations

Because the Site is undeveloped, with the exception of a small masonry block building owned by the City of Colton that was not accessible, Farallon's site reconnaissance did not include interior observations. Much of the surface of the Site occupied by CC Myers was inaccessible for observation due to the presence of construction materials. Several locked metal storage containers on the Site also were inaccessible. No evidence of environmental concern was identified for the containers.

6.4.2 Exterior Observations

Farallon's observations of the exterior of the Site during the site reconnaissance are documented in the table below. Comments pertaining to notable exterior observations follow.

EXTERIOR OBSERVATIONS	YES	NO
Odor		X
Staining and/or Corrosion	X	
Storage Tank(s), Vent Pipe(s), and/or Fuel Port(s)	X	
Drum(s) and/or Other Container(s)		X
Pool(s) of Liquid		X
Hazardous Material(s) and/or Petroleum Product(s)	X	
Hazardous Waste	X	
Pit(s), Pond(s), and/or Lagoon(s)		X
Stressed Vegetation		X
Solid (Non-Hazardous) Waste—Evidence of Dumping		X
Wastewater		X
Domestic Water		X
Water Well(s)		X
Septic/Sewer System		X

EXTERIOR OBSERVATIONS	YES	NO
Stormwater	X	
Air Emissions		X
Potential Polychlorinated Biphenyl (PCB)-Containing Equipment	X	
Significant Amount of Fill Material		X

6.4.3 Exterior Observation Comments

Staining and/or Corrosion

Superficial surface staining was observed throughout the CC Myers area and on the parking lot occupied by US Xpress. The staining was commensurate with current Site use, and therefore not believed to be a significant environmental concern (*de minimis* condition).

Storage Tank(s), Vent Pipe(s), and/or Fuel Port(s)

Farallon observed one double-walled concrete 1,000-gallon waste oil AST in the central portion of the storage lot occupied by CC Myers. According to the interviewed tenant representative (Farallon 2014a), this waste oil AST is used during truck maintenance performed on the Site. Farallon observed the AST to be in good condition, with no signs of leaks or spills.

Hazardous Material(s) and/or Petroleum Product(s)

Farallon observed one metal shipping container in the central portion of the storage lot occupied by CC Myers with small quantities (5 gallons or less) of vehicle maintenance chemicals and petroleum products. According to the interviewed tenant representative (Farallon 2014a), these materials are used during truck maintenance performed on the Site. Farallon observed the storage area to be in good condition, with no signs of leaks or spills.

Hazardous Waste

See Storage Tank(s), Vent Pipe(s), and/or Fuel Port(s).

Stormwater

Stormwater is either absorbed into unpaved ground or dispersed by sheet flow across the Site into adjacent streets. A concrete drainage swale that collects rainwater and directs it to the west into South Riverside Avenue was observed along the center of the parking area in the northern portion of the Site occupied by US Xpress. Stormwater appeared to be plumbed to the City storm sewer system beneath surrounding roadways. No evidence of environmental concern for stormwater was identified during the site reconnaissance.

Potential PCB-Containing Equipment

One pad-mounted transformer was observed on the Site in the fenced-in City of Colton sewage lift station area along South Riverside Avenue, in the southwestern corner of Parcel 2 occupied by CC Myers. The transformer is owned by SCE, and no staining was observed on the concrete pad or surrounding area. Any release of the transformer's contents likely would be the liability of the transformer's owner, SCE.

7.0 ENVIRONMENTAL RECORD REVIEW

EDR (2014) performed a review of environmental regulatory agency database listings to identify reported environmental issues related to the Site and other facilities in the Site vicinity. Farallon used the greater of each approximate minimum search distance from the Site for each of the referenced federal and state environmental databases, as specified in ASTM E1527-13. The descriptions of the databases searched and the associated search distances from the Site are presented in The EDR (2014) Radius Map Report prepared for the Site dated April 2, 2014 (EDR report), provided in Appendix E.

Farallon reviewed the results of the EDR report to note reported facilities in the vicinity of the Site that were considered to have a potential to adversely impact the Site (i.e., are known to have resulted in or are expected to result in a recognized environmental condition). Reported facilities identified in the EDR report were evaluated with respect to the nature and extent of a given release, the distance of the reported facility from the Site, the stratigraphy of soils, the expected soil permeability, and the topographic position of a reported facility with respect to known or expected local and/or regional groundwater flow direction. Shallow groundwater flow in the region has been documented to the west-southwest.

7.1 FEDERAL AND STATE DATABASE REVIEW

A summary of the databases identified in the EDR report is presented in the following table. A discussion of the facilities follows.

Type of Database[1]	Number of Listings in Specified Search Radius			
	Site and Adjacent	0.125 to 0.25 mile from Site	0.25 to 0.5 mile from Site	0.5 to 1 mile from Site
National Priority List (NPL)	0	0	0	0
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)/Federal Facility	0	0	0	0
National CERCLIS/No Further Remedial Action Planned (NFRAP)	0	0	0	0
CORRACTS	0	0	0	0
Resource Conservation and Recovery Act (RCRA) Corrective Action Treatment, Storage, and Disposal Facility (TSDF)	0	0	0	0
RCRA Generators: Small Quantity Generator (SQG); Large Quantity Generator (LQG); Conditionally Exempt Small Quantity Generator (CESQG); Non-Generator / No Longer Reportable (NonGen / NLR)	1 SQG	1 SQG	0	
US Engineering Controls /Institutional Controls	0	0	0	0
Emergency Response Notification System (ERNS)	0			
CA Response	0	0	0	0
CA EnviroStor	0	0	0	0

Type of Database[1]	Number of Listings in Specified Search Radius			
	Site and Adjacent	0.125 to 0.25 mile from Site	0.25 to 0.5 mile from Site	0.5 to 1 mile from Site
Local Solid Waste, Landfills, and Recycling facility databases (SWF/LF, WMUDS/SWAT, SWRCY)	0	0	1	
CA Leaking Underground Storage Tanks (LUSTs)	0	0	0	0
Statewide Spills, Leaks, Investigations and Cleanup (SLIC)	0	0	0	
San Bernardino County Contaminated Site	0	0	0	
San Bernardino County Permit	0	3	0	
CA Underground Storage Tank (UST)	0	0	0	
CA Aboveground Storage Tank (AST)	0	0	0	
Voluntary Cleanup Program (VCP)	0	0	0	0
US Brownfields	0	0	0	0
California Facility Inventory Database (FID) UST	0	0	0	
Historical UST (HIST UST)	0	0	0	
Statewide Environmental Evaluation and Planning System (SWEEPS) UST	0	0	0	
CA Hazardous Material Incident Report System (CHMRIS)	0			
CA Land Disposal Site (LDS)	0			
CA Military Cleanup Site (MCS)	0			
Toxic Chemical Release Inventory System (TRIS)	0			
Material Licensing Tracking System (MLTS)	0			
Facility Index System/Facility Registry System (FINDS)	1			
CA National Pollution Discharge Elimination System (NPDES)	0			
CA Hazardous Waste & Substance List (Cortese)	0	0	0	0
CA Historic Cortese	0	0	0	
CA Enforcement Action List (ENF)	0			
CA Facility and Manifest Data (HAZNET)	0			
CA Emissions Inventory Data (EMI)	0			
CA EnviroStor Permitted (HWP)	0	0	0	0
Recovered Government Archive LUST	0	0	0	0
Waste Discharge Systems (WDS)	0			

NOTES:
[1]See Appendix E for the complete EDR report and maps identifying the facilities summarized above, including a description of each database reviewed.
Shaded areas not searched.

7.1.1 Site Listings

The Site was not identified on any of the reviewed databases.

7.1.2 Surrounding Property Listings

Reported facilities within 0.25 mile up-gradient of the Site, or 0.125 mile cross-gradient or adjacent down-gradient of the Site are considered to have a potential to have impacted the Site. Facilities that were listed in the database search report but not identified as a reported release facility (e.g., a facility listed as a hazardous waste generator but not as having had a release) and facilities that were listed as "closed" were not considered to have a potential to have impacted the Site, unless existing on the adjacent property.

The following facilities proximate to the Site were identified in the EDR report:

PROPERTY NAME/ ADDRESS	DATABASE(S)	DISTANCE/ GROUNDWATER GRADIENT DIRECTION	COMMENTS
US Xpress 2200 & 2250 Riverside Avenue	San Bernardino Co. Permit, RCRA-SQG, FINDS	Adjacent/ North/Northeast (up-gradient)	The US Xpress property was listed as a permitted hazardous material user and waste generator. No violations were indicated for the hazardous material use or waste generation. Farallon noted that the volatile organic compound tetrachloroethylene was identified as the hazardous waste generated at the US Xpress property. Based on the depth to groundwater of approximately 100 feet below ground surface and the absence of violations, the use of this chemical on the adjacent property is unlikely to affect the Site.
Kretzschmar Steel 3750 Riverside Avenue	San Bernardino Co Permit	Adjacent/West (cross-gradient)	Located across South Riverside Avenue to the west. Listed as an active exempt small quantity hazardous waste generator and handler of hazardous materials. No violations were reported. Based on the lack of a reported release, this property is unlikely to affect the Site.

Based on Farallon's review of the databases and application of the evaluation criteria described previously, release facilities with significant potential to have impacted the Site were not identified in the EDR report.

7.1.3 Orphan Facilities

EDR identified 20 facilities as "orphan sites" (of which only 8 were located within the City of Colton), which EDR was unable to map due to inaccurate or inadequate address information. Farallon located these orphan sites as practical from the information provided and, according to the addresses provided by EDR, the facilities are not proximate to the Site. Therefore, these orphan sites do not represent a recognized environmental condition for the Site.

7.2 LOCAL AGENCY REVIEW

Local agency file reviews are performed by Site addresses. Based on the absence of addresses for the Site, as confirmed by Prologis (Farallon 2014b) and by review of the San Bernardino County Office of the Assessor (2014) website, local agency file review is not practical for the City of Colton Building and Safety Department or the San Bernardino County Fire Department. The findings from Farallon's review of online State regulator databases are provided below.

7.2.1 GeoTracker Database

On April 7, 2014, Farallon reviewed the GeoTracker online database maintained by the State of California Water Resources Control Board (2014) for releases associated with the Site and surrounding properties. A search of the GeoTracker database did not identify listings for the Site or adjacent properties. According to GeoTracker, Inland Composting at 2300 South Riverside Avenue is south-adjacent to the Site and listed as a closed LUST property. However, based on surrounding property addresses, this property is south of the Site across the Santa Ana River.

7.2.2 EnviroStor Database

Farallon reviewed the EnviroStor online database maintained by the California Department of Toxic Substance Control (2014) on April 7, 2014 for releases associated with the Site and surrounding properties. A search of the EnviroStor database did not identify listings for the Site or adjacent properties.

8.0 SUPPLEMENTAL CONSIDERATIONS

At the request of Prologis, Farallon conducted environmental services in addition to those specified in ASTM E1527-13. These services are considered non-scope items and are not required to satisfy ASTM E1527-13.

8.1 WETLANDS

Wetlands are jointly defined by EPA and the U.S. Army Corps of Engineers as "those areas that are inundated or saturated by surface or groundwater for a duration and frequency sufficient to support and under normal circumstances do support a prevalence of vegetation adapted for life in saturated soil conditions." Farallon did not observe suspect wetlands vegetation on the Site. According to EDR (2014), there are no designated national wetlands areas within 1 mile of the Site.

8.2 ASBESTOS

In June 1978, EPA initiated a ban on the use of asbestos-containing material in spray application products such as structural fireproofing and acoustic ceilings, pipe lagging, joint compounds, and spackles. The Site consists of undeveloped land, with the exception of a small cinder block structure owned by the City of Colton. Based on the building materials used in the on-Site structure and the lack of any other structures on the Site, asbestos-containing materials are unlikely to exist on the Site.

8.3 LEAD-BASED PAINT

In 1978, EPA initiated a ban on the manufacture and use of lead-based paints. During Farallon's site reconnaissance, no painted surfaces were observed. Based on the lack of any painted permanent structures on the Site, lead-based paints do not exist on the Site.

8.4 LEAD IN DRINKING WATER

Water is not plumbed to the Site.

8.5 RADON

Radon is a colorless, tasteless, radioactive gas with an EPA-specified action level of 4.0 picocuries per liter (pCi/L) of air. Radon gas has a short half-life of 3.8 days. The health risk potential of radon is associated with its rate of accumulation within confined areas, particularly those near or in the ground such as basements, where vapors can readily transfer from the ground to indoor air through foundation cracks or other pathways.

According to EPA, the Site is located in Radon Zone 2, with predicted average indoor screening levels below 2.0 and 4.0 pCi/L. The EPA zone designation reflects the average short-term radon measurement that can be expected to be measured in a building without implementation of

radon-control methods. Based on the EPA designation and the absence of basement structures on the Site, radon is not expected to pose an environmental concern to Site occupants.

8.6 WATER INTRUSION

No structures were located on the Site, with the exception of a small masonry block building associated with the City of Colton, to which Farallon was not provided access. Therefore, no areas of mold or potential mold were observed by Farallon.

9.0 FINDINGS AND OPINIONS

There were no significant deviations from ASTM E1527-13 during completion of this Phase I ESA and no significant limiting conditions were encountered.

Farallon did not encounter significant data gaps during the completion of this Phase I ESA.

According to prior assessment documents reviewed during this ESA (URS 2005, 2008), the Site has never been developed, with the exception of the currently existing small structure along South Riverside Avenue that is part of the City of Colton sewage lift station area, and a possible residential structure in the currently undeveloped southern portion (Lots 1, 2, and 3) seen in a 1953 aerial photograph and depicted in a 1954 topographic map. Reviewed historical aerial photographs and topographic maps showed that by 1966 to at least 1995, the majority of the Site (with the exception of undeveloped Lots 1, 2, and 3) was part of a larger property that extended to the north and northeast. According to the 2005 Phase I ESA document, undeveloped Lots 1, 2, and 3 were historically part of the Beckett Ranch property, and this portion of the Site was owned by Agua Mansa Farms in 1996 (URS 2005).

Parcel 2 has been leased to CC Myers as a construction storage yard since early 2007. Stacks of various construction supplies and equipment (e.g., K-rails, steel beams, wood) are stored throughout the parcel, and a perimeter chain-link fence surrounds the tenant's space. According to the interviewed tenant representative, minimal truck maintenance activities are performed on the parcel, which includes the use of a 1,000-gallon waste oil AST (Farallon 2014a). Located in the southwestern corner of the CC Myers leased space is a fenced-in area occupied by a City of Colton sewage lift station, which includes a small masonry block structure, an electrical transformer, pumps, and aboveground piping. At the time of the site reconnaissance, the northern portion of the Site was occupied by US Xpress and was being used as a parking lot for cars and trucks. The southern portion of the Site (Lots 1, 2, and 3) consisted of unoccupied graded land covered with weeds at the time of the site reconnaissance.

At the time of the reconnaissance, Farallon did not observe storage or handling of hazardous substances, with the exception of minor amounts of vehicle maintenance-related materials on the CC Myers property. The materials were properly labeled and stored, with no evidence of spills or releases noted. No evidence of stained soil, stressed vegetation, fill material, aboveground or underground storage tanks, or significant chemical release was observed on the Site at the time of the site reconnaissance.

The EDR report prepared for the Site and vicinity did not identify the Site on any of the regulatory databases reviewed. Facilities in the vicinity of the Site were listed on various regulatory databases reviewed. Regulatory files for facilities in the vicinity of the Site were not reviewed due to the time constraints of this Phase I ESA; additional information may be available at local and state agencies. According to information obtained from EDR and based on their current regulatory status, topographic location, and or/relative distance to the Site, these facilities do not represent a recognized environmental condition for the Site.

10.0 CONCLUSIONS

Farallon performed a Phase I ESA for the Agua Mansa Commerce Center property on South Riverside Avenue north of Miguel Bustamante Parkway in Colton, California in general conformance with the scope and limitations of ASTM E1527-13. This assessment did not reveal recognized environmental conditions in connection with the Site.

11.0 REFERENCES

California Department of Toxic Substances Control. EnviroStor Database. 2014. <http://www.envirostor.dtsc.ca.gov/public/>. (April 7, 2014.)

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San Bernardino County Office of the Assessor. 2014. Current Property Information for South Riverside Drive Area, Colton, California. <http://cms.sbcounty.gov/assessor/Index.aspx>. (April 4, 2014.)

State of California Water Resources Control Board. GeoTracker Database. 2014. <http://geotracker.waterboards.ca.gov>. (April 7, 2014.)

URS Corporation (URS). 2005. *Phase I Environmental Site Assessment, Aqua Mansa Property, 2300 S. Riverside Avenue, Colton, California*. Prepared for AMB Property Corporation. December 16.

———. 2008. *Phase I Environmental Site Assessment, AMB Colton Land, South Riverside Avenue, Colton, California*. Prepared for AMB Property Corporation. January 24.

12.0 STATEMENT OF LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations:

- **Accuracy of Information**. Certain information used by Farallon in this report/assessment has been obtained, reviewed, and evaluated from various sources believed to be reliable, including the previously discussed interviews and local fire and health departments. Although Farallon's conclusions, opinions, and recommendations are based in part on such information, Farallon's services did not include verification of its accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

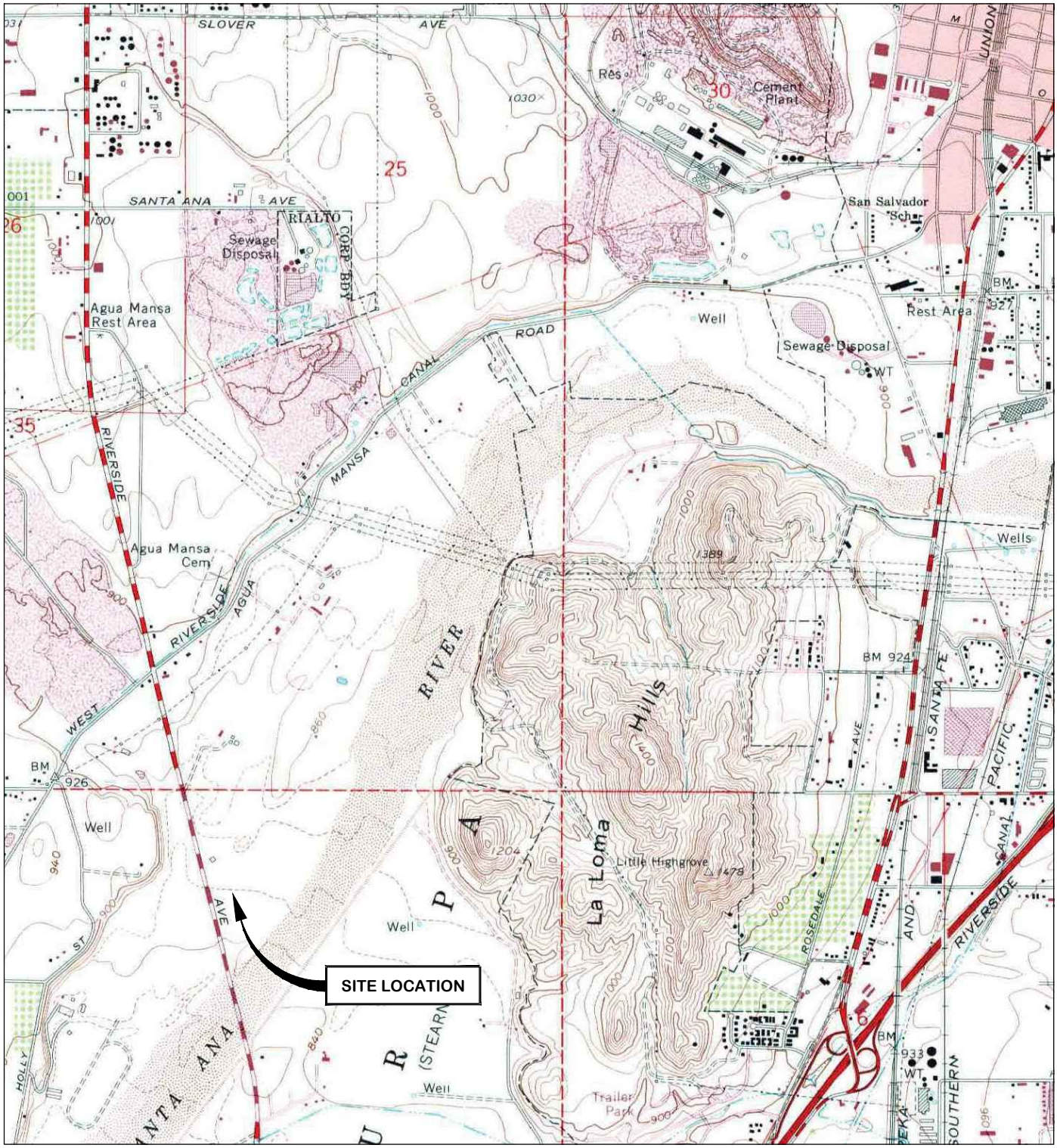
- **Reconnaissance**. Farallon performed a reconnaissance of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions, while other areas received limited attention, or were inaccessible at the time of the reconnaissance.

- **Limitations**. Because Farallon's report is based on information, the accuracy of which has not been determined, and because Farallon's observations made during site reconnaissance are limited, Farallon cannot and does not guarantee that the Site is free of hazardous or potentially hazardous materials or conditions, or that latent or undiscovered conditions will not become evident in the future. Since Site activities beyond Farallon's control could change at any time after the completion of this report/assessment, Farallon's observations, findings, and opinions can be considered valid only as of the date of the report hereof. This report/assessment has been prepared in accordance with the client contract and currently accepted industry standards, and no other warranties, representations, or certifications are made. Unless stated otherwise herein, this report is intended for and restricted to the sole use of Prologis, Inc. Any use, interpretation, or reliance upon this report/assessment by anyone other than Prologis, Inc. is at the sole risk of that party, and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

FIGURES

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)



REFERENCE: 7.5 MINUTE USGS QUADRANGLE SAN BERNARDINO SOUTH, WASHINGTON. DATED 1980 AND PHOTOREVISED 1967

N

FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 1

SITE VICINITY MAP
AGUA MANSA COMMERCE CENTER
COLTON, CALIFORNIA

FARALLON PN: 1071003

Drawn By: DEW	Checked By: SA	Date: 4/7/14	Disk Reference: 1071003010

LEGEND

SITE BOUNDARY

0 250

Scale in feet

FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 2

SITE PLAN
AGUA MANSA COMMERCE CENTER
COLTON, CALIFORNIA

FARALLON PN:1071-007

Drawn By: DEW	Checked By: SA	Date:4/18/13	Disk Reference: 107100310

APPENDIX A
PROFESSIONAL QUALIFICATIONS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)

SCOTT ALLIN BS Physical Science (Hydrology)
Principal Environmental Scientist 25 years experience

Mr. Allin has over 25 years of project and program management experience in the evaluation and reporting of the environmental liability associated with the sale or Brownfields redevelopment of impaired properties. He has supported the needs of developers and others in the acquisition of Cost Cap and Finite Risk environmental insurance to manage long-term environmental risks. He has provided clients with value-added due diligence services, both nationally and internationally, for single properties or large multi-million-dollar mixed-use portfolios. He has provided guidance for evaluating environmental risks during complex mergers and acquisitions. In addition, Mr. Allin has provided management services for implementation of remedial actions, asbestos abatement, environmental audit programs, and environmentally sensitive property improvements.

TINA M. HUFF BA Environmental Studies
Senior Regulatory Specialist 12 years experience

Ms. Huff has a broad range of experience with environmental due diligence and regulatory requirements. She manages and conducts environmental due diligence for property transactions, including Phase I ESAs, risk assessment audits, environmental compliance audits, and Phase II Site Investigations throughout the western United States. She is Asbestos Hazard Emergency Response Act-certified for asbestos, and has completed training for ASTM E1527-05 Phase I ESA protocol and for mold in construction. Ms. Huff has certificates in Dangerous Waste Management and Occupational Safety and Health Administration Compliance.

APPENDIX B
SITE PHOTOGRAPHS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)

SITE PHOTOGRAPHS

Phase I Environmental Site Assessment
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California
Farallon PN: 1071-007 (Task 1)

Photograph 1: Riverside Avenue, looking south.

Photograph 2: Southern property line along Miguel Bustamante Parkway, looking east.

Photograph 3: Southern property line along Miguel Bustamante Parkway, looking west.

Photograph 4: Lot 1, looking north from Miguel Bustamante Parkway.

Photograph 5: Lot 2, looking north from Miguel Bustamante Parkway.

Photograph 6: Lot 3, looking north from Miguel Bustamante Parkway.

Photograph 7: Riverside Avenue (western property line).

Photograph 8: Entrance to CC Myers space along Riverside Avenue.

Photograph 9: Waste oil aboveground storage tank in CC Myers space.

Photograph 10: Hazardous materials storage area at CC Myers space.

Photograph 11: Building material storage at the CC Myers space.

Photograph 12: Building material storage at the CC Myers space.

Photograph 13: Building material storage at the CC Myers space.

Photograph 14: City of Colton sewage lift station on the Site.

Photograph 15: On site City of Colton sewage lift station.

Photograph 16: Transformer near City of Colton sewage lift station.

Photograph 17: Northernmost portion of Site used by US Xpress as parking lot.

Photograph 18: Corner of Miguel Bustamante Parkway and Riverside Avenue street view, looking east.

Photograph 1: Riverside Avenue, looking south.

Photograph 2: Southern property line along Miguel Bustamante Parkway, looking east.

Photograph 3: Southern property line along Miguel Bustamante Parkway, looking west.

Photograph 4: Lot 1, looking north from Miguel Bustamante Parkway.

Photograph 5: Lot 2, looking north from Miguel Bustamante Parkway.

Photograph 6: Lot 3, looking north from Miguel Bustamante Parkway.

Photograph 7: Riverside Avenue (western property line).

Photograph 8: Entrance to CC Myers space along Riverside Avenue.

Photograph 9: Waste oil aboveground storage tank in CC Myers space.

Photograph 10: Hazardous materials storage area at CC Myers space.

Photograph 11: Building material storage at the CC Myers space.

Photograph 12: Building material storage at the CC Myers space.

Photograph 13: Building material storage at the CC Myers space.

Photograph 14: City of Colton sewage lift station on the Site.

Photograph 15: On site City of Colton sewage lift station.

Photograph 16: Transformer near City of Colton sewage lift station.

Photograph 17: Northernmost portion of Site used by US Xpress as parking lot.

Photograph 18: Corner of Miguel Bustamante Parkway and Riverside Avenue street view, looking east.

APPENDIX C
USER QUESTIONNAIRE

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)

PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the Phase I Environmental Site Assessment (Phase I ESA) Report user must provide the following information (if available) to the environmental professional (Farallon Consulting, L.L.C.). Failure to provide this information could result in the determination that "all appropriate inquiry" has not been completed.

Date: April 1, 2014

■ PROJECT/SITE INFORMATION

Client Name: Prologis			Client Telephone: 415-394-9000
Client Address: Pier 1, Bay 1, San Francisco, CA 94111			
Asset #:	Project/Site Name: Agua Mansa Commerce Center		
Project Street Address: S Riverside Drive and Miguel Bustemante Parkway			
City: Colton	County: San Bernardino	State: CA	Zip:

Why is this Phase I ESA required?

Property Transaction:

☐ Sale	☐ Purchase	☐ Exchange	☒ Other

Comments:

■ PROPERTY USE & SPECIFICATIONS

☐ Single-Family Residential	☒ Vacant or Undeveloped Land
☐ Multi-Family Residential #Units:	☐ Agricultural (*Specify type)*:
☐ Commercial Office	☒ Industrial (*Specify type)*: Warehouse
☐ Commercial Retail	☐ Other (*Specify type)*:

Provide a general Site description:52,980 square foot warehouse building

Legal description/plat plan/boundary survey available? ☐ Yes ☒ No ☐ Already provided

Current Property Status: ☒ Vacant ☒ Occupied ☐ Improved ☐ Unimproved

Total Property Size: 21 acres Original Construction Date: NA

Total # of Buildings: 0 Was Construction Phased? ☐ Yes ☒ No ☐ Unknown

Total Sq. Ft. of Buildings: 0 Date(s) of Renovation(s)/Phases:

Does Site have an undeveloped area equal to 1 acre or more? ☒ Yes ☐ No

Are any bodies of water on or immediately adjacent to the Site? ☒ Yes ☐ No If Yes, describe:
Comments:
Santa Ana River

Potable water source at Site? ☐ On-Site well ☐ Utility (*Specify provider)* CIty

Wastewater discharge at Site? ☐ Septic Tank/Drainfield ☐ Sanitary Sewer ☐ Other (Specify): Refer to documents provided

Building plans available at the Site? ☐ Yes ☒ No ☐ Unknown ☐ Already provided

■ OWNERS

Current Owner(s): Prologis

Previous Owner(s): See documents provided

■ OCCUPANTS/TENANTS

Current Occupant(s)/Tenant(s) and operations: Vacant, CC Myers, Xpress

Previous Occupant(s)/Tenant(s) and operations: please refer to disclosed reports.

■ PREVIOUS PROPERTY USES

Describe previous use(s) of the Site: please refer to disclosed reports.

■ PREVIOUS INVESTIGATIONS

Has any previous environmental investigation been conducted at Site? ☒ Yes ☐ No ☐ Unknown

If Yes, note type and describe: ☒ Phase I ESA ☐ Asbestos ☐ Lead Paint ☐ Lead in Water

☐ Radon ☐ Wetlands ☐ Indoor Air ☐ UST/AST ☒ Other (*Specify type below)*

Comments:

I

■ ON-SITE ENVIRONMENTAL CONDITIONS

Are you aware of any of the following environmental conditions at the Site, either current or former?

Environmental Condition/Issue	Response	Comment if Yes Response
Aboveground Storage Tank	☐ Yes ☒ No	I am not aware of any ASTs other than what is disclosed in the documents provided.
Underground Storage Tank	☐ Yes ☒ No	I am not aware of any USTs other than what is disclosed in documents provided.
Hazardous/Toxic Substance	☐ Yes ☒ No	I am not aware of any Hazardous/ Toxic Substance other than what is disclosed in documents provided.
Stored Chemical	☐ Yes ☒ No	I am not aware of any Stored Chemical other than what is disclosed in the documents provided.
Chemical Spill/Release	☐ Yes ☒ No	I am not aware of any chemical spill/ release other than what is disclosed in the documents provided.

Dump Area/Landfill	☐ Yes ☒ No	I am not aware of any dump area/ landfill other than what is disclosed in the documents provided.
Waste Treatment System	☐ Yes ☒ No	I am not aware of any waste treatment system other than what is disclosed in the documents provided.
Wastewater Discharge	☐ Yes ☒ No	I am not aware of any wastewater discharge other than what is disclosed in the documents provided.
Air Stack/Vent/Odor	☐ Yes ☒ No	I am not aware of Air Stack/Vent/Odor other than what is disclosed in the documents provided.
Indoor Air Quality Complaint	☐ Yes ☒ No	I am not aware of Indoor Air Quality complaint other than what is disclosed in the documents provided.
Floor Drain/Sump	☐ Yes ☒ No	I am not aware of floor drain/sump other than what is disclosed in the documents provided.
Pit, Pond, Lagoon	☐ Yes ☒ No	I am not aware of pit, pond, lagoon other than what is disclosed in the documents provided.
Stained Soil/Vegetation Impact	☐ Yes ☒ No	I am not aware of stained soil/ vegetation impact other what is disclosed in the documents provided.

Other specialized knowledge of an environmental condition or issue at the Site?
None other than disclosed in prior reports.

■ ADDITIONAL ON-SITE ENVIRONMENTAL CONDITIONS

Are you aware of any of the following environmental conditions on the Site, either current or former?

Environmental Condition/Issue	Response	Comment if Yes Response
Pesticide/Herbicide Use	☐ Yes ☒ No	I am not aware of any Pesticide/Herbicide use other than what is disclosed in the documents provided.
Polychlorinated Biphenyls	☐ Yes ☒ No	I am not aware of any Polychlorinated Biphenyls other than what is disclosed in the documents provided.
Electrical Transformer	☐ Yes ☒ No	I am not aware of any Electrical Transformer other than what is disclosed in the documents provided.
Hydraulic Lift	☐ Yes ☒ No	I am not aware of any Hydraulic Lift other than what is disclosed in the documents provided.
Elevator	☐ Yes ☒ No	I am not aware of any elevator other than what is disclosed in the documents provided.
Drycleaner Business	☐ Yes ☒ No	I am not aware of any drycleaner business other than what is disclosed in the documents provided.
Asbestos	☐ Yes ☒ No	I am not aware of any asbestos other than what is disclosed in the documents provided.
Lead Paint	☐ Yes ☒ No	I am not aware of any lead paint other than what is disclosed in the documents provided.
Lead Piping/Lead in Water	☐ Yes ☒ No	I am not aware of any lead piping/lead in water other than what is disclosed in the documents provided.
Elevated Radon Level	☐ Yes ☒ No	I am not aware of elevated radon levels other than what is disclosed in the documents provided.
Fluorescent Light Fixture	☐ Yes ☐ No	I am not aware of any Flourescent Light Fixture other

		than what is disclosed in the documents provided.
Wetland, Flooding	☐ Yes ☒ No	I am not aware of any wetland, flooding other than what is disclosed in the documents provided.
Unique Wildlife Species	☐ Yes ☒ No	I am not aware of any unique wildlife species other what is disclosed in the documents provided.
Archeological Resource	☐ Yes ☒ No	I am not aware of any archeological resource other than what is disclosed in the documents provided.
Historic/National Landmark	☐ Yes ☐ No	I am not aware of any historic/national landmark other than what is disclosed in the documents provided.
Oil/Gas Well	☐ Yes ☒ No	I am not aware of any oil/gas well other than what is disclosed in the documents provided.
Water Well	☐ Yes ☒ No	I am not aware of any water well other than what is disclosed in the documents provided.
Environmental Cleanup	☐ Yes ☒ No	I am not aware of any environmental cleanup other then what is disclosed in the documents provided.
Environmental Permit	☐ Yes ☒ No	I am not aware of any environmental permit other then what is disclosed in the documents provided.

■ OFF-SITE ENVIRONMENTAL CONDITIONS

On adjoining property, are there any: Gasoline Stations? ☐ Yes ☒ No Drycleaners? ☐ Yes ☒ No

Are you aware of any other environmental conditions or concerns on adjacent or nearby properties? ☐ Yes ☒ No

Comments
I am not aware of any other environmental conditions or concerns on adjacent or nearby properties other than what is disclosed in the documents provided.

(1) Environmental cleanup liens that have been filed or recorded against the Site (Part 312.25 of Title 40 of the Code of Federal Regulations [40 CFR 312.25])

Are you aware of any environmental cleanup liens against the Site that have been filed or recorded under federal, tribal, state, or local law?

I am not aware of any environmental cleanup liens agains the Site other than what is disclosed in the documents provided.

(2) Activity and land use limitations that are in place at the Site or that have been filed or recorded in a registry (40 CFR 312.26)

Are you aware of any activity and land use limitation (such as engineering controls, land use restrictions, or institutional controls) that are in place at the Site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

I am not aware of any activity and land use limitation other than what is disclosed in the documents provided.

(3) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

As the user of the Phase I ESA Report, do you have any specialized knowledge or experience related to the Site or nearby properties? For example, are you involved in the same line of business as the current or former occupant(s) of the Site or an adjoining property so that you would have specialized knowledge

of the chemicals and processes used by this type of business?

No, I have no specialized knowledge other than what is disclosed in the documents provided.

(4) Relationship of the purchase price to the fair market value of the Site if it were not contaminated (40 CFR 312.29)

Does the purchase price being paid for this Site reasonably reflect the fair market value of the Site? If you conclude that there is a difference between the purchase price and the fair market value, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Site?

I have no knowledge of the Site valuation being discounted for environmental conditions

(5) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the Site that would help Farallon Consulting, L.L.C. to identify conditions indicative of a chemical or other release or threatened release? For example, as user of the Phase I ESA Report:

Do you know the past use(s) of the Site? (If yes, please specify.) No, other than what is disclosed in the documents provided.

Do you know of a specific chemical(s) present at the Site, or present at one time? (If yes, please specify.) No, other than what is disclosed in the documents provided.

Do you know of a chemical and/or other spill(s) or release(s) that have taken place at the Site? (If yes, please specify.) No, other than what is disclosed in the documents provided.

Do you know of any environmental cleanup(s) that have taken place at the Site? (If yes, please specify.) No, other than what is disclosed in the documents provided.

(6) The degree of obviousness of the presence or likely presence of contamination at the Site, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)

As the user of the Phase I ESA Report, based on your knowledge and experience related to the Site, is there any obvious indicator(s) that point to the presence or likely presence of contamination at the Site? (If yes, please specify.)

No, other than what is disclosed in the documents provided.

Identify all parties who will rely on the Phase I ESA Report, including:

Name of Business: Prologis

Name of Contact: Ms. Janet Frentzel

Address: Pier 1, Bay 1, San Francisco, CA

Telephone Number: 415-394-9000

E-mail Address: jfrentzel@prologis.com

Has any party that will rely on the Phase I ESA Report required services beyond the standard ASTM E1527-05? (For example, an asbestos, lead-based paint, lead in drinking water, or wetlands investigation) (If yes, please specify.) Visual or desk top survey for asbestos, lead-based paint, lead in drinking water, wetlands, radon gas, and water intrusion

Who is the Site contact, and how can the contact be reached?

Name of Business: To be provided at a later date

Name of Contact:

Address:

Telephone Number:

E-mail Address:

Are there any special terms and conditions that must be agreed upon by Farallon Consulting, L.L.C.? (If yes, please specify.)

No

APPENDIX D
HISTORICAL RESEARCH DOCUMENTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)

The EDR Aerial Photo Decade Package

Agua Mansa
2040 Agua Mansa Road
Colton, CA 92316

Inquiry Number: 1873807.11

March 09, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Aerial Photo Decade Package

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. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography March 09, 2007

Target Property:

2040 Agua Mansa Road
Colton, CA 92316

Year	***Scale***	***Details***	***Source***
1931	Aerial Photograph. Scale: 1"=333'	Flight Year: 1931	Fairchild
1938	Aerial Photograph. Scale: 1"=555'	Flight Year: 1938	Laval
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Southwestern
1966	Aerial Photograph. Scale: 1"=666'	Flight Year: 1966	Universe
1977	Aerial Photograph. Scale: 1"=666'	Flight Year: 1977	Teledyne
1989	Aerial Photograph. Scale: 1"=666'	Flight Year: 1989	USGS
1995	Aerial Photograph. Scale: 1"=666'	Flight Year: 1995	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS

INQUIRY #: 1873807.11
YEAR: 1931
= 333'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1873807.11
YEAR: 1938
= 555'
N

INQUIRY #: 1873807.11
YEAR: 1953
= 555'
N

INQUIRY #: 1873807.11
YEAR: 1966
= 666'
N

INQUIRY #: 1873807.11
YEAR: 1977
= 666'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1873807.11
YEAR: 1989
= 666'
N

INQUIRY #: 1873807.11
YEAR: 1995
= 666'
N

INQUIRY #: 1873807.11
YEAR: 2002
= 666'
N
EDR Environmental Data Resources Inc

EDR Historical Topographic Map Report

Agua Mansa
2040 Agua Mansa Road
Colton, CA 92316

Inquiry Number: 1873807.10

March 09, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Rd
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
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with any questions or comments.

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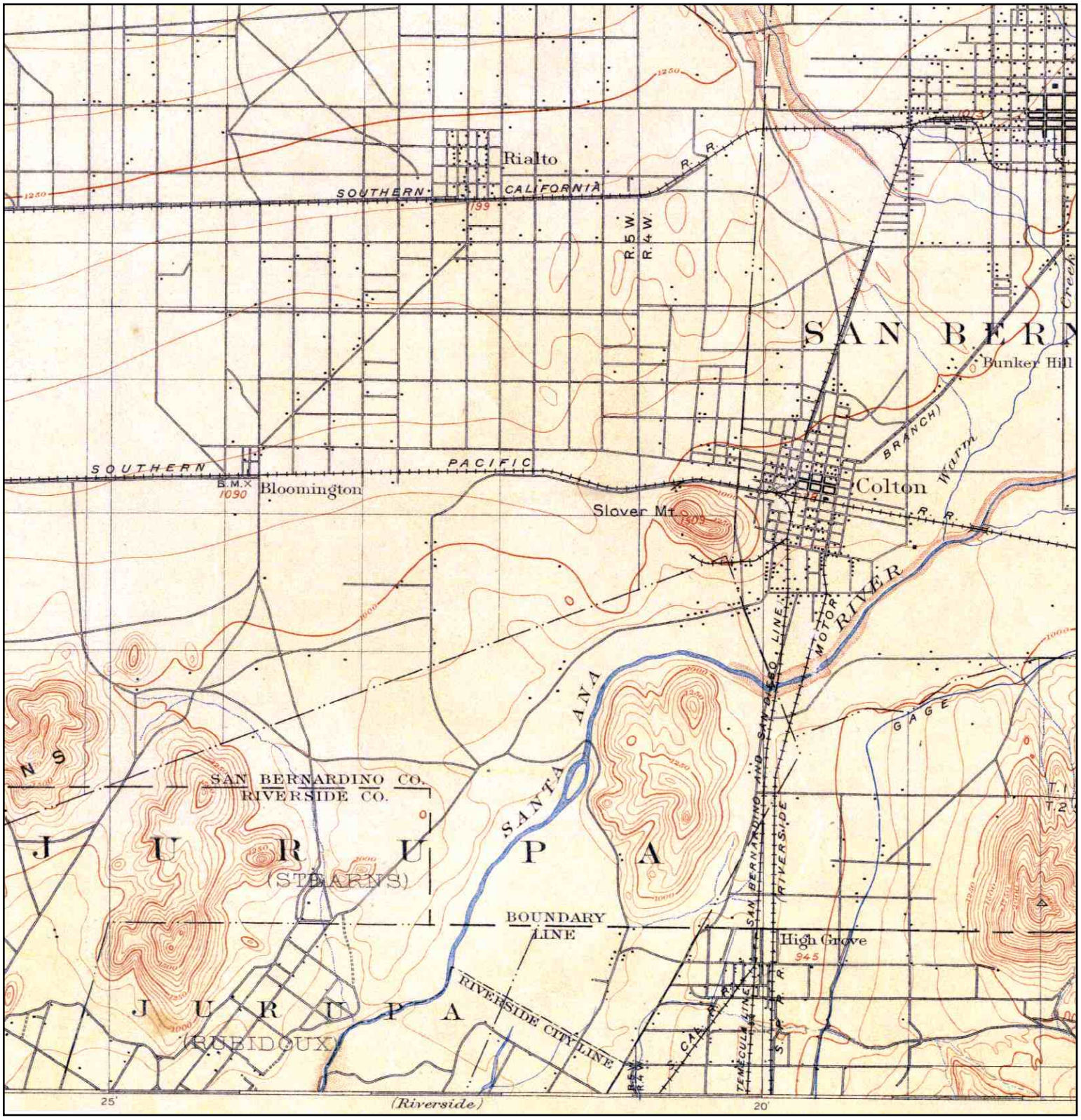
Historical Topographic Map

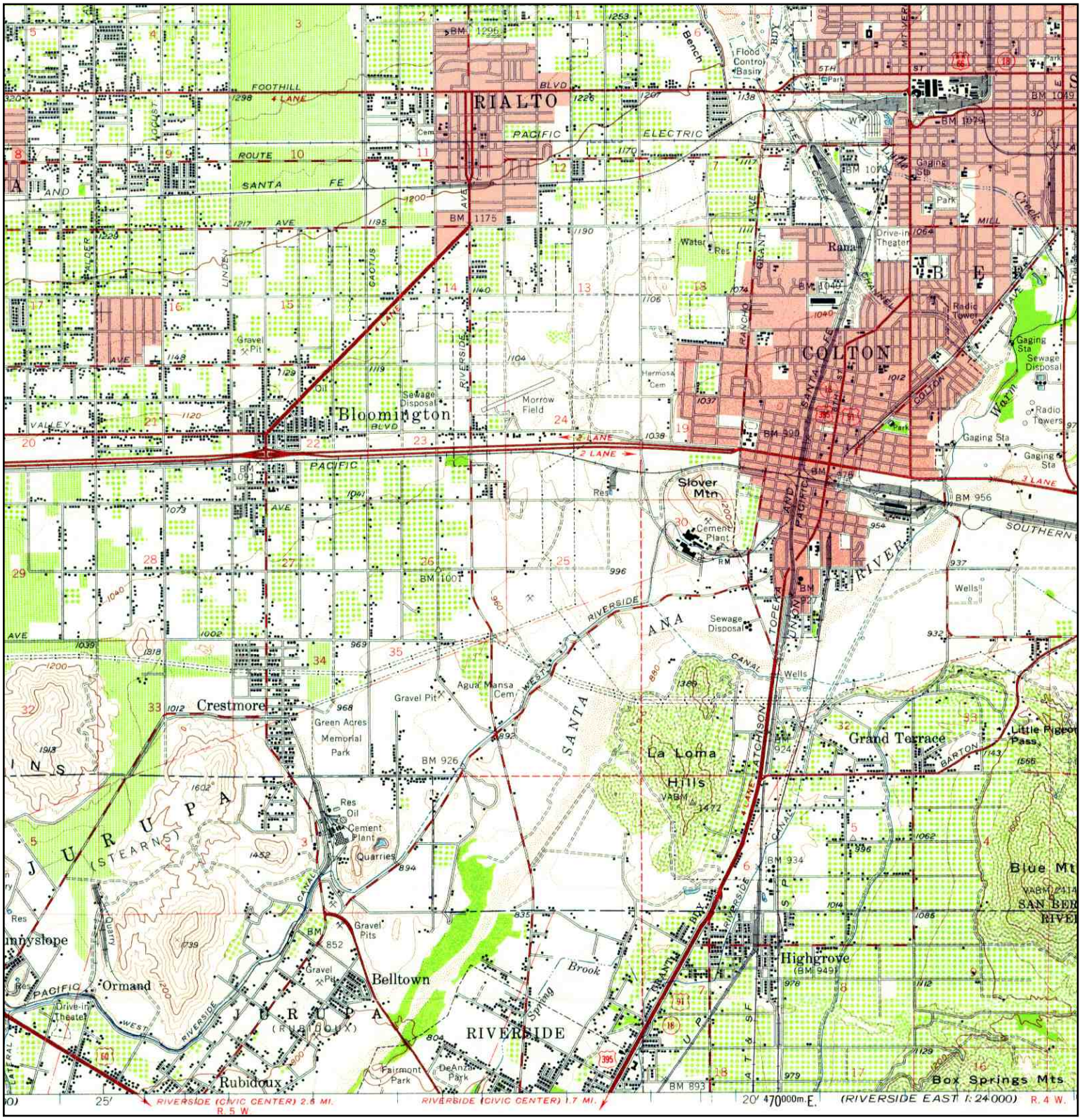


N	TARGET QUAD NAME: SAN BERNARDINO MAP YEAR: 1901 SERIES: 15 SCALE: 1:62500	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map

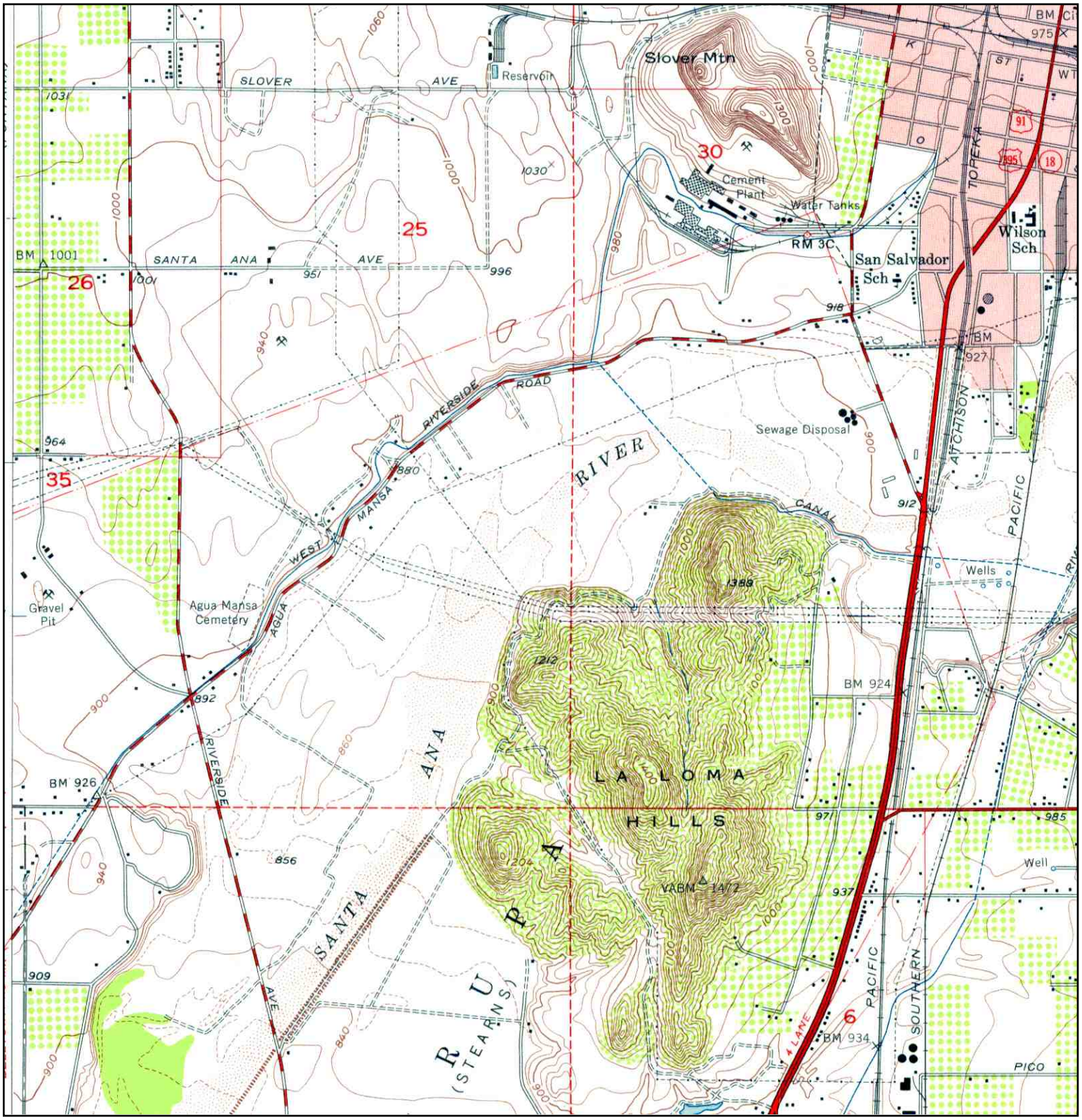
N	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map



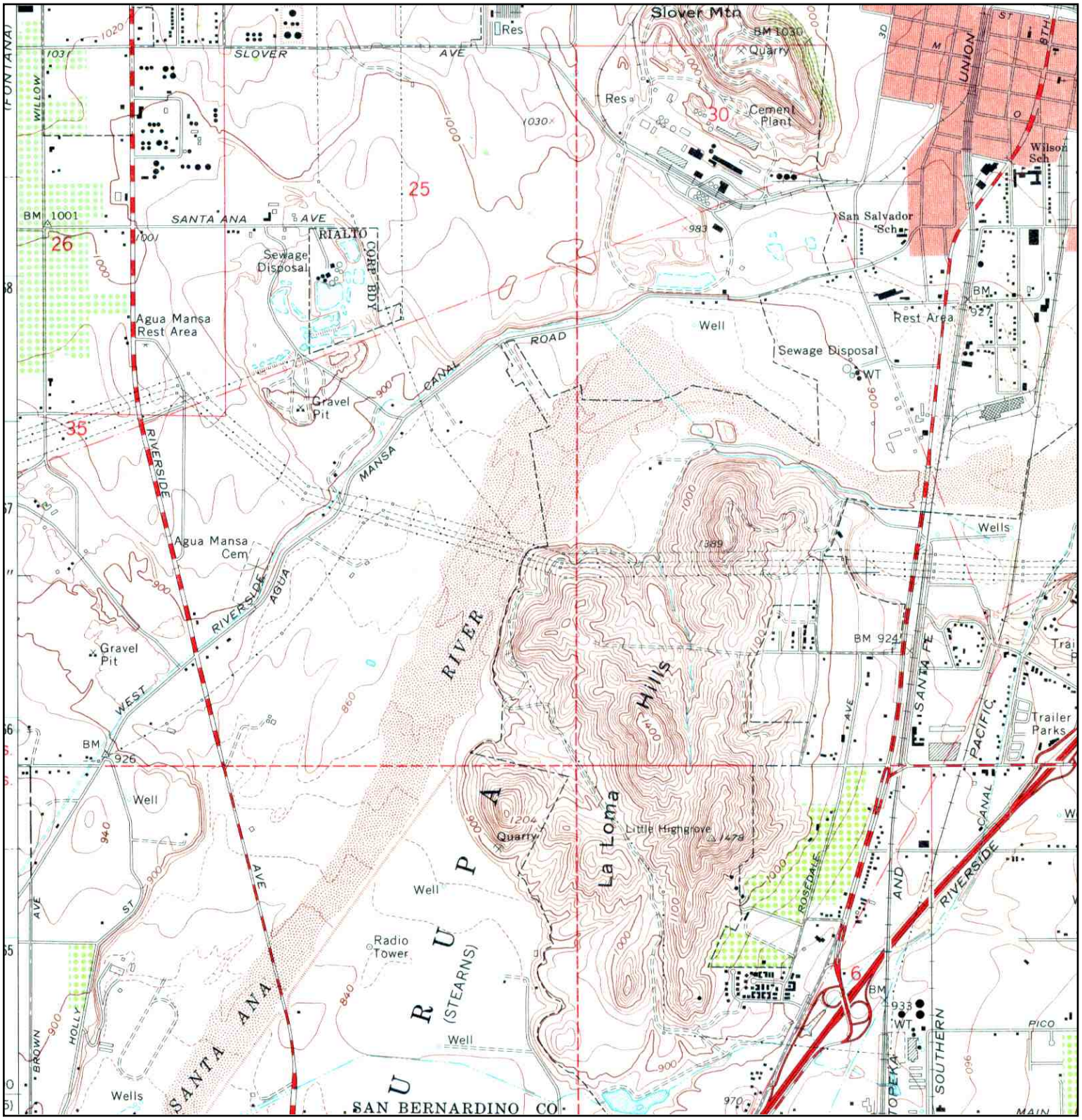
N	TARGET QUAD NAME: SAN BERNARDINO MAP YEAR: 1954 SERIES: 15 SCALE: 1:62500	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map



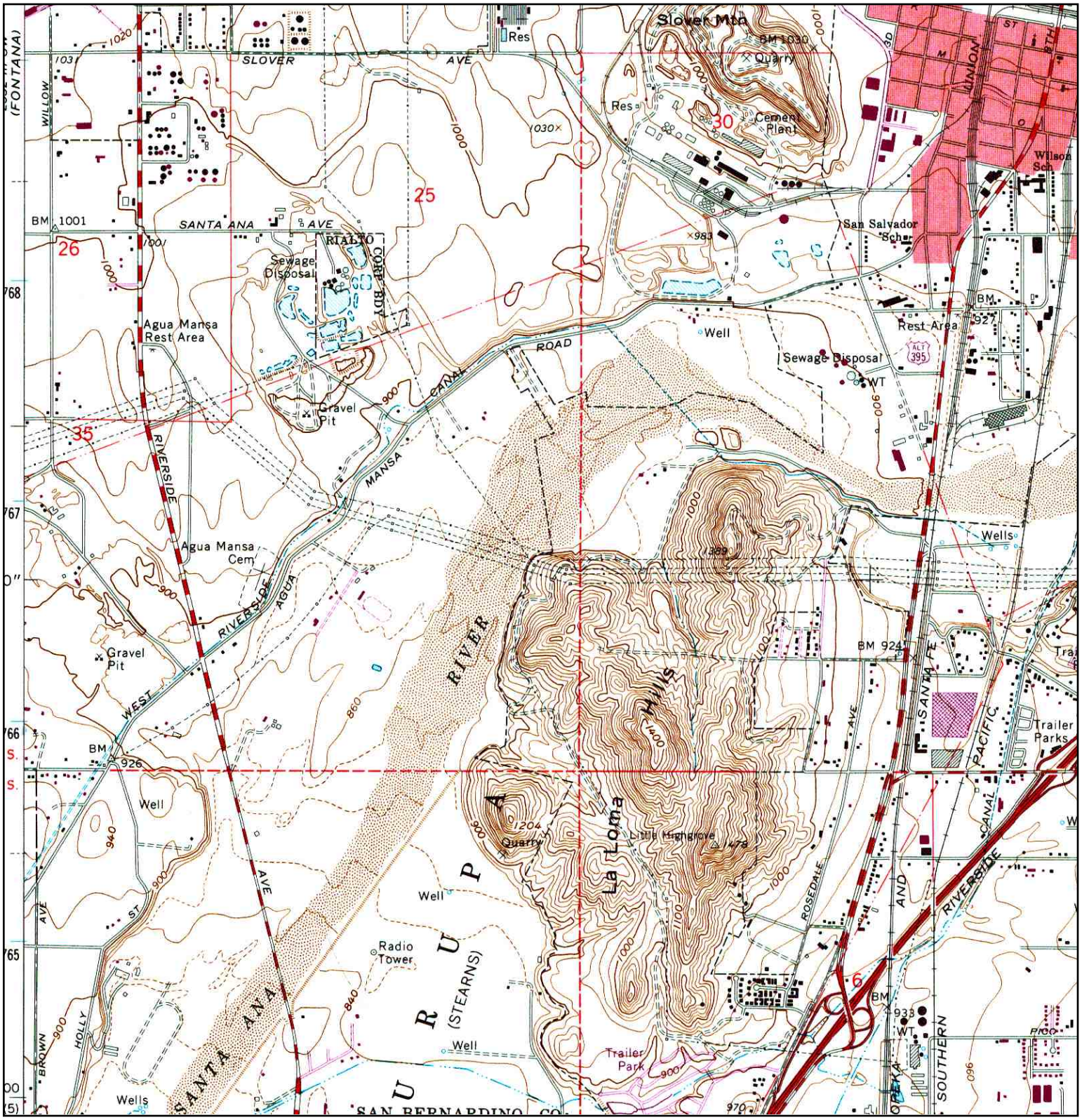
N	TARGET QUAD NAME: SAN BERNARDINO SOUTH MAP YEAR: 1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map



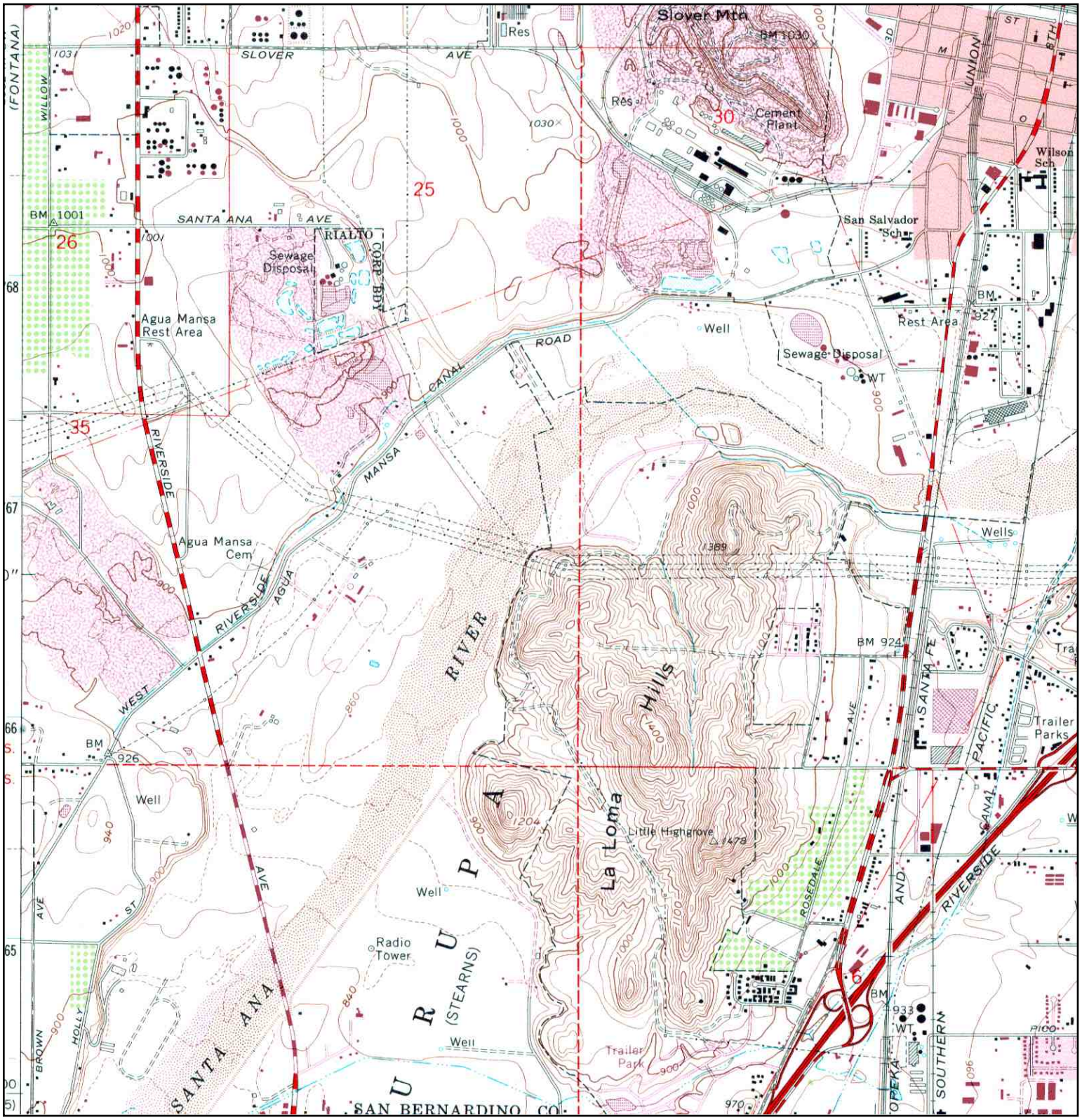
N	TARGET QUAD NAME: SAN BERNARDINO SOUTH MAP YEAR: 1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map



N	TARGET QUAD NAME: SAN BERNARDINO SOUTH MAP YEAR: 1973 PHOTOREVISED FROM:1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

Historical Topographic Map



N	TARGET QUAD NAME: SAN BERNARDINO SOUTH MAP YEAR: 1980 PHOTOREVISED FROM:1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Agua Mansa ADDRESS: 2040 Agua Mansa Road Colton, CA 92316 LAT/LONG: 34.0429 / 117.3624	CLIENT: URS Corporation CONTACT: Kevin Sheridan INQUIRY#: 1873807.10 RESEARCH DATE: 03/09/2007

APPENDIX E
ENVIRONMENTAL DATABASE REPORT

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
Agua Mansa Commerce Center
South Riverside Avenue
Colton, California

Farallon PN: 1071-007 (Task 1)

Agua Mansa Commerce Center Building 1
S RIVERSIDE AVE at Miguel Bustamante Parkway
Colton, CA 92324

Inquiry Number: 3900082.2s
April 02, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

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

FORM-LBE-KTV

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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

S RIVERSIDE AVE AT MIGUEL BUSTAMANTE PARKWAY
COLTON, CA 92324

COORDINATES

Latitude (North):	34.0320000 - 34° 1' 55.20"
Longitude (West):	117.3636000 - 117° 21' 48.96"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	466434.1
UTM Y (Meters):	3765569.2
Elevation:	853 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34117-A3 SAN BERNARDINO SOUTH, CA
Most Recent Revision:	1980
West Map:	34117-A4 FONTANA, CA
Most Recent Revision:	1980

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

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

EXECUTIVE SUMMARY

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

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

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

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

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 leaking storage tank lists

LUST ..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ..... Active UST Facilities

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

State and tribal voluntary cleanup sites

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

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
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

Local Lists of Hazardous waste / Contaminated Sites

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

Local Lists of Registered Storage Tanks

CA FID UST..... Facility Inventory Database
HIST UST..... Hazardous Substance Storage Container Database
SWEEPS UST..... SWEEPS UST Listing

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
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

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
FINDS..... Facility Index System/Facility Registry System
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
CA BOND EXP. PLAN..... Bond Expenditure Plan
UIC..... UIC Listing
NPDES..... NPDES Permits Listing
Cortese..... "Cortese" Hazardous Waste & Substances Sites List
HIST CORTESE..... Hazardous Waste & Substance Site List
CUPA Listings..... CUPA Resources List
Notify 65..... Proposition 65 Records
DRYCLEANERS..... Cleaner Facilities
WIP..... Well Investigation Program Case List
ENF..... Enforcement Action Listing
HAZNET..... Facility and Manifest Data
EMI..... Emissions Inventory Data
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
2020 COR ACTION..... 2020 Corrective Action Program List
LEAD SMELTERS..... Lead Smelter Sites
WDS..... Waste Discharge System
PROC..... Certified Processors Database
Financial Assurance..... Financial Assurance Information Listing
HWP..... EnviroStor Permitted Facilities Listing
HWT..... Registered Hazardous Waste Transporter Database
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
EPA WATCH LIST..... EPA WATCH LIST
PRP..... Potentially Responsible Parties
US FIN ASSUR..... Financial Assurance Information
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
MWMP..... Medical Waste Management Program Listing
COAL ASH DOE..... Steam-Electric Plant Operation Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners..... 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.

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 09/10/2013 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC TRACTOR AND EQUIP	***12151 RIVERSIDE***	***W 0 - 1/8 (0.095 mi.)***	***1***	***8***
U S EXPRESS ENT	***2200 S RIVERSIDE AVE***	***SSW 1/8 - 1/4 (0.139 mi.)***	***A3***	***9***

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

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, and dated 02/14/2014 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
COMPOSTING-INLAND COMPOSTING &	***2300 RIVERSIDE***	***S 1/4 - 1/2 (0.263 mi.)***	***6***	***11***

State and tribal leaking storage tank lists

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 12/16/2013 has revealed that there are 6 SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO TANK FARM Facility Status: Open - Remediation	2395 RIVERSIDE AVENUE S	S 1/4 - 1/2 (0.383 mi.)	B7	13
CHEVRON TANK FARM	2297 S RIVERSIDE AVENUE	S 1/4 - 1/2 (0.394 mi.)	B8	13
UNOCAL TANK FARM	2301 S RIVERSIDE AVENUE	S 1/4 - 1/2 (0.395 mi.)	B9	13
SOUTHERN PACIFIC PIPELINE	2359 S RIVERSIDE AVENUE	S 1/4 - 1/2 (0.398 mi.)	B10	14
SFPP ET. AL TANK FARM	2359 S RIVERSIDE AVENUE	S 1/4 - 1/2 (0.398 mi.)	B11	14
ARCO TANK FARM	2395 S RIVERSIDE AVENUE	S 1/4 - 1/2 (0.399 mi.)	B12	14

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

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 11/26/2013 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
KRETZSCHMAR STEEL	3750 S RIVERSIDE AVE	NW 1/8 - 1/4 (0.247 mi.)	5	11

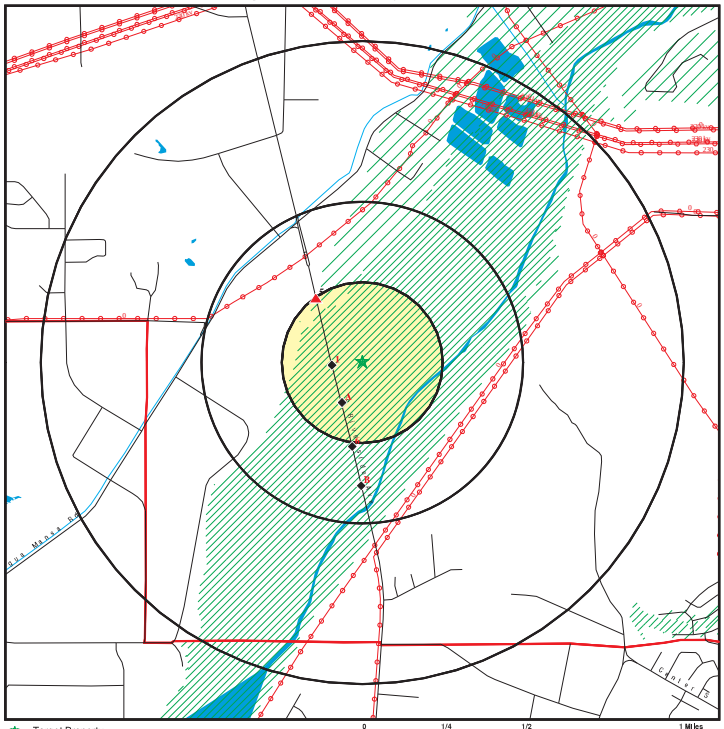
Lower Elevation	Address	Direction / Distance	Map ID	Page
U.S. XPRESS INC	2250 S RIVERSIDE DR	SSW 1/8 - 1/4 (0.139 mi.)	A2	9
PACIFIC TRACTOR & EQPMT	2200 RIVERSIDE AVE	SSW 1/8 - 1/4 (0.139 mi.)	A4	11

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
CAMP YOUNG	HIST CORTESE
CIMA ROAD MINE WASTE SITE	CERCLIS
BLYTHE AIRPORT	HIST UST
RIALTO TRAVEL CENTER	HAZNET
BOB HUBBARD HORSE TRANS	RCRA-SQG, FINDS
330 RESOURCE CENTER DRIVE	HMIRS
330 RESOURCE CENTER DRIVE	HMIRS
330 RESOURCE CENTER DRIVE	HMIRS
330 RESOURCE CENTER DRIVE	HMIRS
330 RESOURCE CENTER DRIVE	HMIRS
330 RESOURCE CENTER DRIVE	HMIRS
HANNA AND RR 1	FINDS
SO CAL GAS/COLTON 1 (FOGG ST) MGP	FINDS
ARROWHEAD RGNL MEDICAL CENTER	FINDS
MT. VERNON 1	FINDS
MT. VERNON 1	US BROWNFIELDS
BORRMANN METAL CENTER INC	San Bern. Co. Permit
RIALTO PETROLEUM	San Bern. Co. Permit
SHELL TANK FARM	SLIC
GOLDEN WEST FUEL RACK	SLIC

OVERVIEW MAP - 3900082.2s



- 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
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Oil & Gas pipelines from USGS
- 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:	Agua Mansa Commerce Center Building 1	CLIENT:	Farallon Consulting, LLC
ADDRESS:	S RIVERSIDE AVE at Miguel Bustamante Parkway Colton CA 92324	CONTACT:	Scott Allin
LAT/LONG:	34.032 / 117.3636	INQUIRY #:	3900082.2s
		DATE:	April 02, 2014 10:12 pm

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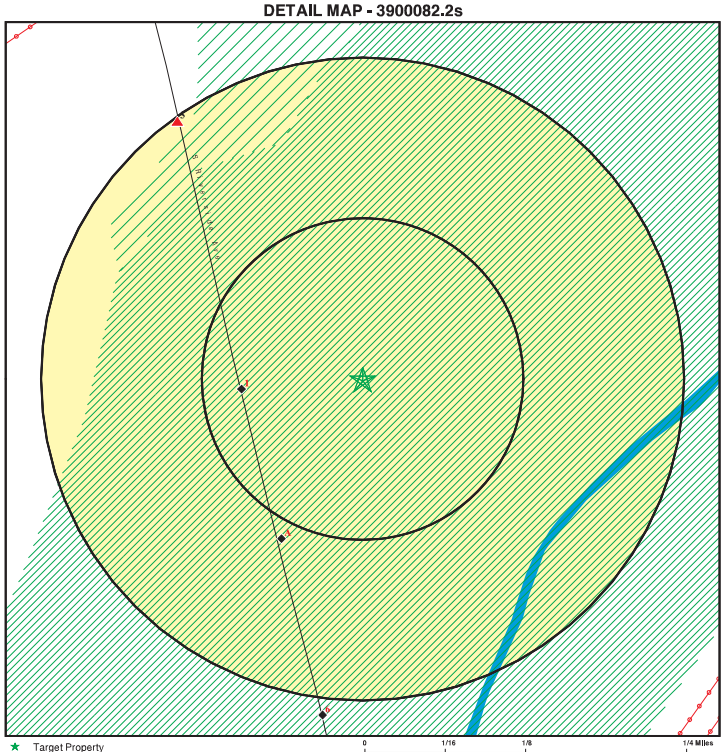
DETAIL MAP - 3900082.2s



- 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
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 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:	Agua Mansa Commerce Center Building 1	CLIENT:	Farallon Consulting, LLC
ADDRESS:	S RIVERSIDE AVE at Miguel Bustamante Parkway Colton CA 92324	CONTACT:	Scott Allin
LAT/LONG:	34.032 / 117.3636	INQUIRY #:	3900082.2s
		DATE:	April 02, 2014 10:19 pm

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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								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	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		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	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	1	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	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
SLIC	0.500		0	0	6	NR	NR	6
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
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
FEMA 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
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
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
Local Lists of Hazardous waste / Contaminated Sites								
US 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
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
SWEEPS UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	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
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	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
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
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		0	3	NR	NR	NR	3
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	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
COAL ASH EPA	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

1
West
< 1/8
0.095 mi.
499 ft.

PACIFIC TRACTOR AND EQUIP — **RCRA-SQG** **1000905405**
12151 RIVERSIDE — **FINDS** **CA0000594960**
COLTON, CA 92324

Relative: Lower

Actual: 850 ft.

RCRA-SQG:

Date form received by agency:	10/14/1994
Facility name:	PACIFIC TRACTOR AND EQUIP
Facility address:	12151 RIVERSIDE COLTON, CA 92324
EPA ID:	CA0000594960
Contact:	JACK PAVELECH
Contact address:	2200 S RIVERSIDE AVE COLTON, CA 92324
Contact country:	US
Contact telephone:	(909) 369-1810
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:	PACIFIC TRACTOR AND EQUIP CO INC
Owner/operator address:	2200 S RIVERSIDE AVE COLTON, CA 92324
Owner/operator country:	Not reported
Owner/operator telephone:	(909) 369-1810
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

Violation Status: No violations found

FINDS:

Registry ID: 110002619248

PACIFIC TRACTOR AND EQUIP (Continued) **1000905405**

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.

A2 **U.S. XPRESS INC** **San Bern. Co. Permit** **S110168917**
SSW **2250 S RIVERSIDE DR** **N/A**
1/8-1/4 **COLTON, CA 92324**
0.139 mi.
735 ft. **Site 1 of 3 in cluster A**

Relative: **Lower**

Actual: **848 ft.**

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0006852
Owner: U.S. XPRESS INC
Permit Number: PT0000755
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 11/30/2013

Region: SAN BERNARDINO
Facility ID: FA0006852
Owner: U.S. XPRESS INC
Permit Number: PT0000754
Permit Category: SPECIAL HANDLER
Facility Status: INACTIVE
Expiration Date: 11/30/2013

A3 **U S EXPRESS ENT** **RCRA-SQG** **1004675439**
SSW **2200 S RIVERSIDE AVE** **FINDS** **CAR000072918**
1/8-1/4 **COLTON, CA**
0.139 mi.
735 ft. **Site 2 of 3 in cluster A**

Relative: **Lower**

Actual: **848 ft.**

RCRA-SQG:
Date form received by agency: 05/09/2000
Facility name: U S EXPRESS ENT
Facility address: 2200 S RIVERSIDE AVE
COLTON, CA 92324
EPA ID: CAR000072918
Contact: CARSON BROWN
Contact address: 2200 S RIVERSIDE AVE
COLTON, CA 92324
Contact country: US
Contact telephone: (800) 654-0752
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

U S EXPRESS ENT (Continued) **1004675439**

hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: U S EXPRESS ENT
Owner/operator address: 4080 JENKINS RD
CHATTANOOGA, TN 37421
Owner/operator country: Not reported
Owner/operator telephone: (800) 251-6291
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

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110002936887

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.

A4 **PACIFIC TRACTOR & EQPMT** **San Bern. Co. Permit** **S106911024**
SSW **2200 RIVERSIDE AVE** **N/A**
1/8-1/4 **COLTON, CA 92324**
0.139 mi.
735 ft. **Site 3 of 3 in cluster A**

Relative: **Lower**

Actual: **848 ft.**

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0005201
Owner: PACIFIC TRACTOR & EQPMT
Permit Number: PT0001693
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 11/30/2001

Region: SAN BERNARDINO
Facility ID: FA0005201
Owner: PACIFIC TRACTOR & EQPMT
Permit Number: PT0001694
Permit Category: HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 11/30/2001

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5 **KRETZSCHMAR STEEL** **San Bern. Co. Permit** **S105697411**
NW **3750 S RIVERSIDE AVE** **N/A**
1/8-1/4 **COLTON, CA 92324**
0.247 mi.
1303 ft.

Relative: **Higher**

Actual: **865 ft.**

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0004304
Owner: KRETZSCHMAR, TIM
Permit Number: PT0022657
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2013

Region: SAN BERNARDINO
Facility ID: FA0004304
Owner: KRETZSCHMAR, TIM
Permit Number: PT0006211
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 10/31/2013

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6 **COMPOSTING-INLAND COMPOSTING &** **SWF/LF** **S109287478**
South **2300 RIVERSIDE** **LDS** **N/A**
1/4-1/2 **COLTON, CA 92324**
0.263 mi.
1389 ft.

Relative: **Lower**

Actual: **843 ft.**

SWF/LF (SWIS):
Region: STATE
Facility ID: 36-AA-0392
Lat/Long: 34.0666700 / -117.31667
Owner Name: Not reported
Owner Telephone: Not reported

COMPOSTING-INLAND COMPOSTING & (Continued) **S109287478**

Owner Address: Not reported
Owner Address2: Not reported
Owner City,St,Zip: Not reported
Operational Status: Not reported
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: Not reported
Activity: Not reported
Regulation Status: Not reported
Landuse Name: Not reported
GIS Source: Place
Category: Not reported
Unit Number: Not reported
Inspection Frequency: Not reported
Accepted Waste: Not reported
Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: Not reported
SWIS Num: 36-AA-0392
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Permitted Capacity with Units: Not reported
Remaining Capacity: Not reported
Remaining Capacity with Units: Not reported

LDS:

Global Id: L10009245742
Latitude: 34.02977
Longitude: -117.3646
Case Type: Land Disposal Site
Status: Completed - Case Closed
Status Date: 06/26/2003
Lead Agency: SANTA ANA RWQCB (REGION 8)
Caseworker: RA
Local Agency: Not reported
RB Case Number: 8 362715001
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Not reported
EDR Link ID: L10009245742
Potential Contaminants of Concern: Not reported
Site History: Not reported

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

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

B7
South
1/4-1/2
0.383 mi.
2022 ft.
Site 1 of 6 in cluster B

Relative:
Lower

Actual:
841 ft.

ARCO TANK FARM — SLIC — S106486949 / N/A
2395 RIVERSIDE AVENUE S
COLTON, CA

SLIC:

Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	04/01/2000
Global Id:	SLT8R1024096
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	34.0587748949985
Longitude:	-117.369818687439
Case Type:	Cleanup Program Site
Case Worker:	RS
Local Agency:	Not reported
RB Case Number:	SLT8R102
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Benzene, Diesel, MTBE / TBA / Other Fuel Oxygenates, Gasoline
Site History:	Past uses that caused contamination include the storage of fuel and petrochemicals in aboveground and underground tanks and the transportation of fuel in pipelines and vehicles.

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

B8
South
1/4-1/2
0.394 mi.
2082 ft.
Site 2 of 6 in cluster B

Relative:
Lower

Actual:
840 ft.

CHEVRON TANK FARM — SLIC — S108985923 / N/A
2297 S RIVERSIDE AVENUE
COLTON, CA

SLIC REG 8:

Type:	Groundwater
Facility Status:	Additional Characterization Underway
Staff:	RTS
Substance:	GASOLINE
Lead Agency:	Regional Board
Location Code:	Not reported
Thomas Bros Code:	Not reported

B9
South
1/4-1/2
0.395 mi.
2083 ft.
Site 3 of 6 in cluster B

Relative:
Lower

Actual:
840 ft.

UNOCAL TANK FARM — SLIC — S101541263 / N/A
2301 S RIVERSIDE AVENUE
COLTON, CA

SLIC REG 8:

Type:	Groundwater
Facility Status:	Additional Characterization Underway
Staff:	RTS
Substance:	DIESEL
Lead Agency:	Regional Board
Location Code:	Not reported
Thomas Bros Code:	Not reported

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

B10
South
1/4-1/2
0.398 mi.
2099 ft.
Site 4 of 6 in cluster B

Relative:
Lower

Actual:
840 ft.

SOUTHERN PACIFIC PIPELINE — SLIC — S108985924 / N/A
2359 S RIVERSIDE AVENUE
COLTON, CA

SLIC REG 8:

Type:	Soil
Facility Status:	6
Staff:	RTS
Substance:	GASOLINE
Lead Agency:	Regional Board
Location Code:	Not reported
Thomas Bros Code:	Not reported

B11
South
1/4-1/2
0.398 mi.
2099 ft.
Site 5 of 6 in cluster B

Relative:
Lower

Actual:
840 ft.

SFPP ET. AL TANK FARM — SLIC — S108985925 / N/A
2359 S RIVERSIDE AVENUE
COLTON, CA

SLIC REG 8:

Type:	Groundwater
Facility Status:	6
Staff:	RTS
Substance:	GASOLINE
Lead Agency:	Regional Board
Location Code:	Not reported
Thomas Bros Code:	Not reported

B12
South
1/4-1/2
0.399 mi.
2108 ft.
Site 6 of 6 in cluster B

Relative:
Lower

Actual:
840 ft.

ARCO TANK FARM — SLIC — S108985926 / N/A
2395 S RIVERSIDE AVENUE
COLTON, CA

SLIC REG 8:

Type:	Groundwater
Facility Status:	6
Staff:	RTS
Substance:	GASOLINE
Lead Agency:	Regional Board
Location Code:	Not reported
Thomas Bros Code:	Not reported

ORPHAN SUMMARY

Count: 20 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLOOMINGTON	2009552730	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	2009551651	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	2009551678	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	2009551381	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	2009551199	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	2009049992	330 RESOURCE CENTER DRIVE	330 RESOURCE CENTER DRIVE	92316	HMIRS
BLOOMINGTON	S112951621	RIALTO TRAVEL CENTER	1310 S RIVERSIDE AVE	92316	HAZNET
BLYTHE	U001576259	BLYTHE AIRPORT	HIGHWAY 60	92501	HIST UST
COLTON	1016349788	HANNA AND RR 1	300 BLOCK HANNA STREET		FINDS
COLTON	1010731029	SO CAL GAS/COLTON 1 (FOGG ST) MGP	NORTH EAST CORNER OF 6TH & FOG		FINDS
COLTON	1004676291	BOB HUBBARD HORSE TRANS	12082 RIVERSIDE AVE		RCRA-SQG, FINDS
COLTON	S108985928	SHELL TANK FARM	N/A S RIVERSIDE AVENUE		SLIC
COLTON	S108985927	GOLDEN WEST FUEL RACK	N/A S RIVERSIDE AVENUE		SLIC
COLTON	1014678881	ARROWHEAD RGNL MEDICAL CENTER	UNKNOWN		FINDS
COLTON	1010345414	MT. VERNON 1	1033 MT. VERNON AVENUE	92324	US BROWNFIELDS
COLTON	1010345417	MT. VERNON 2	1033 MT. VERNON AVENUE	92324	US BROWNFIELDS
CRESTMORE	S109117864	BORRMANN METAL CENTER INC	12790 HOLLY ST	92316	San Bern. Co. Permit
RIALTO	S111456357	RIALTO PETROLEUM	3368 S RIVERSIDE AVE	92316	San Bern. Co. Permit
RIVERSIDE	S105025887	CAMP YOUNG	25 MI E. OF INDIO HWY 195	92501	HIST CORTESE
SAN BERNARDINO COUN	1016139697	CIMA ROAD MINE WASTE SITE	1 MIL W OF INTE: 15 OFF CIMA R		CERCLIS

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: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
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 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

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: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
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

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: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78
Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94
Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

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: 05/31/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 151
Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94
Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14
Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
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: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14
Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

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: 11/20/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 95
Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
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: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66
Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 02/07/2014
Next Scheduled EDR Contact: 04/14/2014
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: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
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 identifies 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: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
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: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28
Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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 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 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

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: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

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: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
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

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: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 05/12/2014
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: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

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: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

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: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

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: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

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

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

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

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
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: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

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: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
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: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 01/29/2014
Date Data Arrived at EDR: 01/29/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 42
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

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: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

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: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

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: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

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

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: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

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: 09/24/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/20/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: No Update Planned

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

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: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: No Update Planned

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

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

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

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 02/20/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 35
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
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: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

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: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Quarterly

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: 02/03/2014
Date Data Arrived at EDR: 02/06/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 39
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

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

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: 12/31/2013
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 20
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
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: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

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

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
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

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

Local Land Records

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: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
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: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
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: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
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: 10/14/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 34
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
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: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18
Source: State Water Quality Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
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: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
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
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: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

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: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
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: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
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: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

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: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

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: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

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: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/05/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

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: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/28/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Every 4 Years

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: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
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: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
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

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: 01/28/2014
Next Scheduled EDR Contact: 05/12/2014
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: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 04/28/2014
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: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

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: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

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: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

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: 11/18/2013
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/14/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

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

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: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Biennially

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

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/17/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 37
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

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: 12/30/2013
Date Data Arrived at EDR: 12/31/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 42
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/31/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

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

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: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

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: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

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: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
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: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 19
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/05/2014
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.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
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: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/25/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Varies

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: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

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: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
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: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
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

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: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

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: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

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: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: N/A

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: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30
Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30
Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

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: 11/20/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 72
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

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: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
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: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
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: 09/20/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan 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: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

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: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/14/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

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: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 01/30/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 12
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

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 US Hist Auto Stat: 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 US Hist Cleaners: 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 US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

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: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

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: N/A
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: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 19
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 20
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24
Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20
Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56
Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 53
Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/26/2014
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: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/05/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 27

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/04/2014
Next Scheduled EDR Contact: 05/19/2014
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: 12/31/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 14

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
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: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 21

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
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: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/06/2013
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/20/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/25/2014
Number of Days to Update: 28

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/10/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
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: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
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: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 34

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/25/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 91

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/04/2014
Date Made Active in Reports: 04/01/2014
Number of Days to Update: 28

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 02/14/2014
Number of Days to Update: 35
Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
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: 03/03/2014
Next Scheduled EDR Contact: 06/06/2014
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: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 27
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 33
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 34
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 28
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
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: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 27
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/02/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 28
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
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: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/06/2014
Next Scheduled EDR Contact: 04/21/2014
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: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/06/2014
Next Scheduled EDR Contact: 04/21/2014
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: 11/26/2013
Date Data Arrived at EDR: 11/27/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 34
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
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: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/12/2014
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: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
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: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
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: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
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: 12/18/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/26/2014
Date Made Active in Reports: 03/26/2014
Number of Days to Update: 28
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
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: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
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: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 03/04/2014
Date Data Arrived at EDR: 03/06/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
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: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/07/2014
Date Data Arrived at EDR: 02/11/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 12/03/2013
Date Data Arrived at EDR: 12/04/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 29

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
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: 12/16/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/02/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 40

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
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: 01/03/2014
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 39

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/10/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
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: 01/28/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
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: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
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: 02/17/2014
Next Scheduled EDR Contact: 06/02/2014
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: 10/02/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 28

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 03/21/2014
Next Scheduled EDR Contact: 05/12/2014
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: 11/26/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/24/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 15

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/11/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 32

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 02/17/2014
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: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
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: 12/31/2013
Date Data Arrived at EDR: 02/07/2014
Date Made Active in Reports: 03/31/2014
Number of Days to Update: 52

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/12/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

AGUA MANSA COMMERCE CENTER BUILDING 1
S RIVERSIDE AVE AT MIGUEL BUSTAMANTE PARKWAY
COLTON, CA 92324

TARGET PROPERTY COORDINATES

Latitude (North):	34.032 - 34° 1' 55.20''
Longitude (West):	117.3636 - 117° 21' 48.96''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	466434.1
UTM Y (Meters):	3765569.2
Elevation:	853 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34117-A3 SAN BERNARDINO SOUTH, CA
Most Recent Revision:	1980
West Map:	34117-A4 FONTANA, CA
Most Recent Revision:	1980

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).

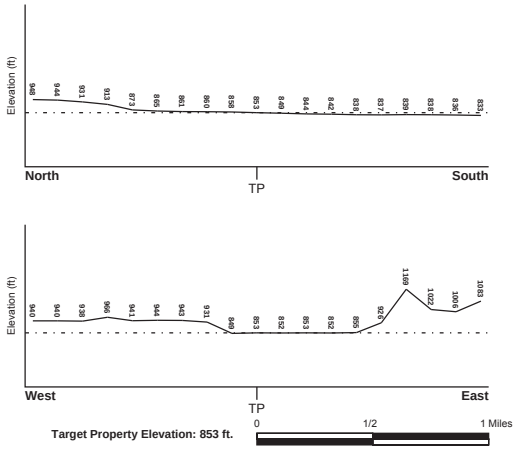
TOPOGRAPHIC INFORMATION

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 ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 853 ft.

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
SAN BERNARDINO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06071C - FEMA DFIRM Flood data

Additional Panels in search area: 06065C - 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
12	1/2 - 1 Mile South	SW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

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

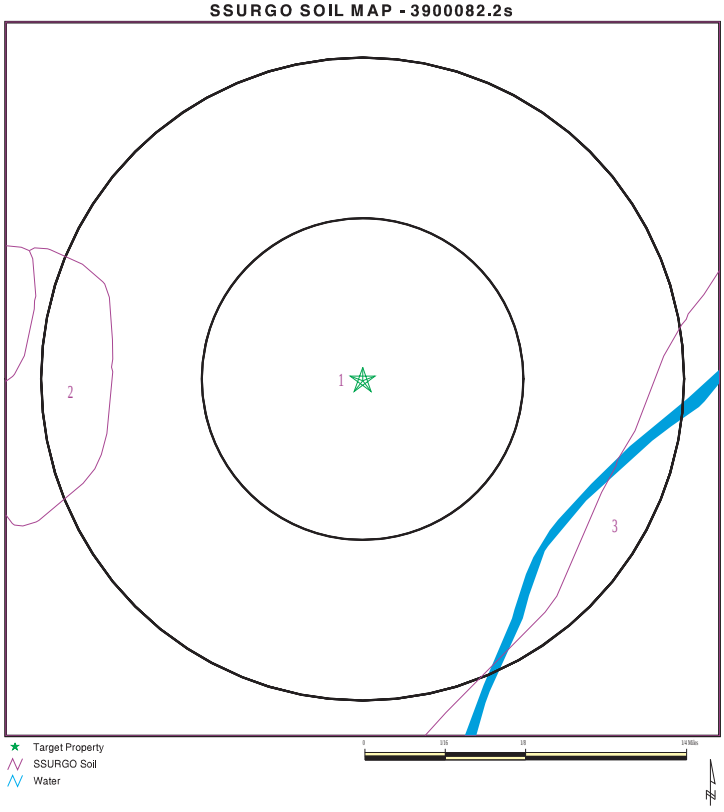
Era: Paleozoic
System: Pennsylvanian
Series: Upper Paleozoic
Code: uPze *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

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 - 3900082.2s



SITE NAME: Agua Mansa Commerce Center Building 1	CLIENT: Farallon Consulting, LLC
ADDRESS: S RIVERSIDE AVE at Miguel Bustamante Parkway Colton CA 92324	CONTACT: Scott Allin
LAT/LONG: 34.032 / 117.3636	INQUIRY #: 3900082.2s
	DATE: April 02, 2014 10:20 pm

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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: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively 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

Layer	Boundary Upper	Boundary Lower	Soil Texture Class	Classification AASHTO Group	Classification Unified Soil	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	35 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	35 inches	59 inches	gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

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

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

Soil Map ID: 3

Soil Component Name: FLUVENTS

Soil Surface Texture: gravelly sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially 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	9 inches	gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6
2	9 inches	29 inches	stratified gravelly sand to gravelly 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: 8.4 Min: 6.6
3	29 inches	59 inches	stratified gravelly sand to gravelly 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: 6.6

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 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS40000139876	1/4 - 1/2 Mile South
3	USGS40000139974	1/4 - 1/2 Mile NNE
4	USGS40000139898	1/4 - 1/2 Mile ESE
7	USGS40000139859	1/2 - 1 Mile SE
8	USGS40000139834	1/2 - 1 Mile South
A9	USGS40000139840	1/2 - 1 Mile SSW
A10	USGS40000139841	1/2 - 1 Mile SSW
A13	USGS40000139838	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

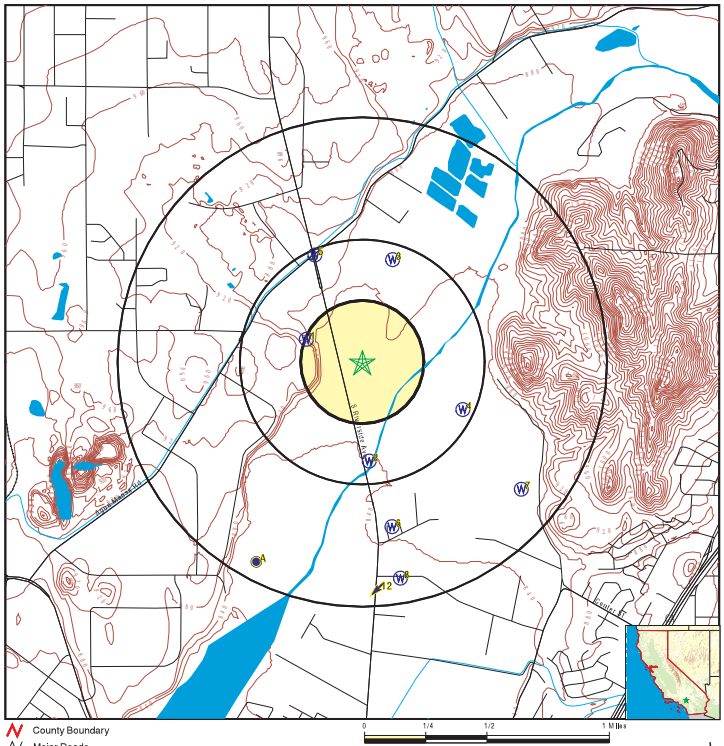
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	1012	1/8 - 1/4 Mile WNW
5	1011	1/4 - 1/2 Mile NNW
6	2486	1/2 - 1 Mile South
A11	2487	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 3900082.2s



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
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME: Agua Mansa Commerce Center Building 1	CLIENT: Farallon Consulting, LLC
ADDRESS: S RIVERSIDE AVE at Miguel Bustamante Parkway Colton CA 92324	CONTACT: Scott Allin
LAT/LONG: 34.032 / 117.3636	INQUIRY #: 3900082.2s DATE: April 02, 2014 10:20 pm

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Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
1 **WNW** **1/8 - 1/4 Mile** **Higher**	**CA WELLS**	**1012**

Water System Information:

Prime Station Code:	01S/05W-36L01 S	User ID:	WAT
FRDS Number:	3310031001	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Agricultural/Irrigation Well
Source Lat/Long:	340200.0 1172200.0	Precision:	Undefined
Source Name:	AGUA MANSA - AGRICULTURAL		
System Number:	3310031		
System Name:	Riverside, City of		
Organization That Operates System:	3900 MAIN STREET RIVERSIDE, CA 92522		
Pop Served:	245000	Connections:	58586
Area Served:	RIVERSIDE		
Sample Collected:	23-MAY-07	Findings:	0.251 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		

	Database	EDR ID Number
2 **South** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000139876**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340134117214401		
Monloc name:	002S005W01M003S		
Monloc type:	Well		
Monloc desc:	DRIVE PT AT SANTA ANA R AT RIVERSIDE AVE		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0261251
Longitude:	-117.3631005	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from Digital Map		
Horiz coord refsys:	NAD83	Vert measure val:	840
Vert measure units:	feet	Vertacc measure val:	10
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:	20000726	Welldepth:	10
Welldepth units:	ft	Wellholedepth:	10
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
3 **NNE** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000139974**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340217117213801		
Monloc name:	001S005W36L001S		
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:	34.0380692
Longitude:	-117.3614339	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:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
4 **ESE** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000139898**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340145117212001		
Monloc name:	002S005W01G002S		
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:	34.0291806
Longitude:	-117.3564336	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:	150
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
5 **NNW** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**1011**

Water System Information:

Prime Station Code:	01S/05W-35J06 S	User ID:	36C
FRDS Number:	3600066001	County:	San Beernardino
District Number:	66	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340218.0 1172158.0	Precision:	100 Feet (one Second)
Source Name:	WELL 01		
System Number:	3600066		
System Name:	CANALE FOODS		
Organization That Operates System:	1181 RIVERSIDE AVE COLTON, CA 92324		
Pop Served:	25	Connections:	4
Area Served:	Not Reported		

	Database	EDR ID Number
6 **South** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**2486**

Water System Information:

Prime Station Code:	02S/05W-01P04 S	User ID:	36C
FRDS Number:	3600344001	County:	San Beernardino
District Number:	66	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340120.0 1172138.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL		
System Number:	3600344		
System Name:	KEY MWC		
Organization That Operates System:	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

	Database	EDR ID Number
7 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000139859**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340128117210501		
Monloc name:	002S005W01J003S		
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:	34.0244586
Longitude:	-117.3522668	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:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
8 **South** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000139834**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340109117213601		
Monloc name:	002S005W12C001S		
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:	34.0191809
Longitude:	-117.3608782	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:	60
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
A9 **SSW** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000139840**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340113117221101		
Monloc name:	002S005W02R001S		
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:	34.0202919
Longitude:	-117.3706007	Sourcemap scale:	24000

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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:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A10
SSW
1/2 - 1 Mile
Lower

FED USGS **USGS40000139841**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340113117221102		
Monloc name:	002S005W02R002S		
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:	34.0202919
Longitude:	-117.3706007	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:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A11
SSW
1/2 - 1 Mile
Lower

CA WELLS **2487**

Water System Information:

Prime Station Code:	02S/05W-02Q07 S	User ID:	WAT
FRDS Number:	3310031062	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Agricultural/Irrigation Well
Source Lat/Long:	340113.6 1172215.3	Precision:	10 Feet (1/10 Second)
Source Name:	JURUPA WELL 06 - AGRICULTURAL		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number:	3310031
System Name:	Riverside, City of
Organization That Operates System:	
	3900 MAIN STREET
	RIVERSIDE, CA 92522
Pop Served:	245000 Connections: 58586
Area Served:	RIVERSIDE

12
South
1/2 - 1 Mile
Lower

AQUIFLOW **66422**

Site ID:	083302795T
Groundwater Flow:	SW
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	15'
Date:	01/07/1996

A13
SSW
1/2 - 1 Mile
Lower

FED USGS **USGS40000139838**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340111117221501		
Monloc name:	002S005W02Q007S		
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:	34.0197364
Longitude:	-117.3717119	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:	482
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

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
92324	10	0

Federal EPA Radon Zone for SAN BERNARDINO 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 Zip Code: 92324

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

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.

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 Services
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 Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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.

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Appendix D Traffic Impact Analysis

KUNZMAN ASSOCIATES, INC.

AGUA MANSA COMMERCE CENTER ADDENDUM

TRAFFIC IMPACT ANALYSIS

May 22, 2014

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

KUNZMAN ASSOCIATES, INC.

AGUA MANSA COMMERCE CENTER
ADDENDUM

TRAFFIC IMPACT ANALYSIS

May 22, 2014

Prepared by:

Bryan Crawford
Carl Ballard, LEED GA
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I. Introduction

The purpose of this report is to provide an assessment of the traffic impacts resulting from the development of the proposed Agua Mansa Commerce Center Addendum project and to identify the traffic mitigation measures necessary to maintain the established level of service standard for the elements of the impacted roadway system. The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The City of Colton is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with partial occupancy of the development in Opening Year 2016, at which time it will be generating traffic at its full potential, and for the current traffic forecast year, which is the Year 2035.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

A. Project Description

The proposed development is located on the northeast corner of Riverside Avenue and Miguel Bustamante Parkway in the City of Colton. A vicinity map showing the project location is provided on Figure 1.

The project site is proposed to be developed with 447,330 square feet of high-cube warehouse distribution center. The project will have access to Riverside Avenue and Miguel Bustamante Parkway. Figure 2 illustrates the project site plan.

B. Study Area

Regional access to the project site is provided by the I-10, I-215, and SR-60 Freeways. Local access is provided by various roadways in the vicinity of the site. The east-west roadways which will be most affected by the project include Agua Mansa Road and Miguel Bustamante Parkway. The north-south roadways which will be most affected by the project include Riverside Avenue and Miguel Bustamante Parkway.

A series of scoping discussions were conducted with the City of Colton to define the desired analysis locations for each future analysis year. In addition, the San Bernardino Associated Governments staff has also been contacted to discuss the project and its associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial

segments are required to be included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute traffic greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10, I-215, or SR-60 Freeways. The project does not contribute traffic greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside the City of Colton.

C. Analysis Methodology

The analysis of the traffic impacts from the proposed development and the assessment of the required mitigation measures were based on an evaluation of the existing and forecast traffic conditions in the vicinity of the site with and without the project. The following analysis years are considered in this report:

- Existing Conditions (2014)
- Existing Plus Project Conditions
- Project Opening Year Conditions (2016)
- Horizon Year Conditions (2035)

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. from May 2014 (see Appendix B). In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks was used in the conversion of trucks to Passenger Car Equivalent's (see Appendix C).

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and City of Fontana, Truck Trip Generation Study, August 2003.

The average daily traffic volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). Traffic model plots are included in Appendix D. This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2014 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 21 years of the 27 year time frame, a factor of 0.78 (i.e., 21/27) was used.

The Year 2035 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The

initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Opening Year (2016) traffic volumes have been interpolated from the Year 2035 traffic volumes based upon a portion of the future growth increment.

Project traffic volumes were then added to the Year 2035 SBTAM traffic model volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix E) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

(Curb to curb distance) / (4 feet/second) + 7 seconds.

For existing/existing plus project/Opening Year (2016) traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Year 2035 traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios

analyzed. Where feasible improvements in accordance with the local jurisdiction's General Plan and which result in acceptable operations cannot be identified, the Year 2035 peak hour factor has been adjusted upwards to 0.95. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

The traffic mitigation needs anticipated at the time of the project opening with full occupancy and for the Year 2035 were combined into a summary of mitigation requirements and costs. The mitigation cost responsibility for the proposed development was estimated based on the percent of the increase in traffic from the existing condition to the Year 2035 that was attributed to the project-generated traffic.

D. Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of Colton requirements.

1. Definition of Deficiency

The definition of an intersection deficiency has been obtained from the City of Colton General Plan. The General Plan states that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E or F will be considered deficient.

For freeway facilities, the Congestion Management Program controls the definition of deficiency for purposes of this study. The Congestion Management Program definition of deficiency is based on maintaining a Level of Service standard of Level of Service E or better, except where an existing Level of Service F condition is identified in the Congestion Management Program document (San Bernardino County Congestion Management Program Table 2-1). A Congestion Management Program deficiency is, therefore, defined as any freeway segment operating or projected to operate at Level of Service F, unless the segment is identified explicitly in the Congestion Management Program document.

The identification of a Congestion Management Program deficiency requires further analysis in satisfaction of Congestion Management Program requirements, including:

- Evaluation of the mitigation measures required to restore traffic operations to an acceptable level with respect to Congestion Management Program Level of Service standards.
- Calculation of the project share of new traffic on the impacted Congestion Management Program facility during peak hours of traffic.
- Estimation of the cost required to implement the improvements required to restore traffic operations to an acceptable Level of Service as described above.

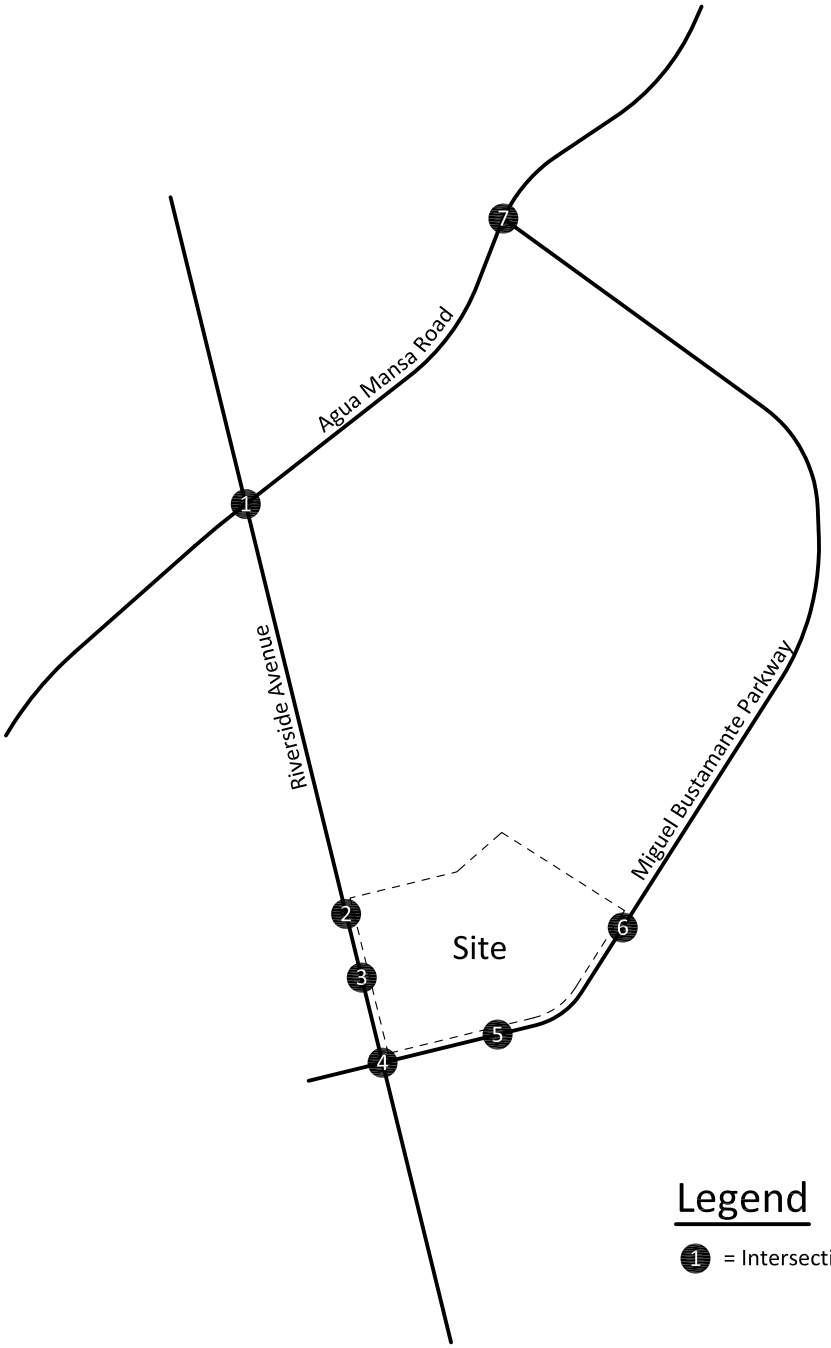
This study incorporates each of these aspects for all locations where a Congestion Management Program deficiency is identified.

2. Definition of Significant Impact

The identification of significant impacts is a requirement of the California Environmental Quality Act. The City of Colton General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the City of Colton that are consistent with these documents are not considered a significant impact, so long as the project contributes its "fair share" funding for improvements.

A traffic impact is considered significant if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the Level of Service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the City of Colton General Plan cannot be constructed.

Figure 1
Project Location Map



Legend

1 = Intersection Reference Number

N

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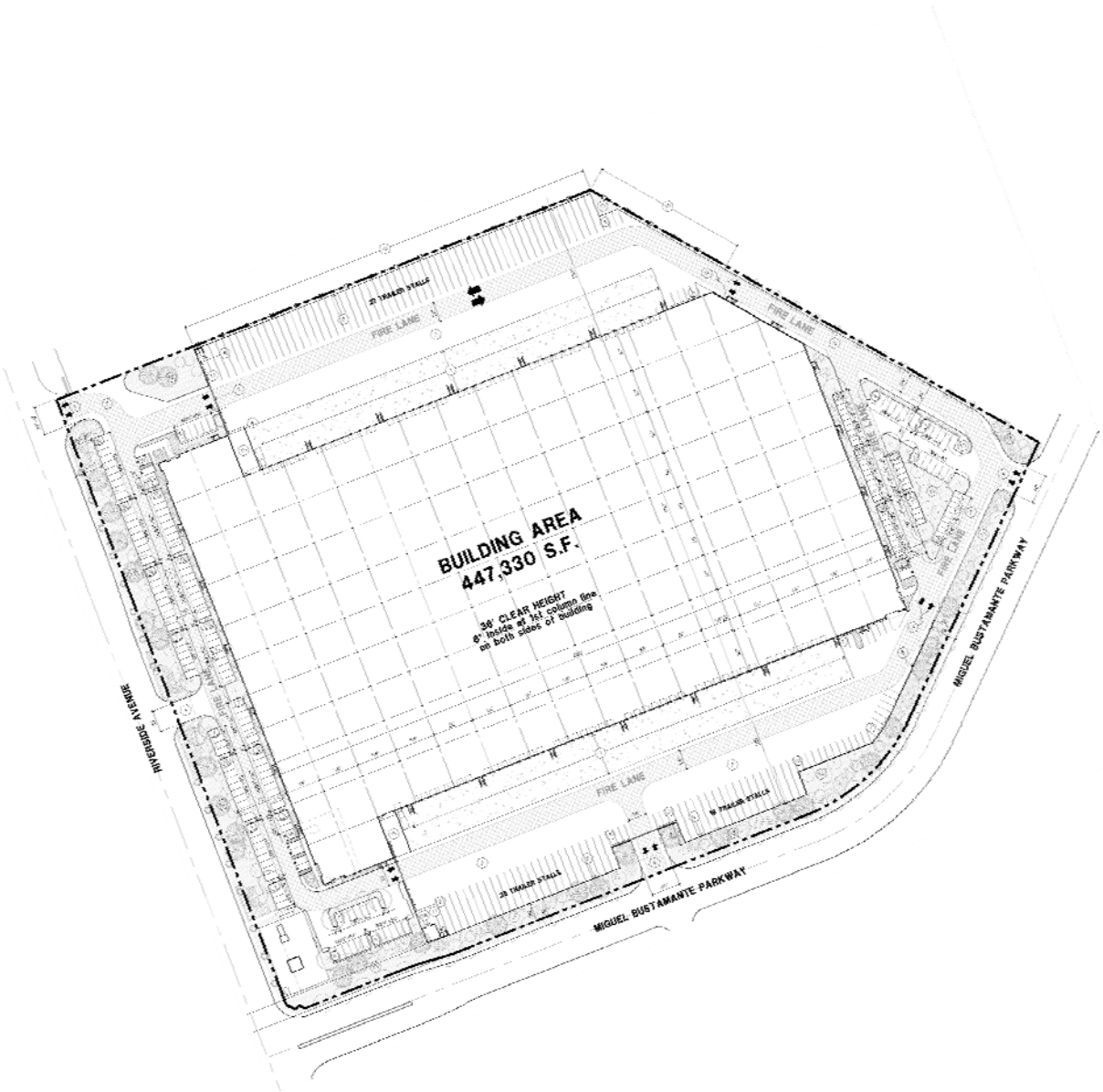
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 2
Site Plan



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OVER 35 YEARS OF EXCELLENT SERVICE

II. Existing Conditions

A. Existing Roadway System

Figure 3 identifies the existing conditions for the study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Regional access to the project site is provided by the I-10, I-215, and SR-60 Freeways. Local access is provided by various roadways in the vicinity of the site. The east-west roadways which will be most affected by the project include Agua Mansa Road and Miguel Bustamante Parkway. The north-south roadways which will be most affected by the project include Riverside Avenue and Miguel Bustamante Parkway.

B. Existing Volumes

Figure 4 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were obtained and factored from peak hour counts (see Appendix B) obtained by Kunzman Associates, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach + Exit Volume) x 11.5 = Daily Leg Volume.

This is a conservative estimate and may over estimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. from May 2014 (see Appendix B) and shown on Figures 5 and 6, respectively. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two-hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

C. Existing Level of Service

The existing delay and Level of Service for the intersection in the vicinity of the project are shown in Table 1. The study area intersections currently operate within acceptable Levels of Service during the peak hours for existing traffic conditions. Existing delay worksheets are provided in Appendix E.

D. Planned Transportation Improvements and Relationship to General Plan

The City of Colton General Plan Circulation Element is shown on Figure 7. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Colton General Plan roadway cross-sections are illustrated on Figure 8.

Table 1

Existing Intersection Delay and Level of Service

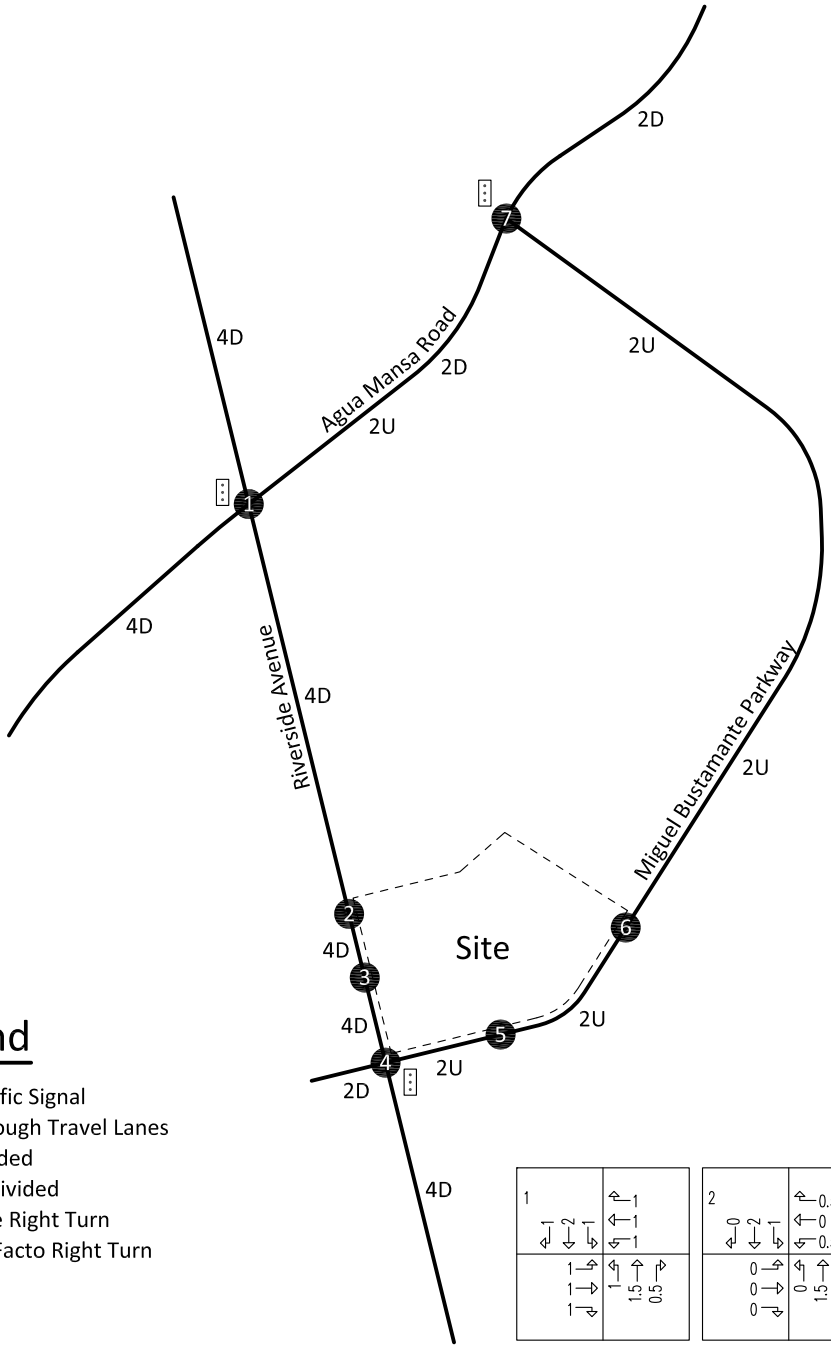
Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	32.1-C	33.3-C
Project North Access (EW) - #2	CSS	0	1.5	0.5	1	2	0	0	0	0	0.5	0	0.5	16.2-C	19.0-C
Miguel Bustamante Parkway (EW) - #4	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	38.2-D	40.2-D
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	11.5-B	15.0-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

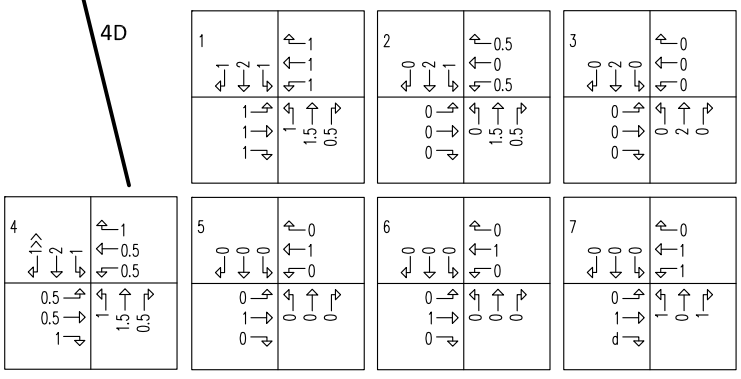
[3] TS = Traffic Signal; CSS = Cross Street Stop

Figure 3
Existing Through Travel Lanes and Intersection Controls



Legend

- = Traffic Signal
- 4 = Through Travel Lanes
- D = Divided
- U = Undivided
- >> = Free Right Turn
- d = De Facto Right Turn



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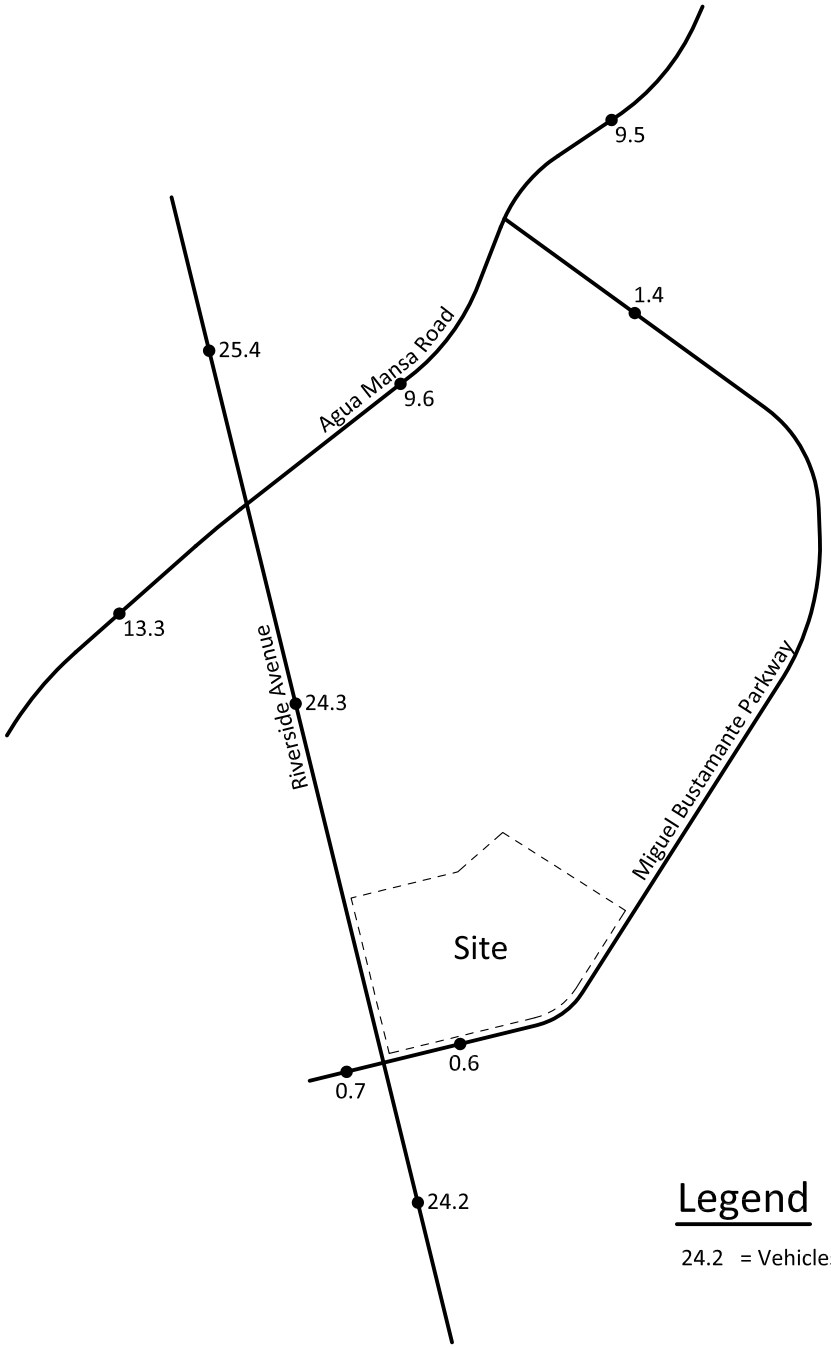
KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 4
Existing Average Daily Traffic Volumes



Legend

24.2 = Vehicles Per Day (1,000's)

N

NTS

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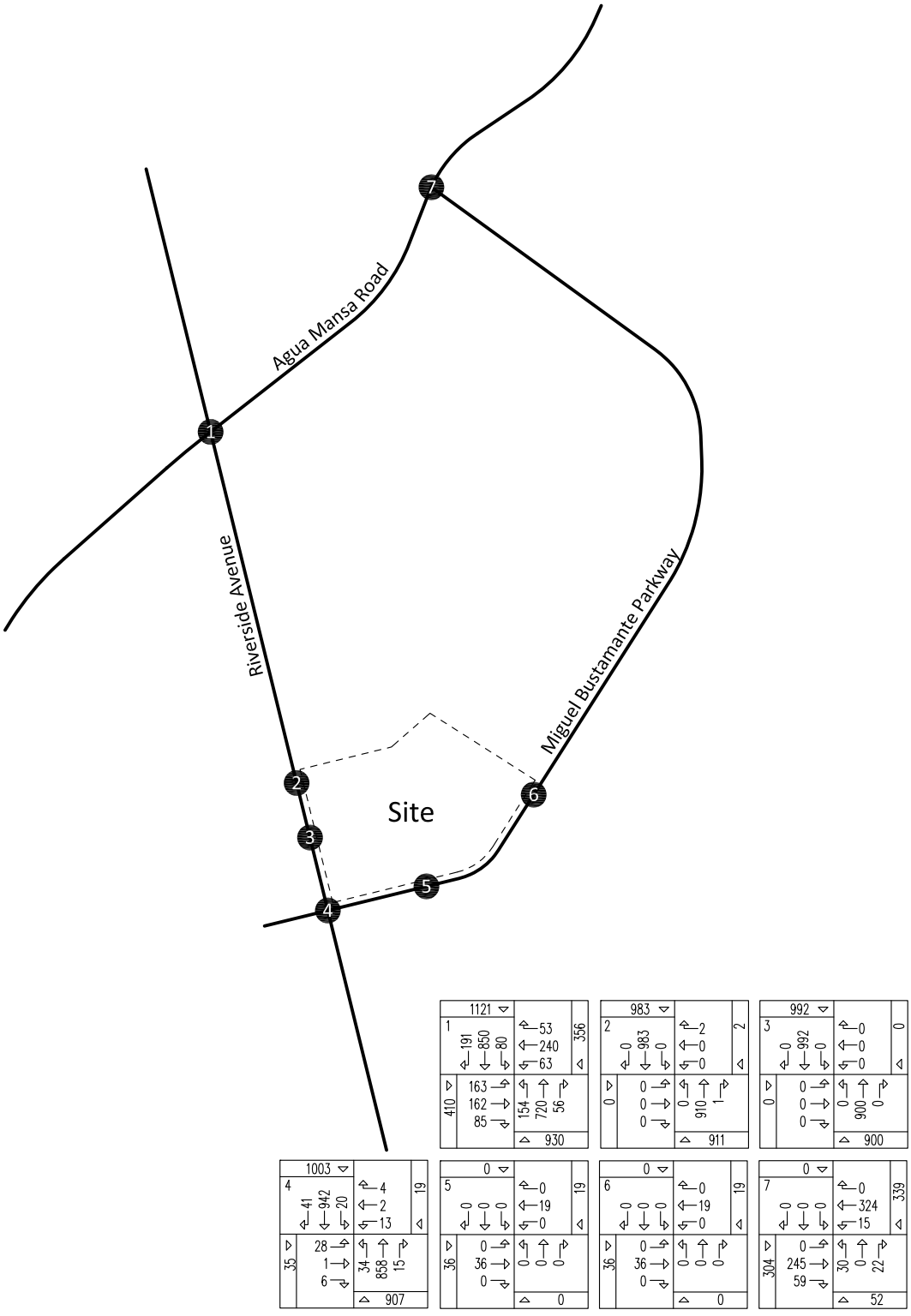
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 5
Existing Morning Peak Hour Intersection Turning Movement Volumes



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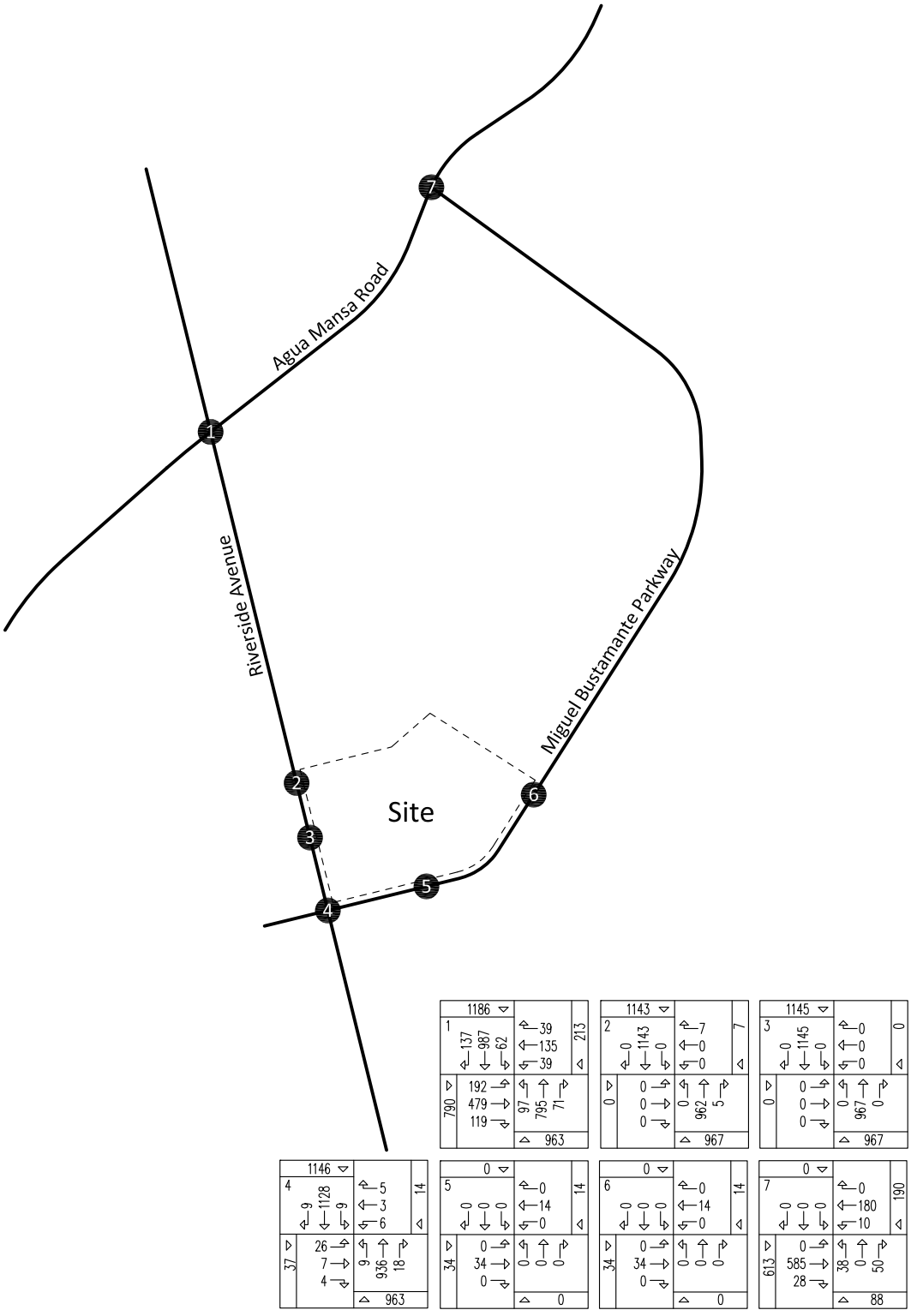
KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 6
Existing Evening Peak Hour Intersection Turning Movement Volumes



5450/6

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 7
City of Colton General Plan Circulation Element

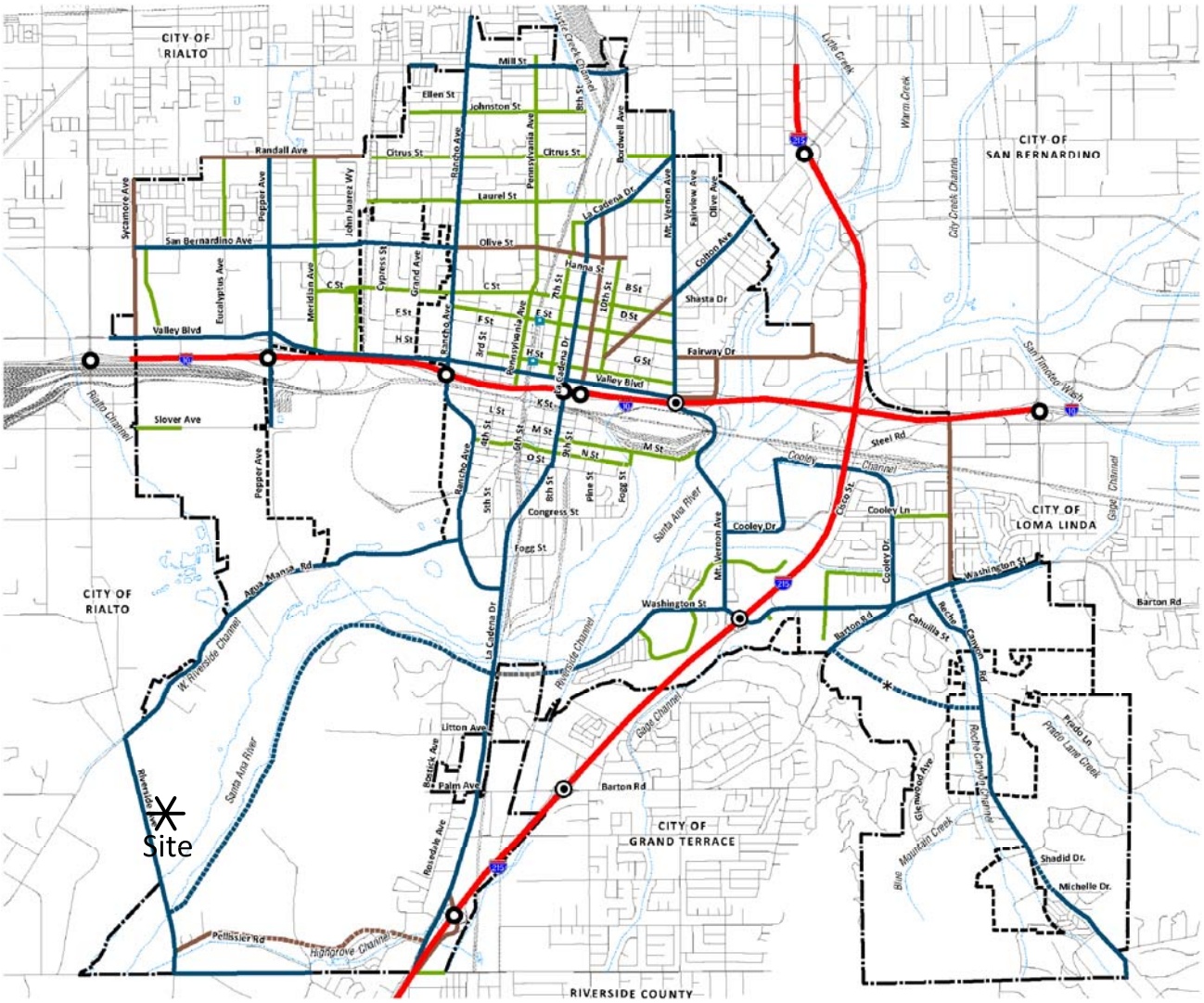
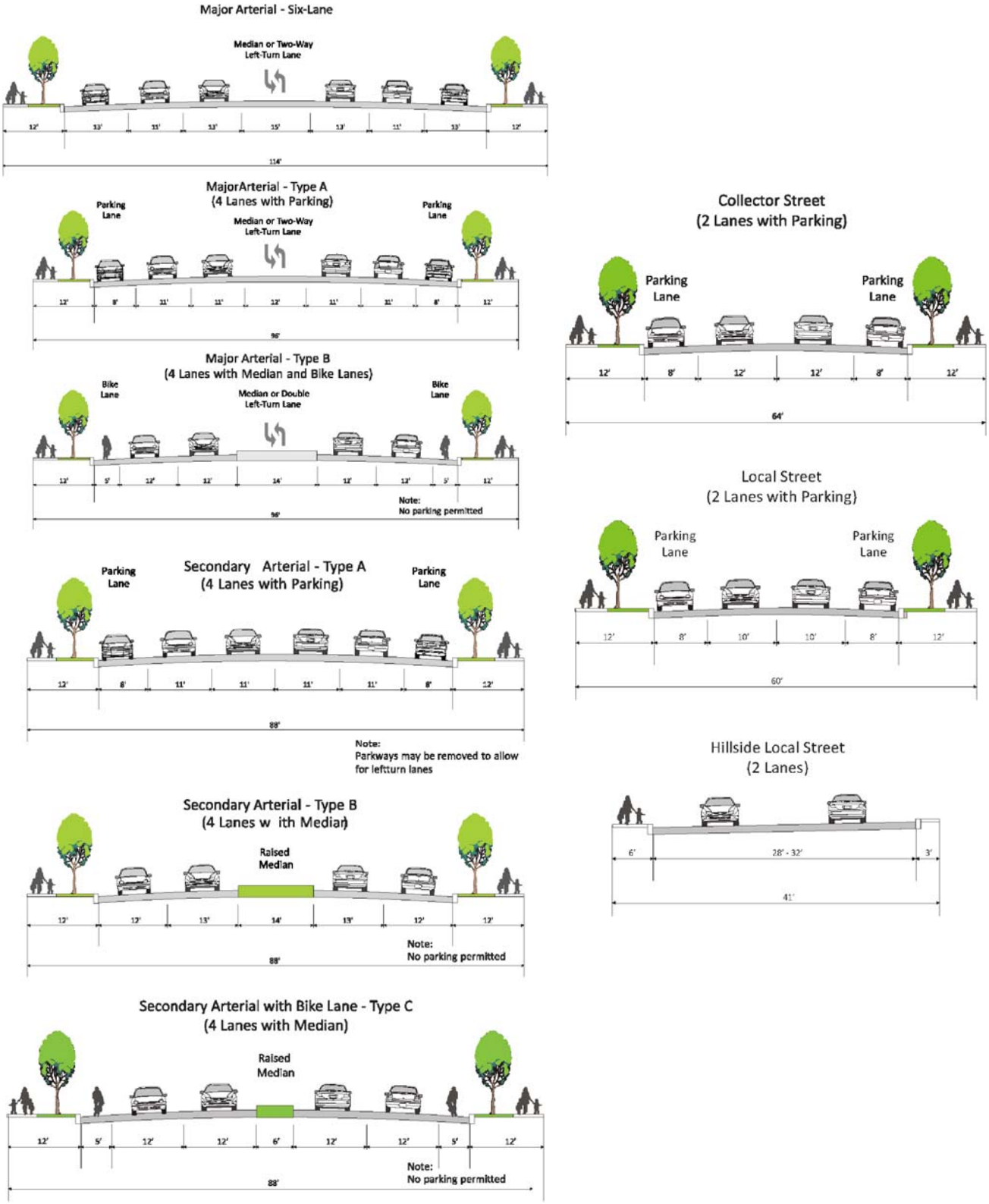


Figure 8
City of Colton General Plan Roadway Cross-Sections



Source: City of Colton

5450/8

III. Project Traffic

A. Project Description

The project site is proposed to be developed with 447,330 square feet of high-cube warehouse distribution center. The project will have access to Riverside Avenue and Miguel Bustamante Parkway.

B. Trip Generation

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are based on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic and morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land use. By multiplying the trip generation rates by the land use quantity, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and City of Fontana, Truck Trip Generation Study, August 2003.

This methodology for generating trips for a high-cube warehouse distribution center is standard practice throughout Southern California. Jurisdictions that have utilized this methodology within the past few years include but are not limited to: San Bernardino Associated Governments, County of San Bernardino, County of Riverside, City of Rialto, City of Fontana, City of Redlands, City of San Bernardino, City of Ontario, City of Chino, City of Hesperia, City of Beaumont, City of Banning, City of Rancho Cucamonga, City of Moreno Valley, City of Norco, and City of Riverside.

As shown in Table 2, the proposed development is projected to generate approximately 986 daily vehicle trips in Passenger Car Equivalents, 65 Passenger Car Equivalents of which will occur during the morning peak hour and 70 Passenger Car Equivalents of which will occur during the evening peak hour.

C. Trip Distribution

Figures 9 to 12 contain the directional distributions of the project trips for the proposed land use.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site and other additional information on future development and traffic impacts in the area were reviewed.

D. Trip Assignment

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 13. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 14 and 15, respectively.

E. Project Traffic Contribution Test

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways. Figure 16 graphically depicts the project traffic contribution test volumes on all of the roadway segments adjacent to the potential intersection analysis locations until the project volume contribution has clearly dropped below the 50 trip threshold.

The project does not contribute traffic greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10, I-215, or SR-60 Freeways. The project does not contribute traffic greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside the City of Colton.

Table 2

Project Trip Generation[1]

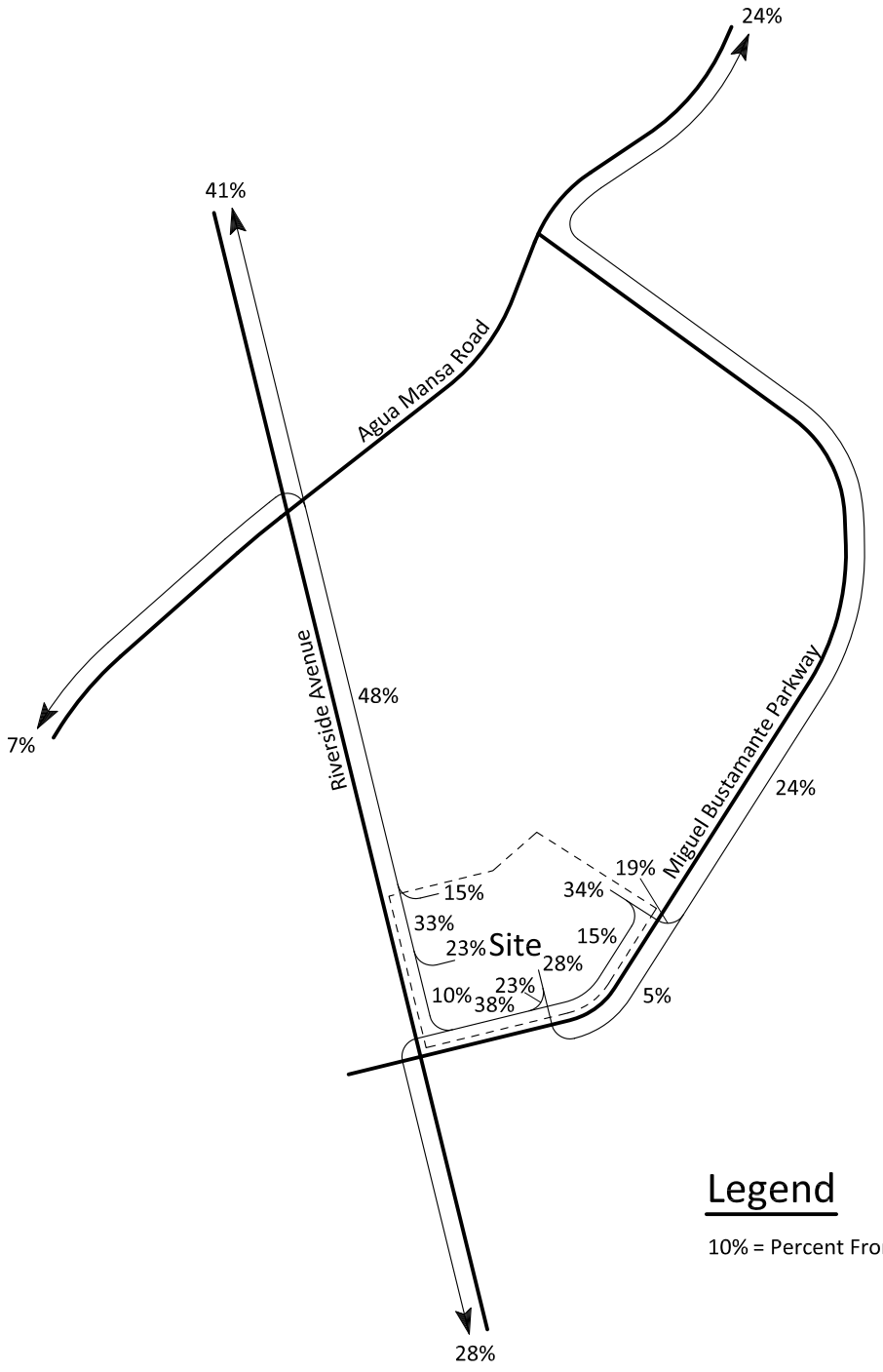
Descriptor	Quantity	Units[2]	Type of Vehicle: Passenger Car	2 Axle Truck	3 Axle Truck	4+ Axle Truck	Total Trucks	Total
Land Use: High Cube	447.330	TSF	79.57%	3.46%	4.64%	12.33%	20.43%	100%
Traffic Generation Rates in trips per TSF								
Daily			1.337	0.058	0.078	0.207	0.343	1.68
Morning Peak Hour			0.088	0.004	0.005	0.014	0.023	0.11
Evening Peak Hour			0.096	0.004	0.006	0.015	0.025	0.12
Traffic Generation in Vehicles								
Daily			598	26	35	93	154	752
Morning Peak Hour								
Inbound			28	1	2	4	7	35
Outbound			11	-	1	2	3	14
Total			39	1	3	6	10	49
Evening Peak Hour								
Inbound			14	1	1	2	4	18
Outbound			28	1	2	4	7	35
Total			42	2	3	6	11	53
Passenger Car Equivalent's (PCE'S) Factor[3]			1.00	1.50	2.00	3.00		
Traffic Generation in PCE's								
Daily			598	39	70	279	388	986
Morning Peak Hour								
Inbound			28	2	4	12	18	46
Outbound			11	-	2	6	8	19
Total			39	2	6	18	26	65
Evening Peak Hour								
Inbound			14	2	2	6	10	24
Outbound			28	2	4	12	18	46
Total			42	4	6	18	28	70

[1] Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Category 152 and Truck Trip Generation Study, City of Fontana, August 2003.

[2] TSF = Thousand Square Feet

[3] Passenger Car Equivalent factors are recommended by San Bernardino Associated Governments (SANBAG).

Figure 9
Project Outbound Trip Distribution - Cars



Legend

10% = Percent From Project

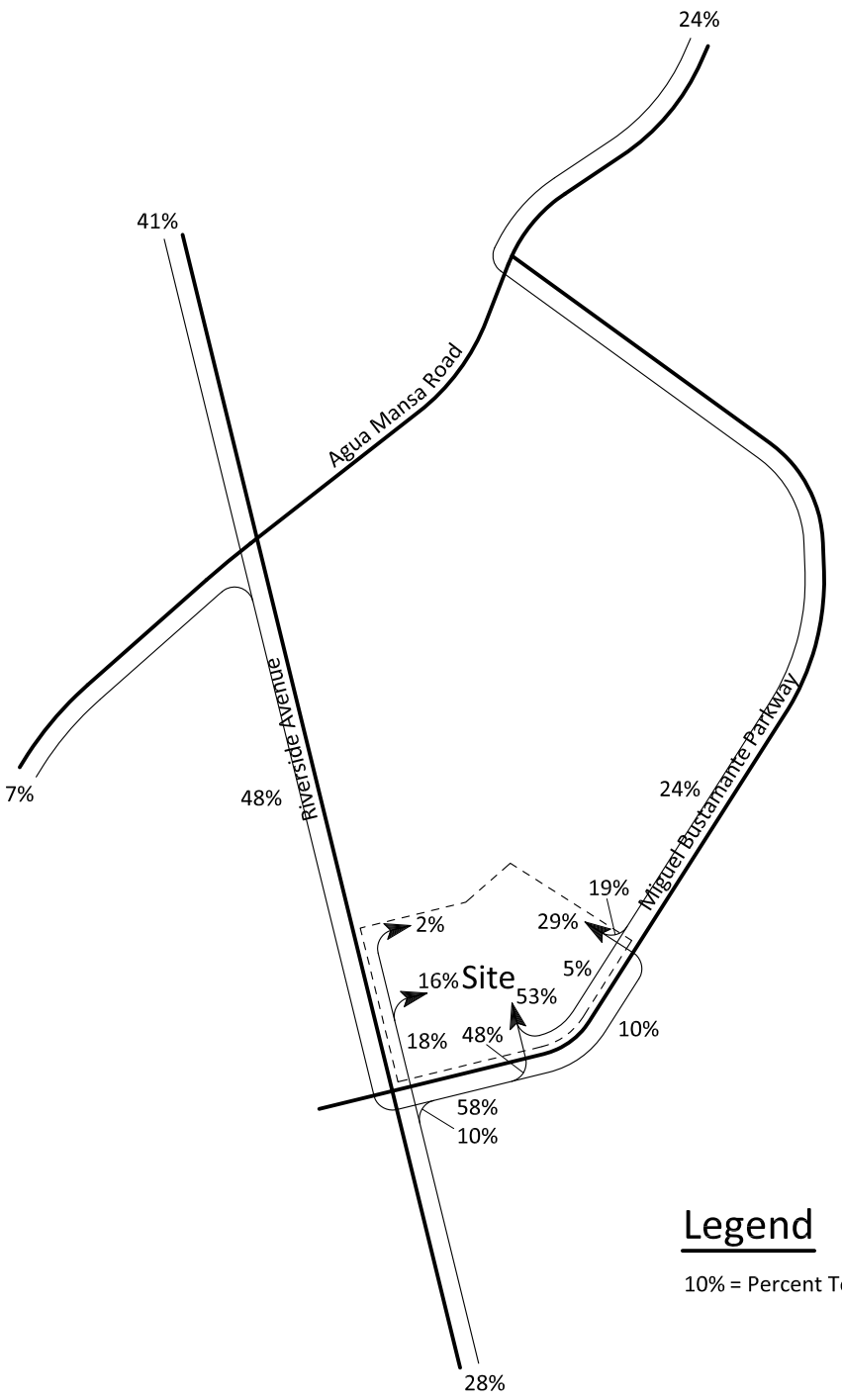
NTS

5450/9

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 10
Project Inbound Trip Distribution - Cars



Legend

10% = Percent To Project

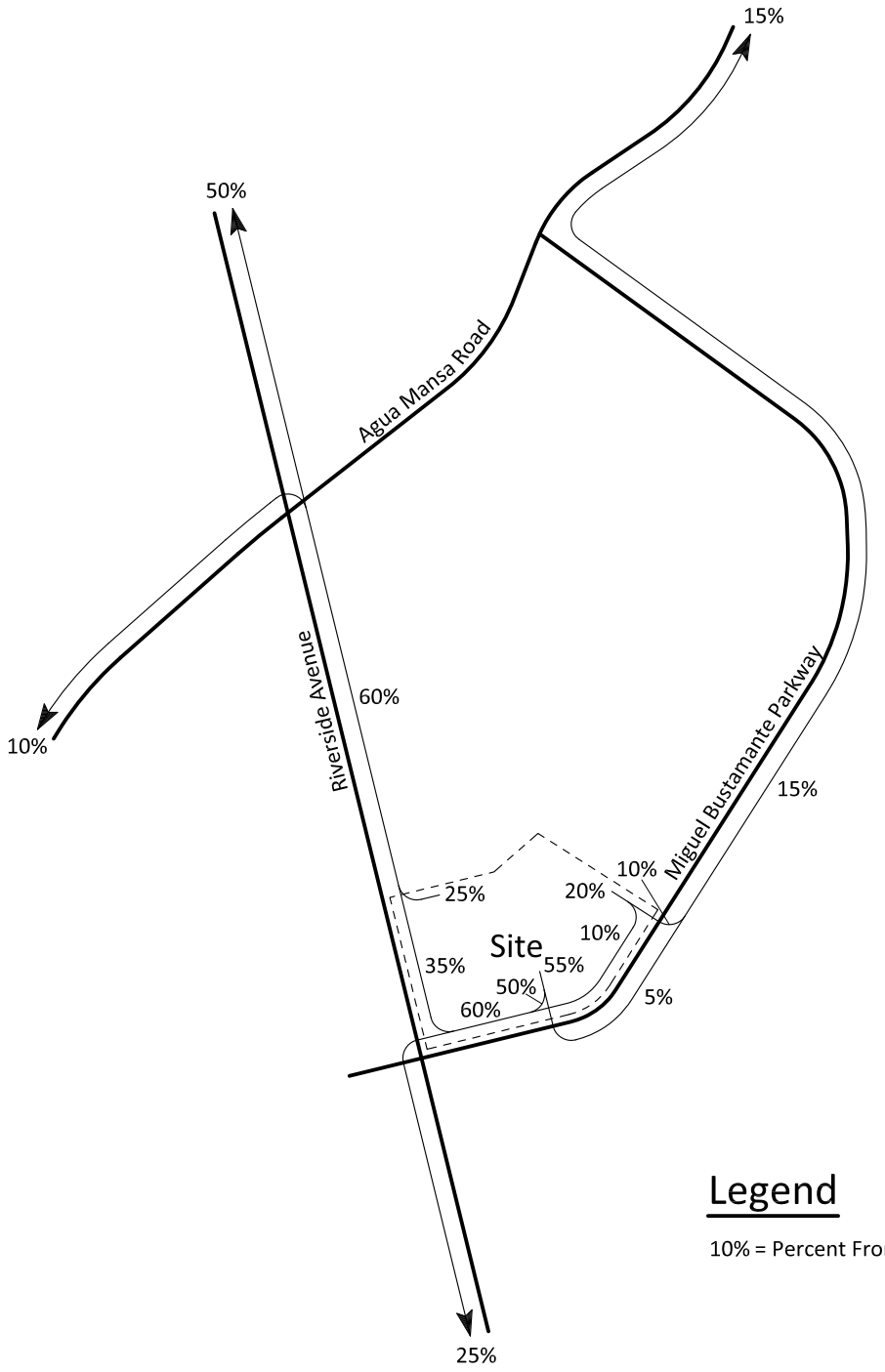
NTS

5450/10

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 11
Project Outhbound Trip Distribution - Trucks



Legend

10% = Percent From Project

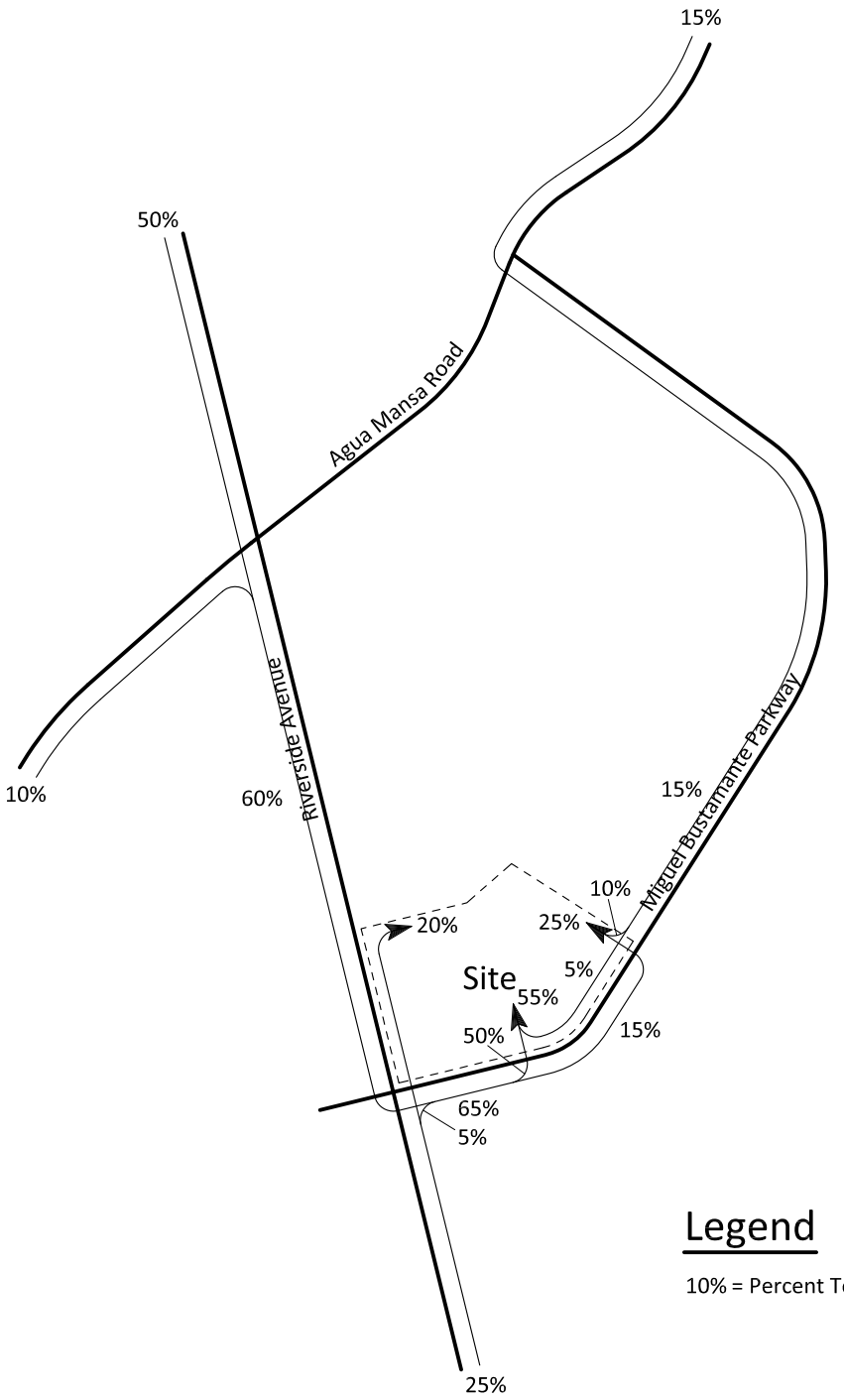
NTS

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

5450/11

Figure 12
Project Inbound Trip Distribution - Trucks



Legend

10% = Percent To Project

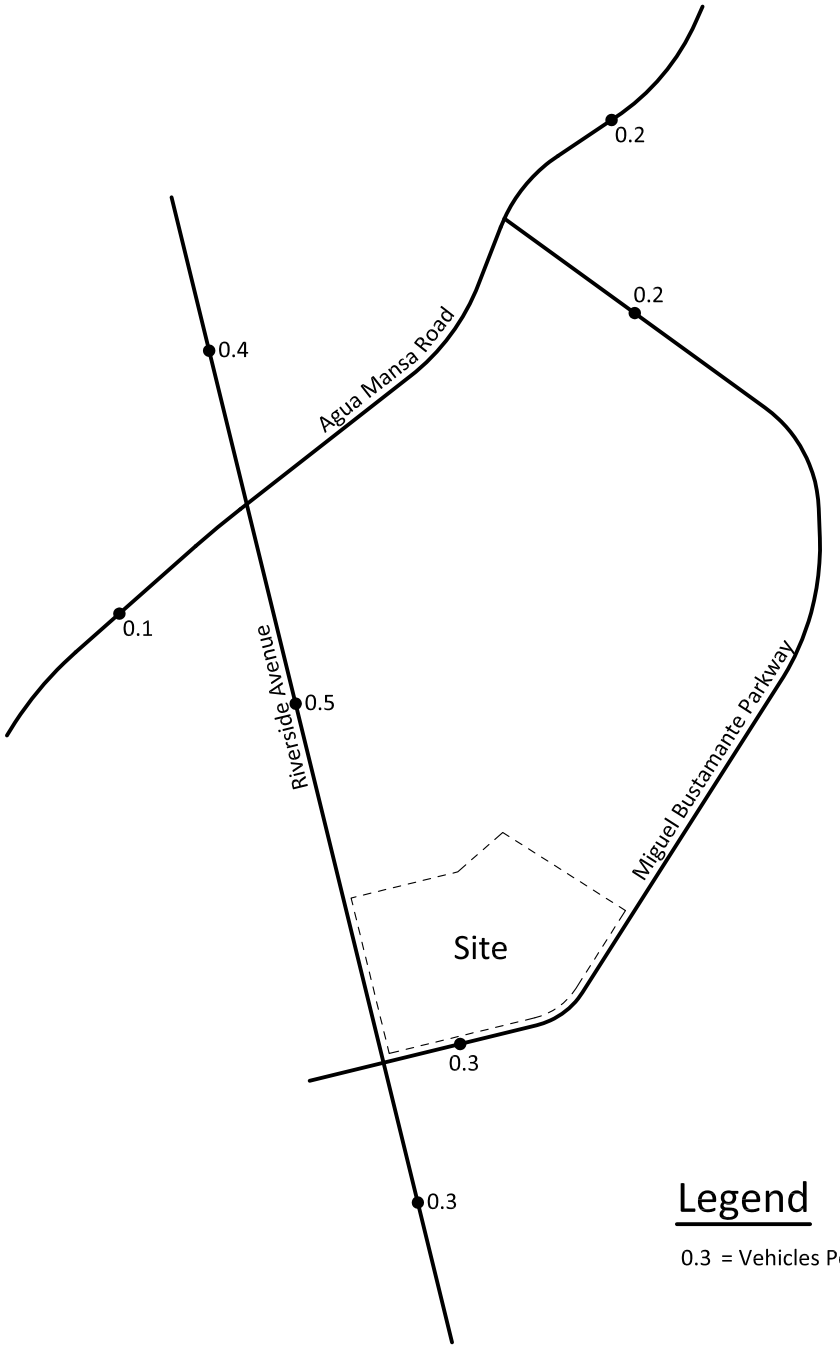
NTS

5450/12

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 13
Project Average Daily Traffic Volumes



Legend

0.3 = Vehicles Per Day (1,000's)

N

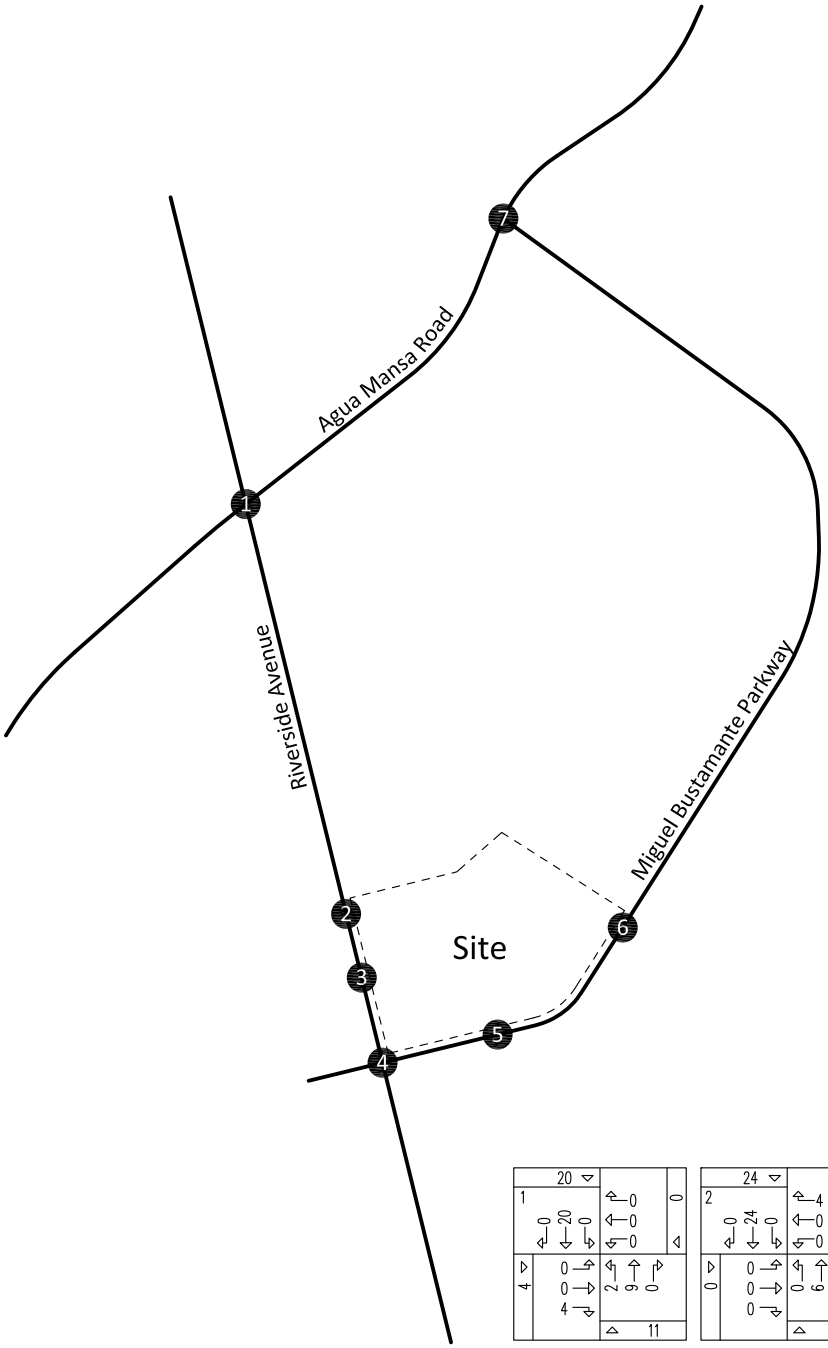
NTS

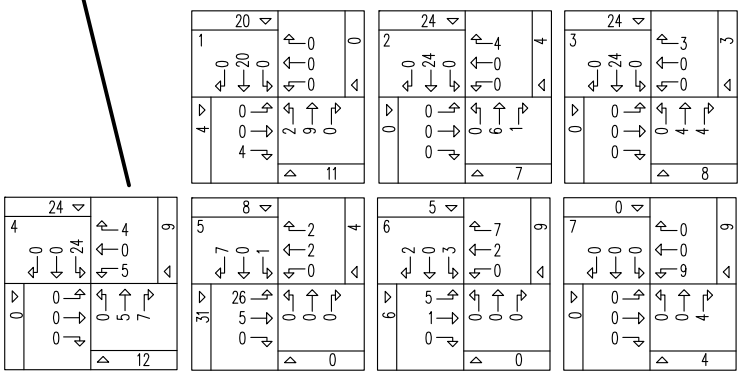
5450/13

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 14
Project Morning Peak Hour Intersection Turning Movement Volumes





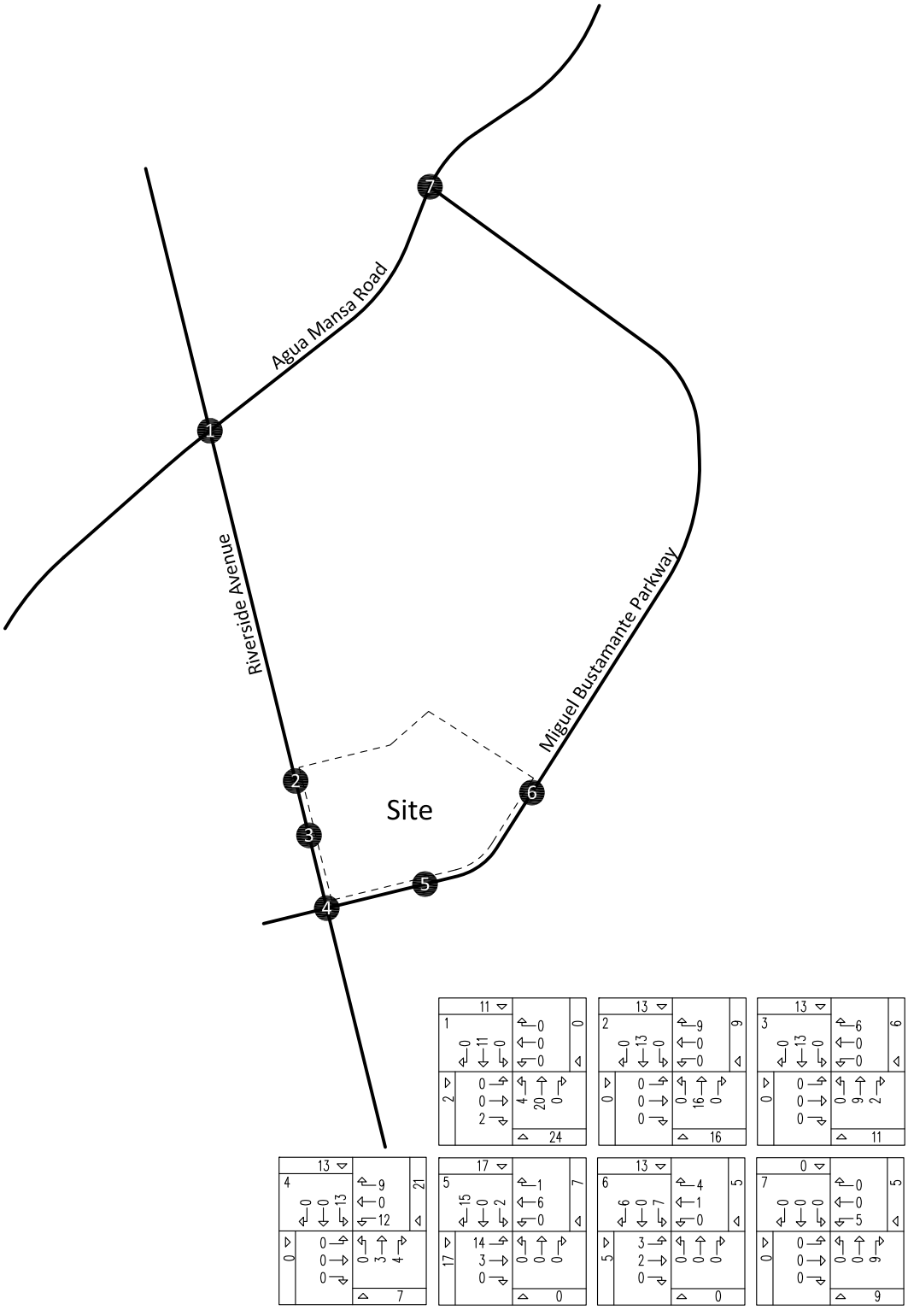
NTS

5450/14

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 15
Project Evening Peak Hour Intersection Turning Movement Volumes

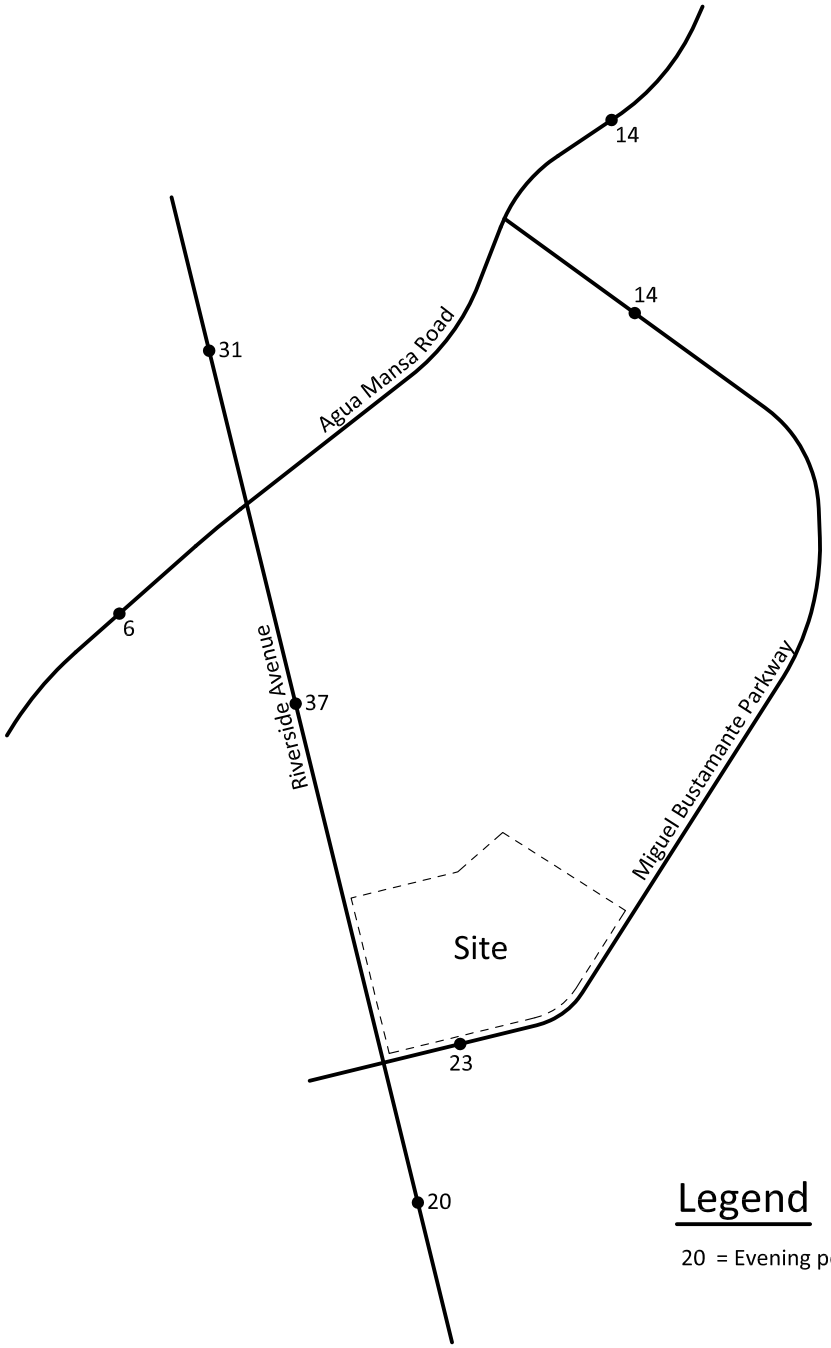


5450/15

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 16
Project Traffic Contribution Test Volumes



5450/16

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

IV. Future Conditions

A. Future Volumes

As described within Section I.C., the Year 2035 average daily traffic volume forecasts with the project are developed using a growth increment process based on volumes predicted by the SBTAM traffic model Year 2008 and Year 2035 traffic models. The growth increment for Year 2035 on each roadway segment is the increase in SBTAM traffic model volumes from existing Year 2013 to Year 2035. The final Year 2035 roadway segment volume used for analysis purposes is then determined by adding the Year 2035 growth increment volume to the existing counted volume.

The Opening Year (2016) traffic projections have been interpolated between Year 2035 traffic volumes and existing traffic volumes utilizing a portion of the growth increment (see Section I.C.). Project traffic volumes for all future projections were estimated using the manual approach.

In order to provide a "conservative" analysis, other development within the area have been obtained from the City of Colton, Rialto, and Riverside staffs. The other development list has been brought up to date by eliminating projects that are currently developed. The remaining developments have been added to Opening Year (2016) traffic volumes.

It should be noted that for Year 2035 traffic conditions, the Agua Mansa Commerce Center Project (Traffic Analysis Zone 7) has been added to the Year 2035 traffic volumes. The purpose of this inclusion is to delineate potential mitigation measures inclusive of this project relative to the overall Agua Mansa Commerce Center Project.

Table 4 lists the proposed land uses for the other development (see Figure 17). Table 4 shows the daily and peak hour vehicle trips generated by the other development in the study area. Figures 18 to 23 contain the directional distributions and assignment of the other development traffic.

Figure 24 shows the weekday average daily traffic volumes that can be expected for the other development traffic conditions. Other development morning and evening peak hour intersection turning movement volumes are shown on Figures 25 and 26, respectively.

1. Existing Plus Project

The average daily traffic volumes for Existing Plus Project traffic conditions have been determined. Existing Plus Project average daily traffic volumes are shown on Figure 27.

2. Opening Year (2016) Without Project

The average daily traffic volumes for Opening Year (2016) Without Project traffic conditions have been determined as described above using the growth interpolation

process (see Section I.C). Opening Year (2016) Without Project average daily traffic volumes are shown on Figure 28.

3. Opening Year (2016) With Project

The average daily traffic volumes for Opening Year (2016) With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C). Opening Year (2016) With Project average daily traffic volumes are shown on Figure 29.

4. Year 2035 Without Project

The average daily traffic volumes for Year 2035 Without Project traffic conditions have been determined as described above using the growth increment process (see Section I.C). Year 2035 Without Project average daily traffic volumes are shown on Figure 30.

5. Year 2035 With Project

The average daily traffic volumes for Year 2035 With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C). Year 2035 With Project average daily traffic volumes are shown on Figure 31.

B. Future Level of Service

1. Existing Plus Project

The Existing Plus Project delay and Level of Service for the study area roadway network are shown in Table 3. Table 3 shows delay values based on the existing geometrics at the study area intersections. Existing Plus Project delay calculation worksheets are provided in Appendix E. Existing Plus Project morning and evening peak hour intersection turning movement volumes are shown on Figures 32 and 33, respectively.

For Existing Plus Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

2. Opening Year (2016) Without Project

The Opening Year (2016) delay and Level of Service for the study area roadway network without the proposed project are shown in Table 5. Table 5 shows delay values based on existing geometrics at the study area intersections. Opening Year (2016) Without Project delay calculation worksheets are provided in Appendix E. Opening Year (2016) Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 34 and 35, respectively.

For Opening Year (2016) Without Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

3. Opening Year (2016) With Project

The Opening Year (2016) delay and Level of Service for the study area roadway network with the proposed project are shown in Table 6. Table 6 shows delay values based on existing geometrics at the study area intersections. Opening Year (2016) With Project delay calculation worksheets are provided in Appendix E. Opening Year (2016) With Project morning and evening peak hour intersection turning movement volumes are shown on Figures 36 and 37, respectively.

For Opening Year (2016) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

4. Year 2035 Without Project

The Year 2035 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 7. Table 7 shows delay values based on the geometrics at the study area intersections without and with improvements. Year 2035 Without Project delay calculation worksheets are provided in Appendix E. Year 2035 Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 38 and 39, respectively.

For Year 2035 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Riverside Avenue (NS) at:
- Agua Mansa Road (EW) - #1
- Project North Access (EW) - #2
- Miguel Bustamante Parkway (EW) - #4

As shown in Table 7, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 Without Project traffic conditions, with improvements.

5. Year 2035 With Project

The Year 2035 delay and Level of Service for the study area roadway network with the proposed project are shown in Table 8. Table 8 shows delay values based on the geometrics at the study area intersections, without and with improvements. Year 2035 With Project delay calculation worksheets are provided in Appendix E. Year 2035 With Project morning and evening peak hour intersection turning movement volumes are shown on Figures 40 and 41, respectively.

For Year 2035 With Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Riverside Avenue (NS) at:

Agua Mansa Road (EW) - #1

Miguel Bustamante Parkway (EW) - #4

As shown in Table 8, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 With Project traffic conditions, with improvements.

Table 3

Existing Plus Project Intersection Delay and Level of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	32.3-C	33.6-C
Project North Access (EW) - #2	CSS	0	1.5	0.5	0	2	0	0	0	0	0	0	1	11.9-B	12.3-B
Project South Access (EW) - #3	**CSS**	0	1.5	0.5	0	2	0	0	0	0	0	0	**1**	11.7-B	12.1-B
Miguel Bustamante Parkway (EW) - #4	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	38.5-D	40.3-D
Project West Access (NS) at:															
Miguel Bustamante Parkway (EW) - #5	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	8.5-A	8.5-A
Project East Access (NS) at:															
Miguel Bustamante Parkway (EW) - #6	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	8.7-A	8.7-A
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	12.3-B	15.5-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn; **1** = Improvement

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

Table 4

Other Development Trip Generation[1]

Traffic Analysis Zone	Name	Land Use	Quantity	Units[2]	Peak Hour						Daily
					Morning			Evening			
					Inbound	Outbound	Total	Inbound	Outbound	Total	
1	Scannel Properties	High-Cube Distribution Warehouse - Cars	320.000	TSF	20	8	28	10	20	30	428
		High-Cube Distribution Warehouse - Trucks			13	3	16	8	13	21	277
2	Crane	Light Industrial	20.800	TSF	17	2	19	18	2	20	145
	Riverside Avenue Warehouse Project	High-Cube Distribution Warehouse - Cars	300.773	TSF	19	7	26	10	19	29	402
		High-Cube Distribution Warehouse - Trucks			13	3	16	5	13	18	258
	PPD # 1966	Concrete Batch Plant	47.000	TSF	26	26	52	24	26	50	1,122
		Office	0.800	TSF	1	1	2	1	1	2	9
3	El Rivino	High-Cube Distribution Warehouse - Cars	269.000	TSF	17	6	23	9	17	26	360
		High-Cube Distribution Warehouse - Trucks			13	3	16	5	13	18	234
		Light Industrial	80.000	TSF	86	12	98	12	93	105	748
	Oakmont El Rivino	High-Cube Distribution Warehouse - Cars	3,659.000	TSF	233	87	320	116	233	349	4,891
		High-Cube Distribution Warehouse - Trucks			151	58	209	76	151	227	3,164
4	Tract Map 34908	Single-Family Detached Residential	15	DU	3	8	11	9	6	15	143
	Family Dollar Store	Dollar Store	8.039	TSF	18	12	30	27	27	54	515
5	Agua Mansa Logistics Center	High-Cube Distribution Warehouse - Cars	808.500	TSF	51	19	70	26	51	77	1,081
		High-Cube Distribution Warehouse - Trucks			33	13	46	18	33	51	698
6	Agua Mansa Commerce Center	High-Cube Distribution Warehouse - Cars	899.103	TSF	57	21	78	29	57	86	1,202
		High-Cube Distribution Warehouse - Trucks			36	13	49	18	38	56	776
Total					807	302	1,109	421	813	1,234	16,453

[1] Source: Cities of Colton, Rialto, and Riverside Development Lists.

[2] TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acre; ST = Student

Table 5

Opening Year (2016) Without Project Intersection Delay and Level of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	36.6-D	37.7-D
Project North Access (EW) - #2	CSS	0	1.5	0.5	1	2	0	0	0	0	0.5	0	0.5	16.1-C	22.2-C
Miguel Bustamante Parkway (EW) - #4	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	41.2-D	46.3-D
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	13.0-B	16.7-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn **1** = Improvement

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection dela and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

Table 6

Opening Year (2016) With Project Intersection Delay and Level of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	37.0-D	38.1-D
Project North Access (EW) - #2	CSS	0	1.5	0.5	0	2	0	0	0	0	0	0	1	12.6-B	13.4-B
Project South Access (EW) - #3	**CSS**	0	1.5	0.5	0	2	0	0	0	0	0	0	**1**	12.3-B	13.2-B
Miguel Bustamante Parkway (EW) - #4	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	41.8-D	46.3-D
Project West Access (NS) at:															
Miguel Bustamante Parkway (EW) - #5	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	8.7-A	8.8-A
Project East Access (NS) at:															
Miguel Bustamante Parkway (EW) - #6	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	9.0-A	8.8-A
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	13.7-B	17.1-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn **1** = Improvement

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

Table 7

Year 2035 Without Project Intersection Delay and Level of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1															
- Without Improvements	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	46.2-D	99.9-F[4]
- With Improvements	TS	1	2	**1**	1	2	1	1	**2**	1	1	1	1	52.2-D	45.7-D
Project North Access (EW) - #2															
- Without Improvements	CSS	0	1.5	0.5	1	2	0	0	0	0	0.5	0	0.5	19.8-C	58.3-F
- With Improvements	CSS	0	1.5	0.5	0	2	0	0	0	0	0	0	1	14.0-B	22.1-C
Miguel Bustamante Parkway (EW) - #4															
- Without Improvements	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	85.0-F	99.9-F
- With Improvements[5]	TS	1	1.5	0.5	1	2	1>>	1	0.5	0.5	1	0.5	0.5	14.2-B	12.2-B
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	10.0-A	14.4-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn

[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

[5] Improvements include: traffic signal modification and restriping of eastbound and westbound geometrics from a shared left/thru lane and right turn lane to a left turn lane and shared thru/right turn lane.

Table 8

Year 2035 With Project Intersection Delay and Level of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Riverside Avenue (NS) at:															
Agua Mansa Road (EW) - #1															
- Without Improvements	TS	1	1.5	0.5	1	2	1	1	1	1	1	1	1	46.9-D	99.9-F[4]
- With Improvements	TS	1	2	**1**	1	2	1	1	**2**	1	1	1	1	46.4-D	53.5-D
Project North Access (EW) - #2	CSS	0	1.5	0.5	0	2	0	0	0	0	0	0	1	14.1-B	23.2-C
Project South Access (EW) - #3	**CSS**	0	1.5	0.5	0	2	0	0	0	0	0	0	**1**	13.9-B	22.0-C
Miguel Bustamante Parkway (EW) - #4															
- Without Improvements	TS	1	1.5	0.5	1	2	1>>	0.5	0.5	1	0.5	0.5	1	85.0-F	99.9-F
- With Improvements[5]	TS	1	1.5	0.5	1	2	1>>	1	0.5	0.5	1	0.5	0.5	12.7-B	14.6-B
Project West Access (NS) at:															
Miguel Bustamante Parkway (EW) - #5	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	8.7-A	8.8-A
Project East Access (NS) at:															
Miguel Bustamante Parkway (EW) - #6	**CSS**	0	0	0	**0.5**	0	**0.5**	0.5	0.5	0	0	0.5	0.5	9.2-A	9.0-A
Miguel Bustamante Parkway (NS) at:															
Agua Mansa Road (EW) - #7	TS	1	0	1	0	0	0	0	1	d	1	1	0	10.4-B	14.7-B

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = De Facto Right Turn**1** = Improvement

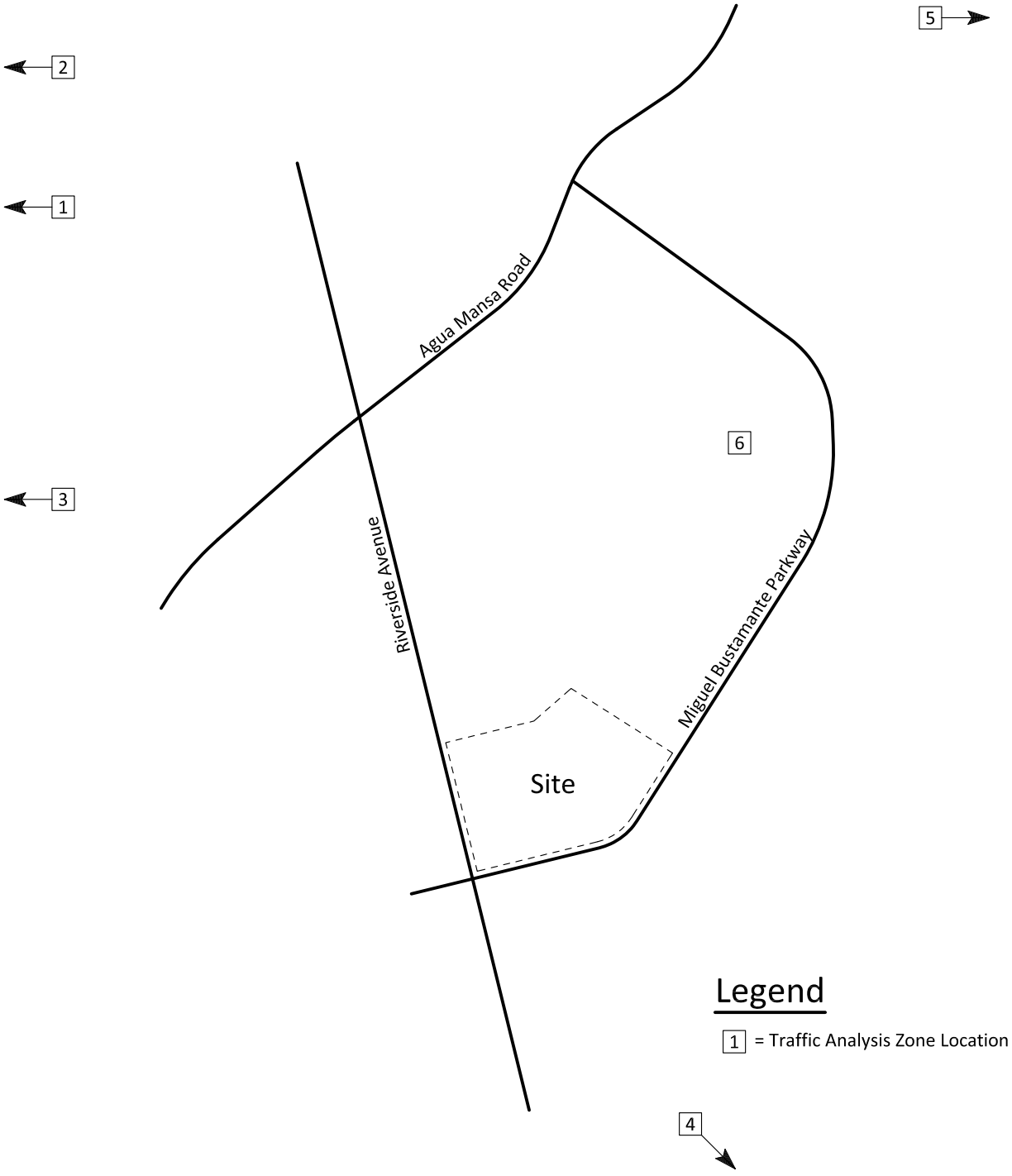
[2] Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

[4] 99.9-F = Delay High, Intersection Unstable, Level of Service F.

[5] Improvements include: traffic signal modification and restriping of eastbound and westbound geometrics from a shared left/thru lane and right turn lane to a left turn lane and shared thru/right turn lane.

Figure 17
Other Development Traffic Analysis Zone Map

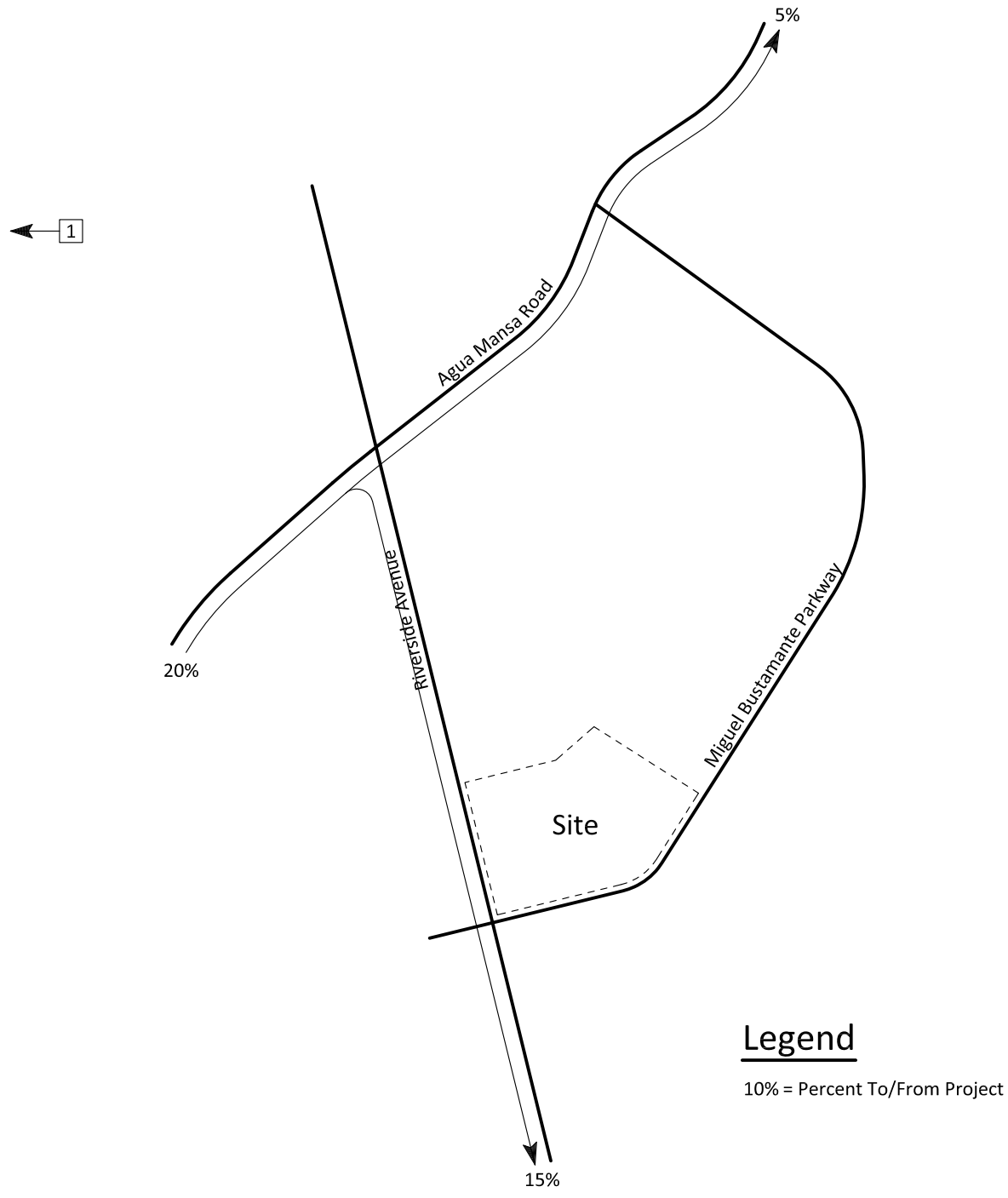


5450/17

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 18
Other Development Traffic Analysis Zone 1 Trip Distribution - Cars



Legend

10% = Percent To/From Project

N

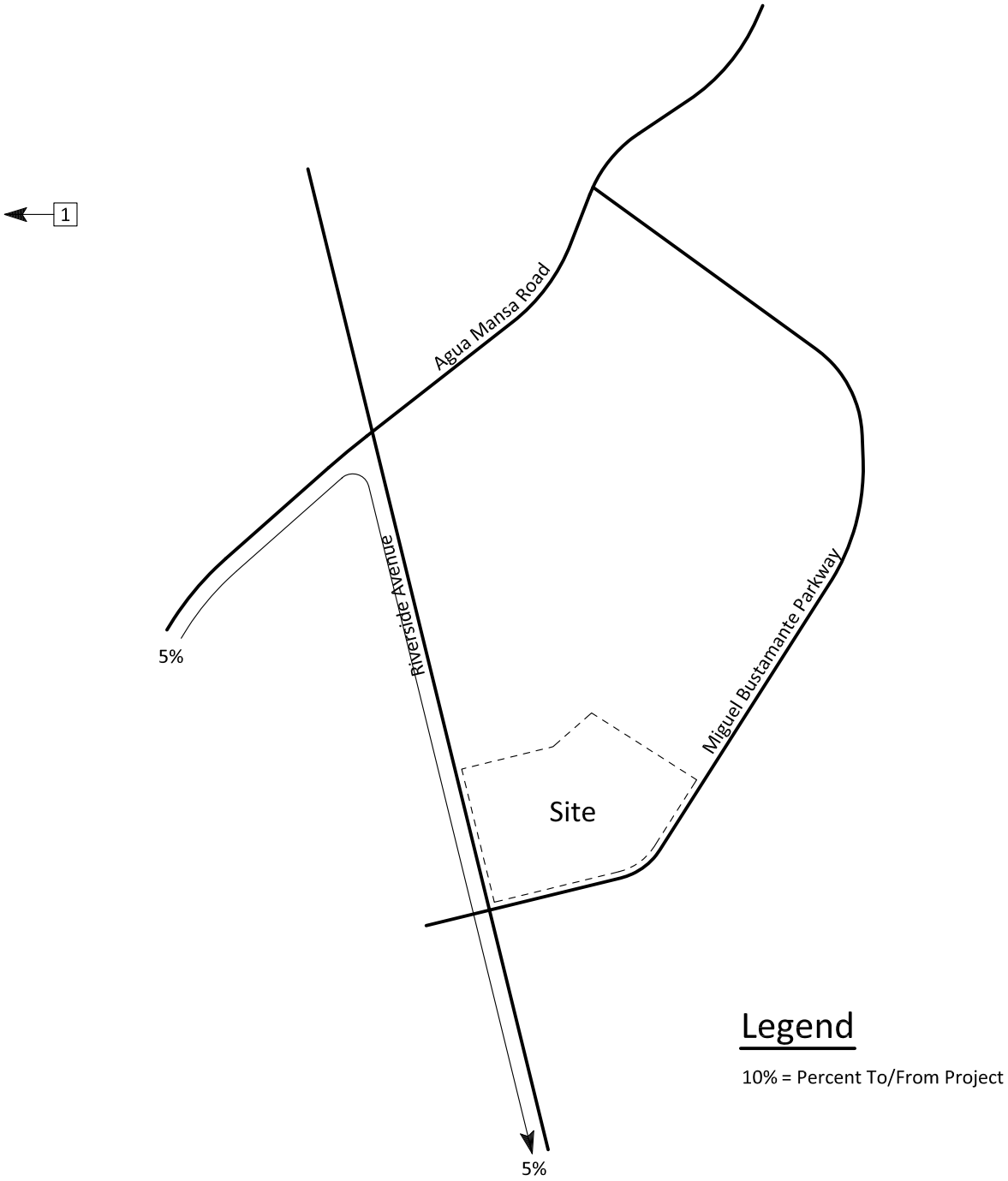
NTS

5450/18

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

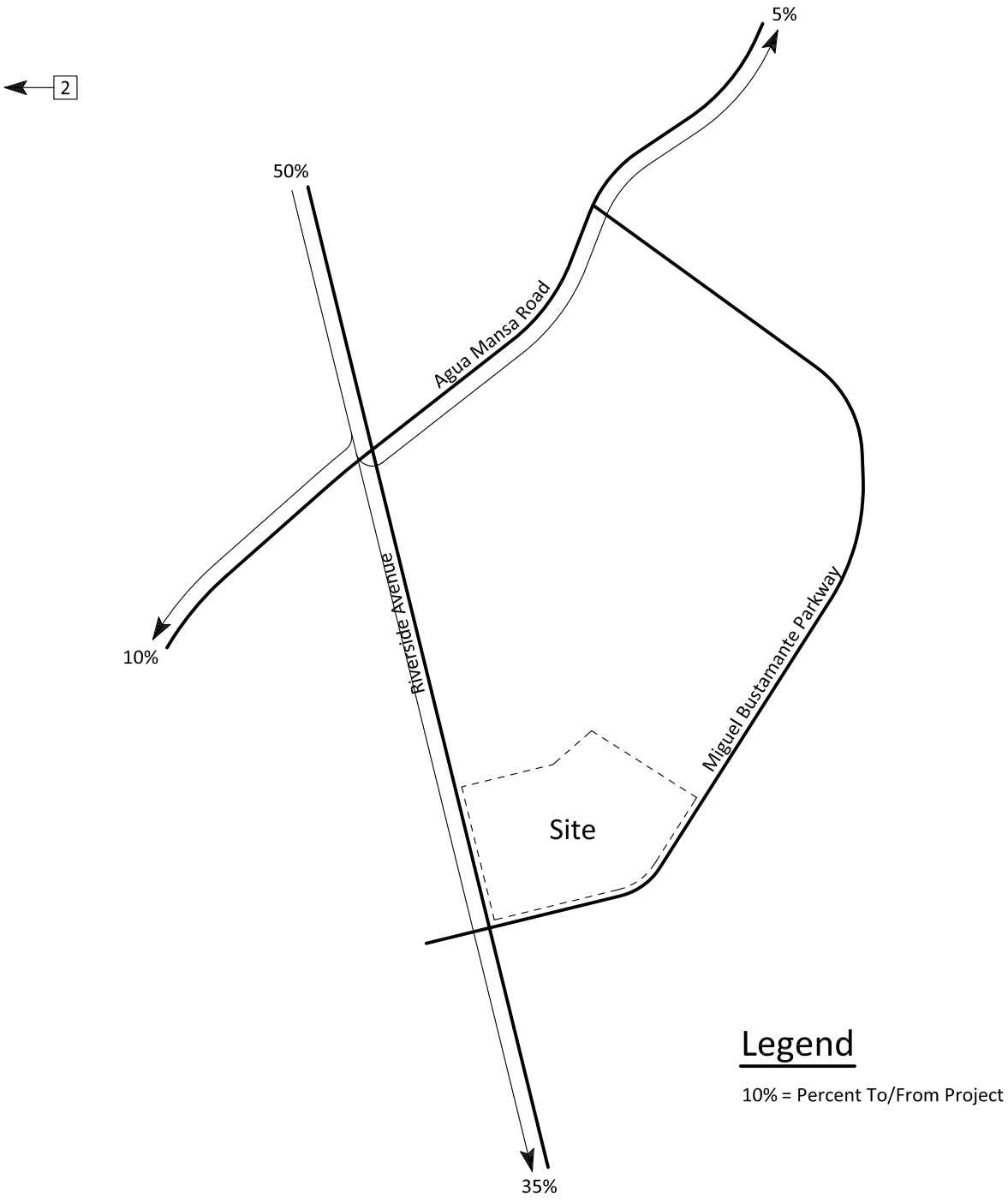
Figure 19
Other Development Traffic Analysis Zone 1 Trip Distribution - Trucks



5450/19

KUNZMAN ASSOCIATES, INC.
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 20
Other Development Traffic Analysis Zone 2 Trip Distribution

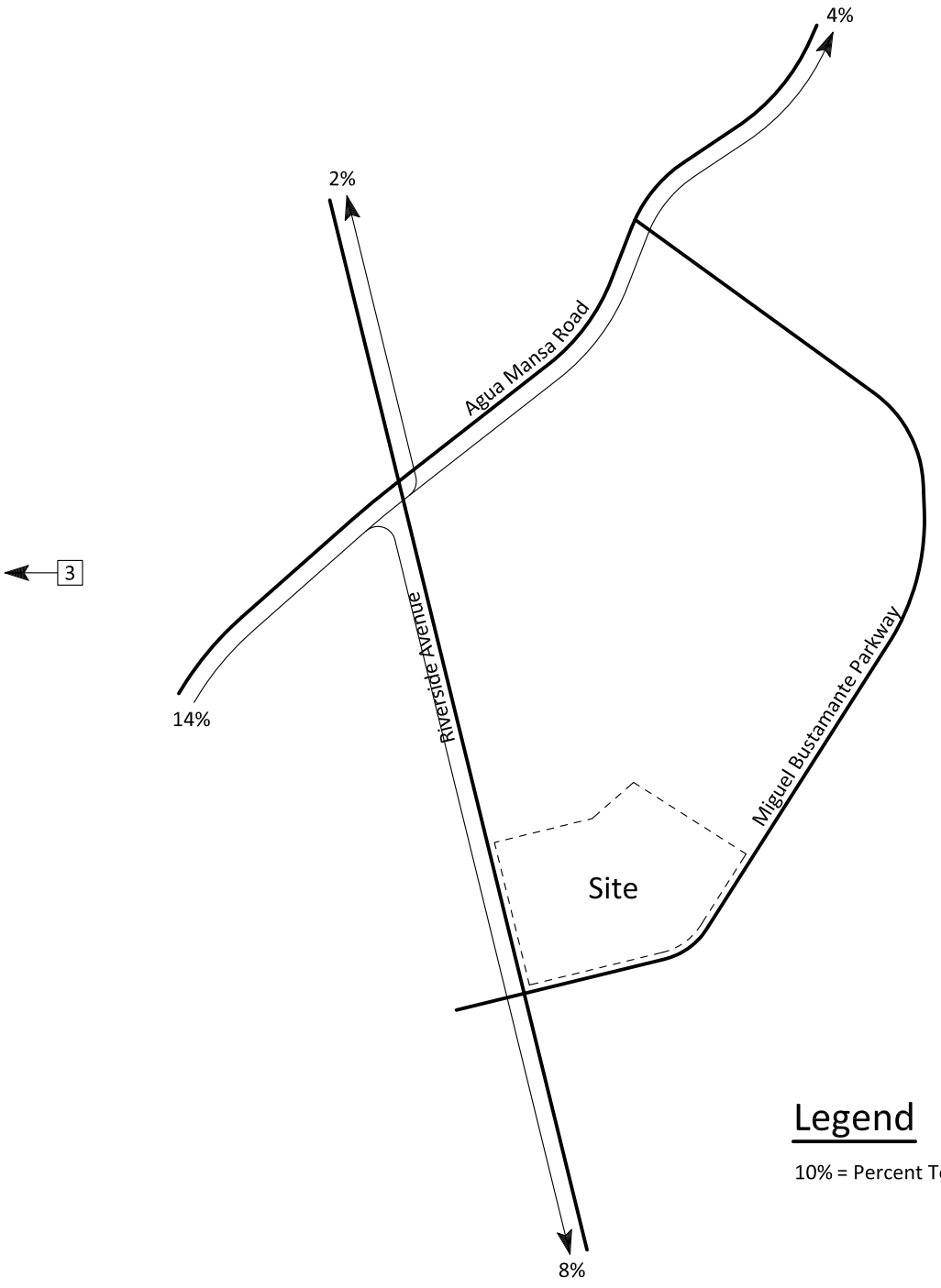


5450/20

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 21
Other Development Traffic Analysis Zone 3 Trip Distribution - Cars



Legend

10% = Percent To/From Project

N

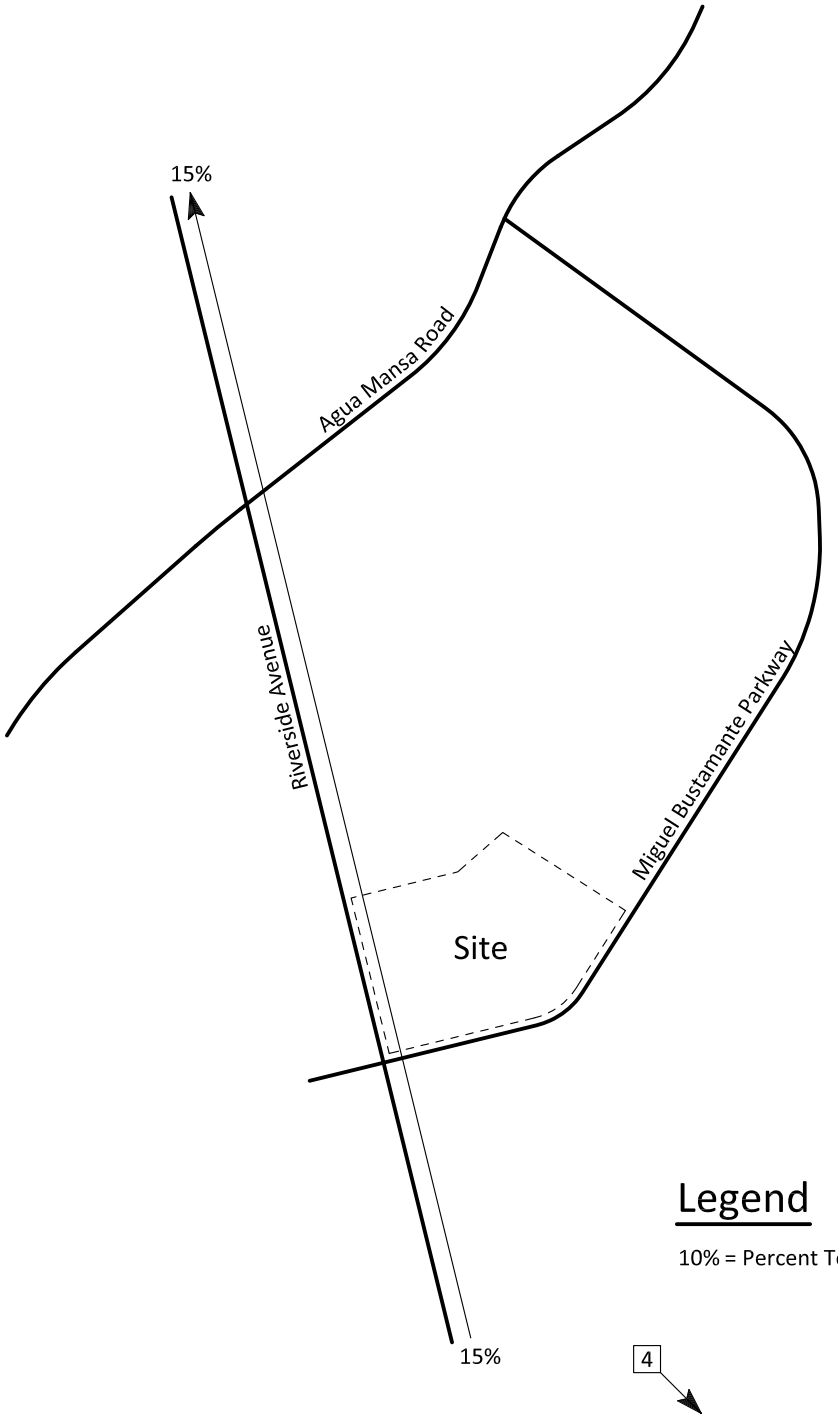
NTS

5450/21

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 22
Other Development Traffic Analysis Zone 4 Trip Distribution

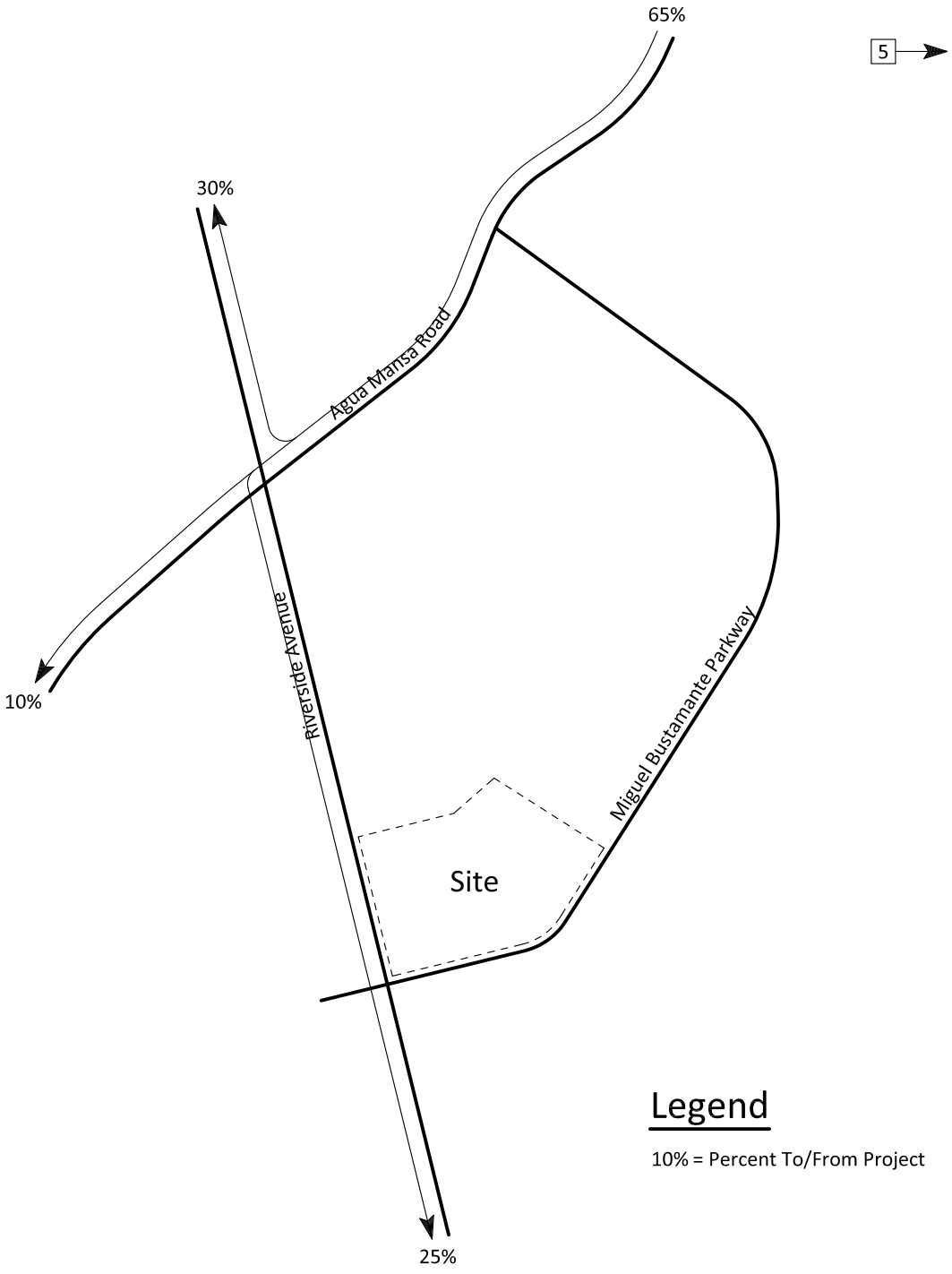


5450/22

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 23
Other Development Traffic Analysis Zone 5 Trip Distribution - Cars

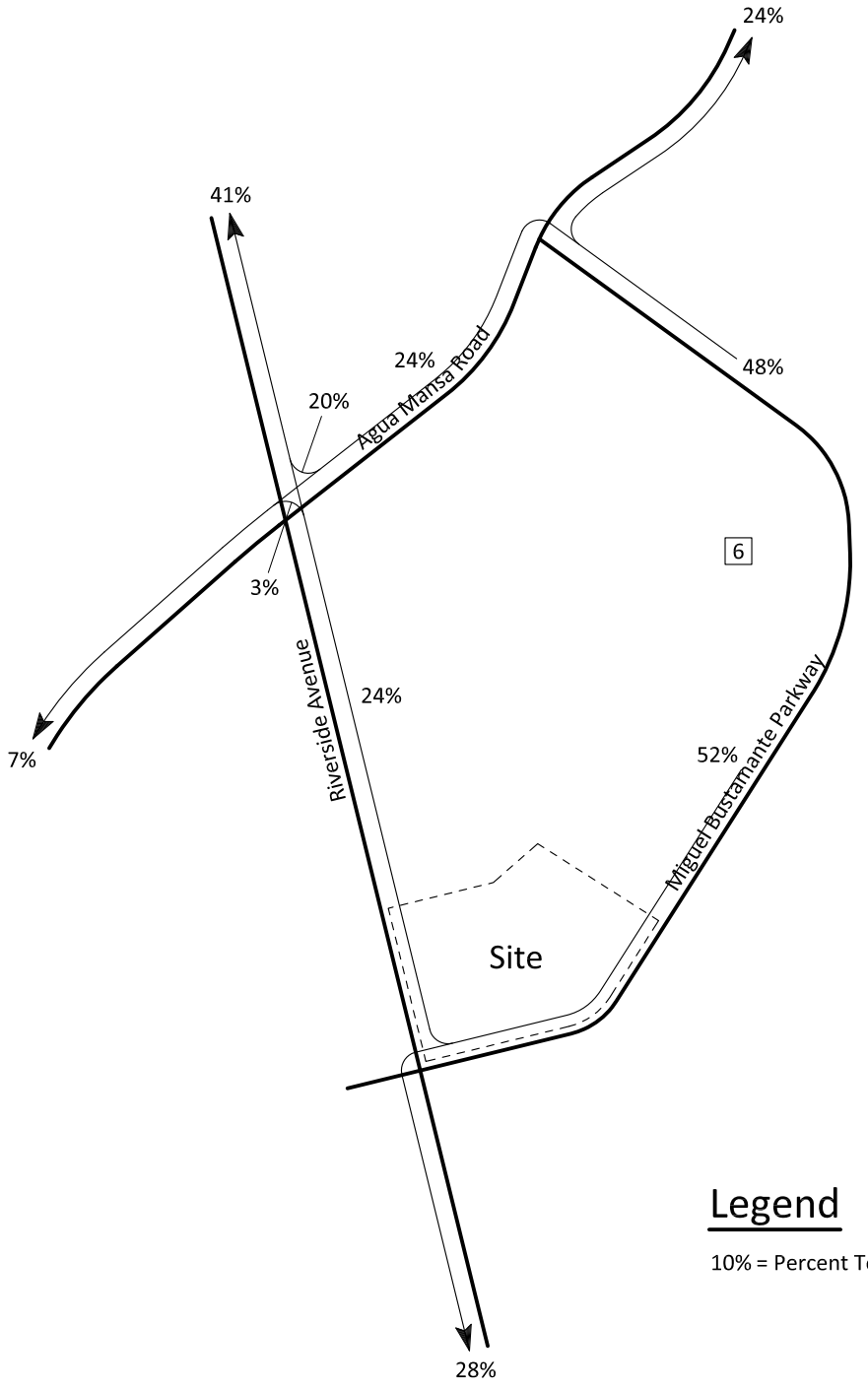


5450/23

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 24
Other Development Traffic Analysis Zone 6 Trip Distribution - Cars



Legend

10% = Percent To/From Project

N

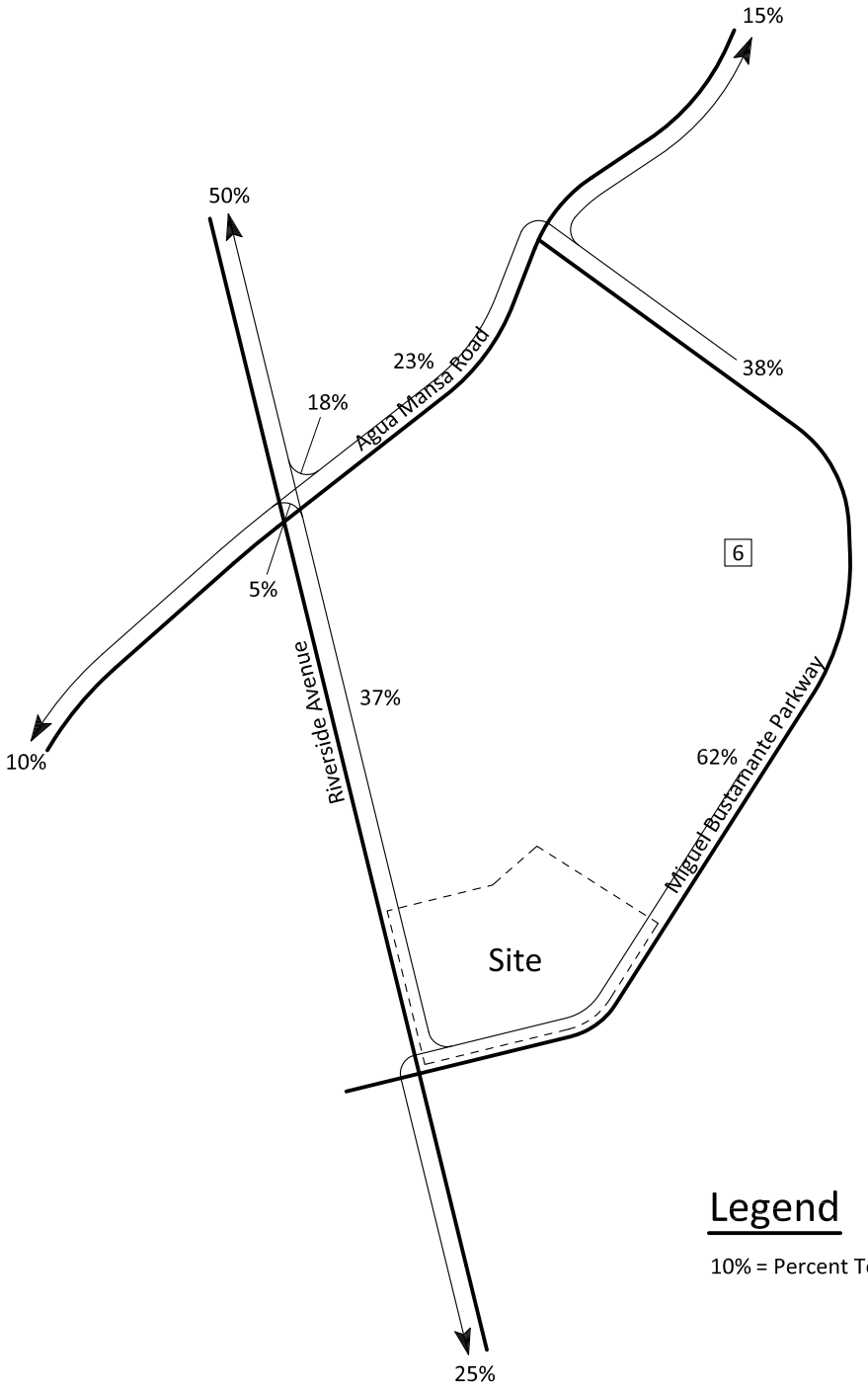
NTS

5450/24

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 25
Other Development Traffic Analysis Zone 6 Trip Distribution - Trucks



Legend

10% = Percent To/From Project

N

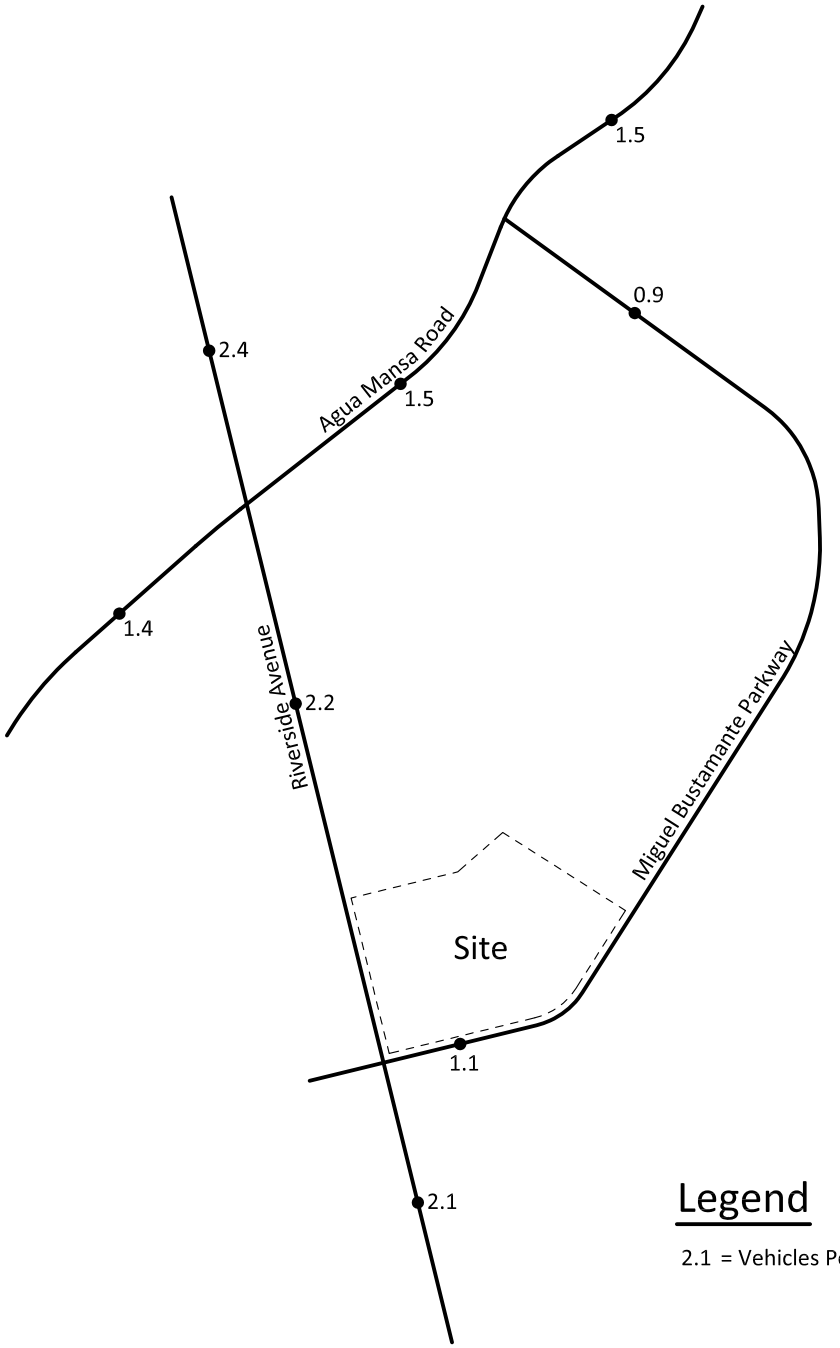
NTS

5450/25

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 26
Other Development Average Daily Traffic Volumes

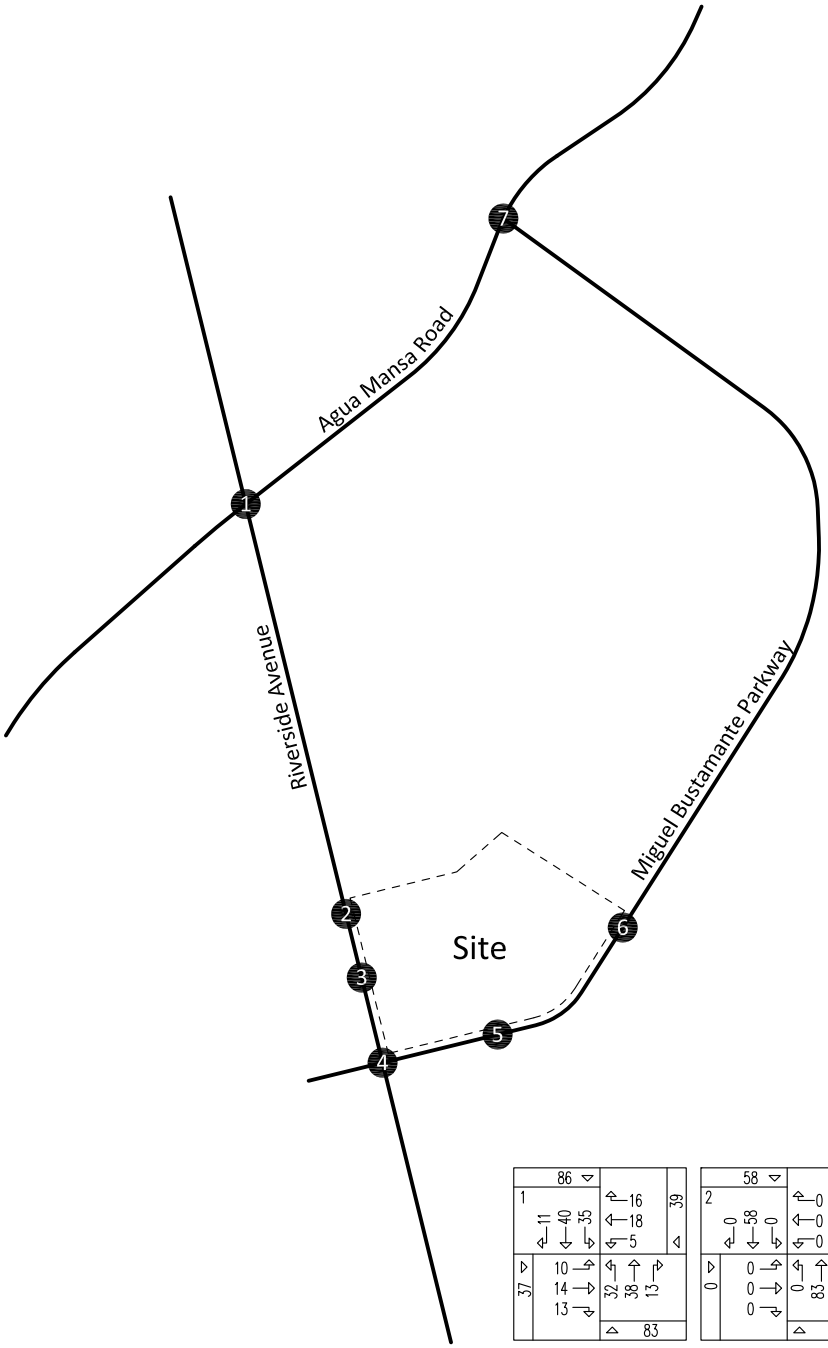


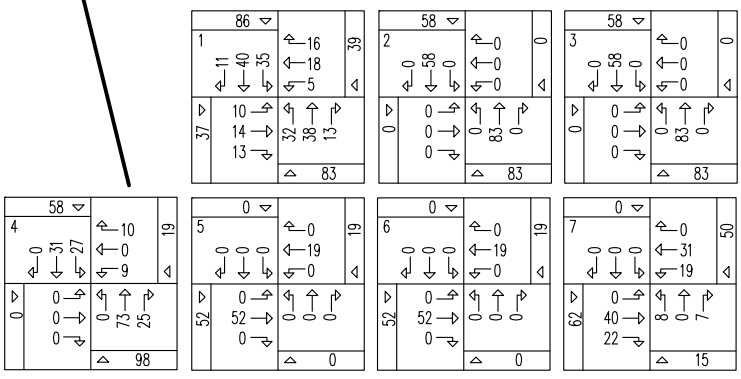
5450/26

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 27
Other Development
Morning Peak Hour Intersection Turning Movement Volumes





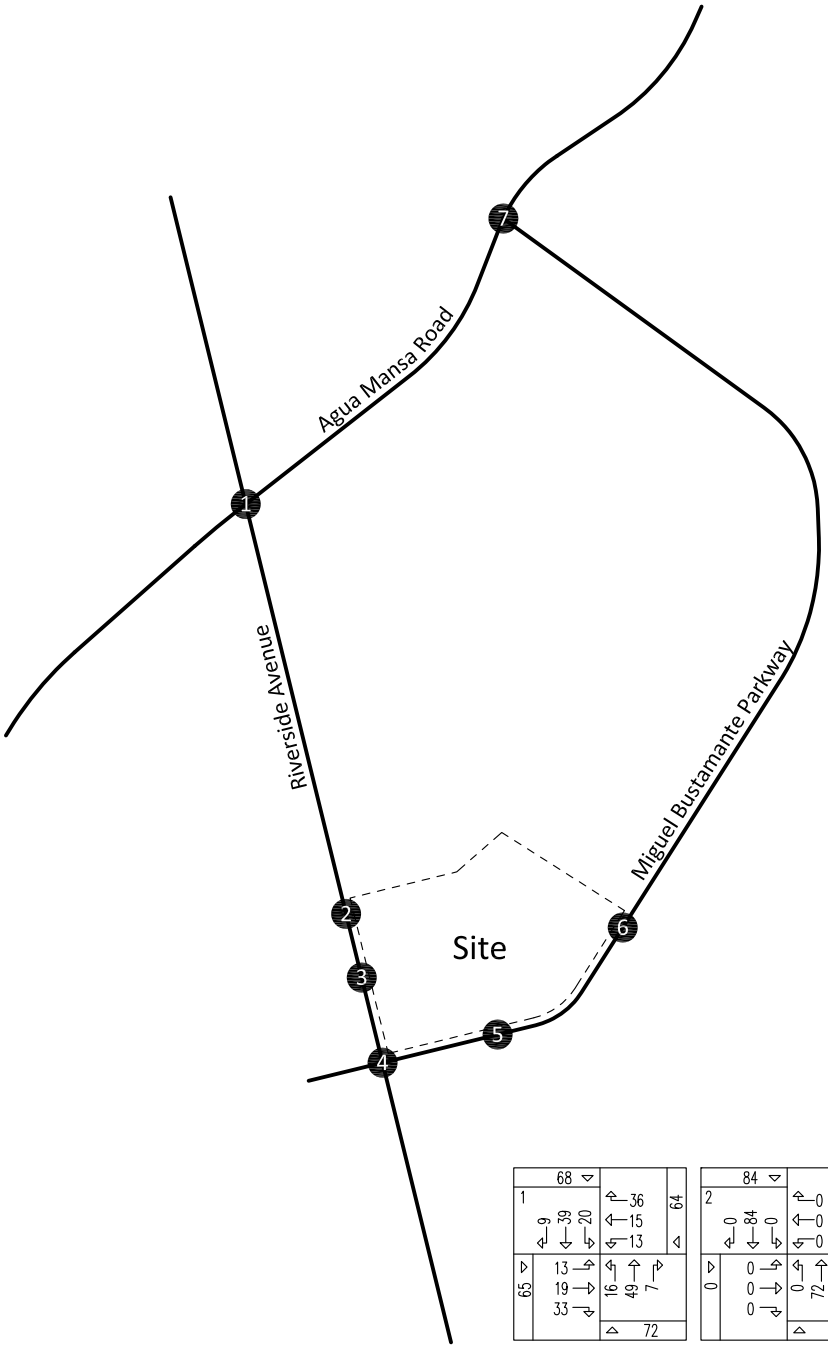
NTS

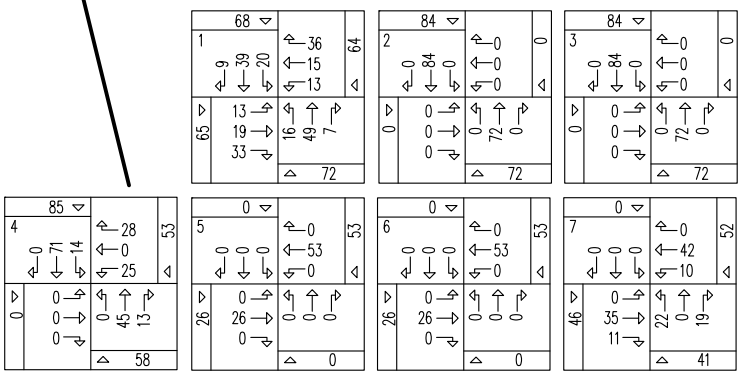
5450/27

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 28
Other Development
Evening Peak Hour Intersection Turning Movement Volumes





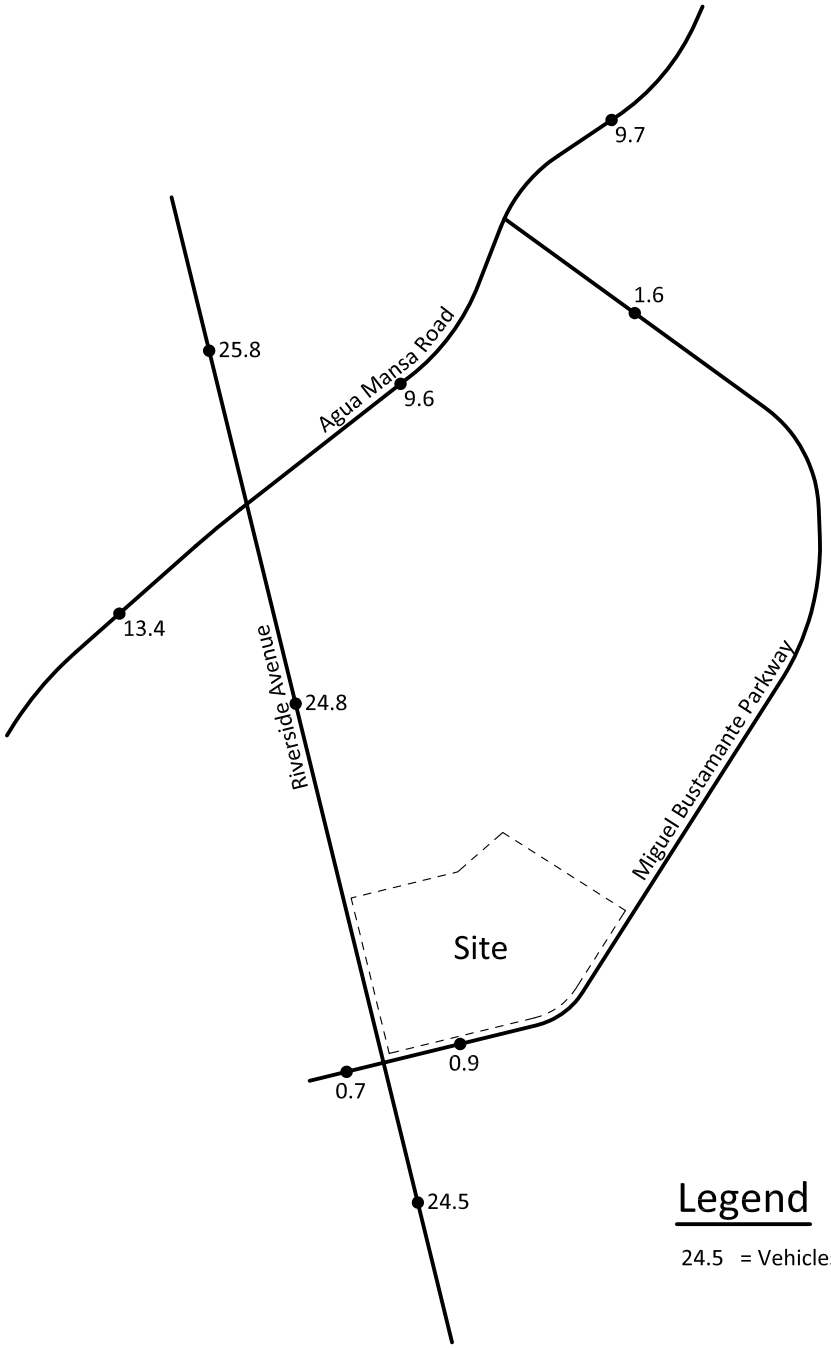
NTS

5450/28

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 29
Existing Plus Project Average Daily Traffic Volumes

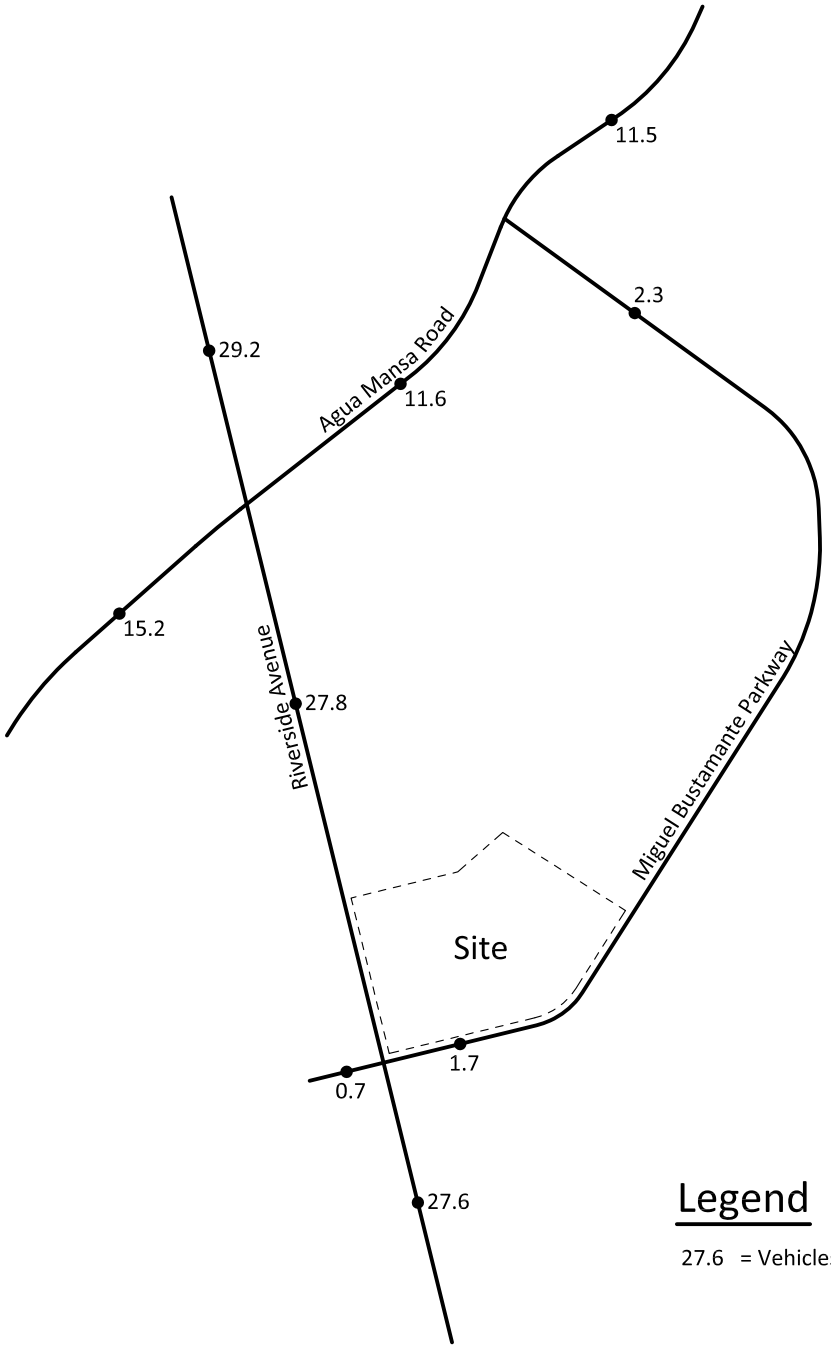


5450/29

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

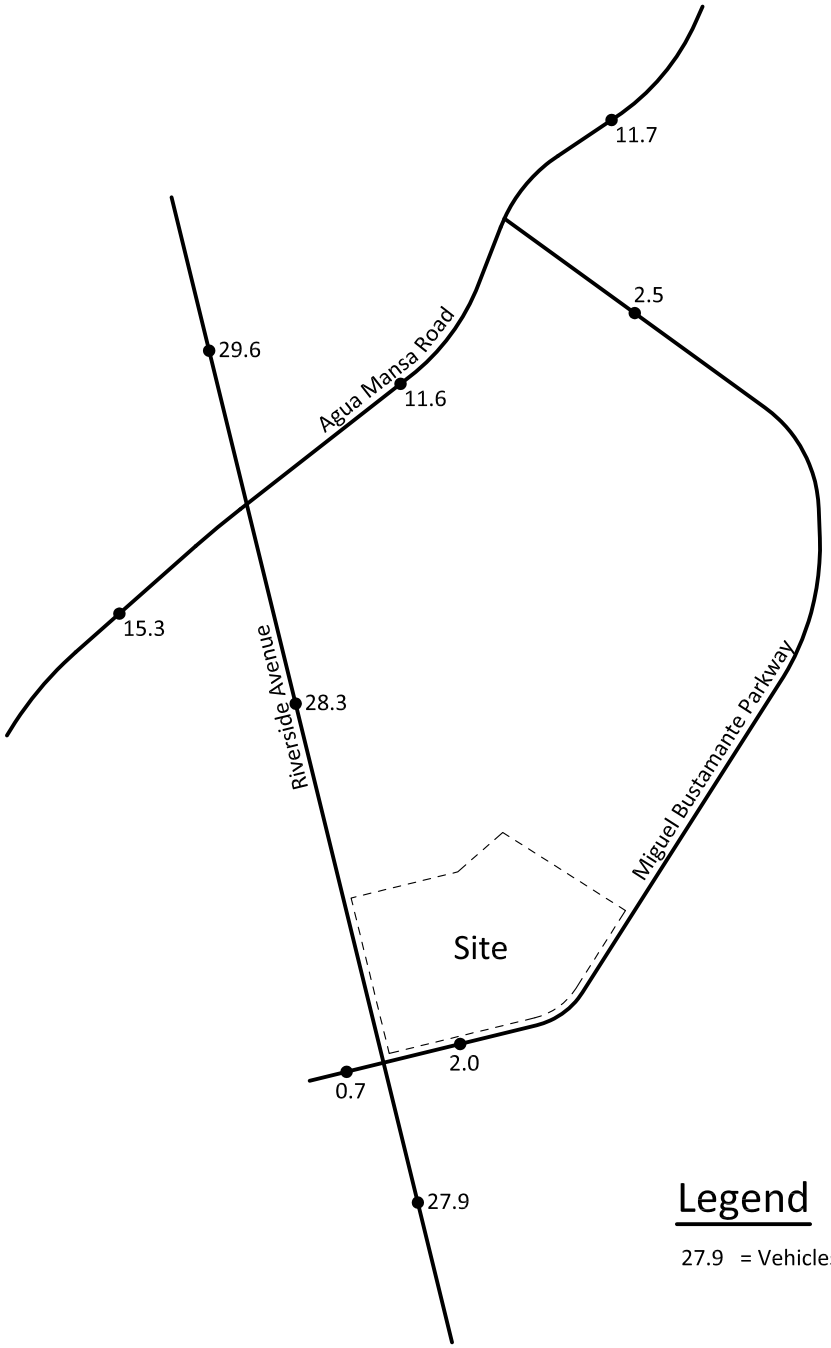
Figure 30
Opening Year (2016) Without Project Average Daily Traffic Volumes



5450/30

KUNZMAN ASSOCIATES, INC.
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 31
Opening Year (2016) With Project Average Daily Traffic Volumes

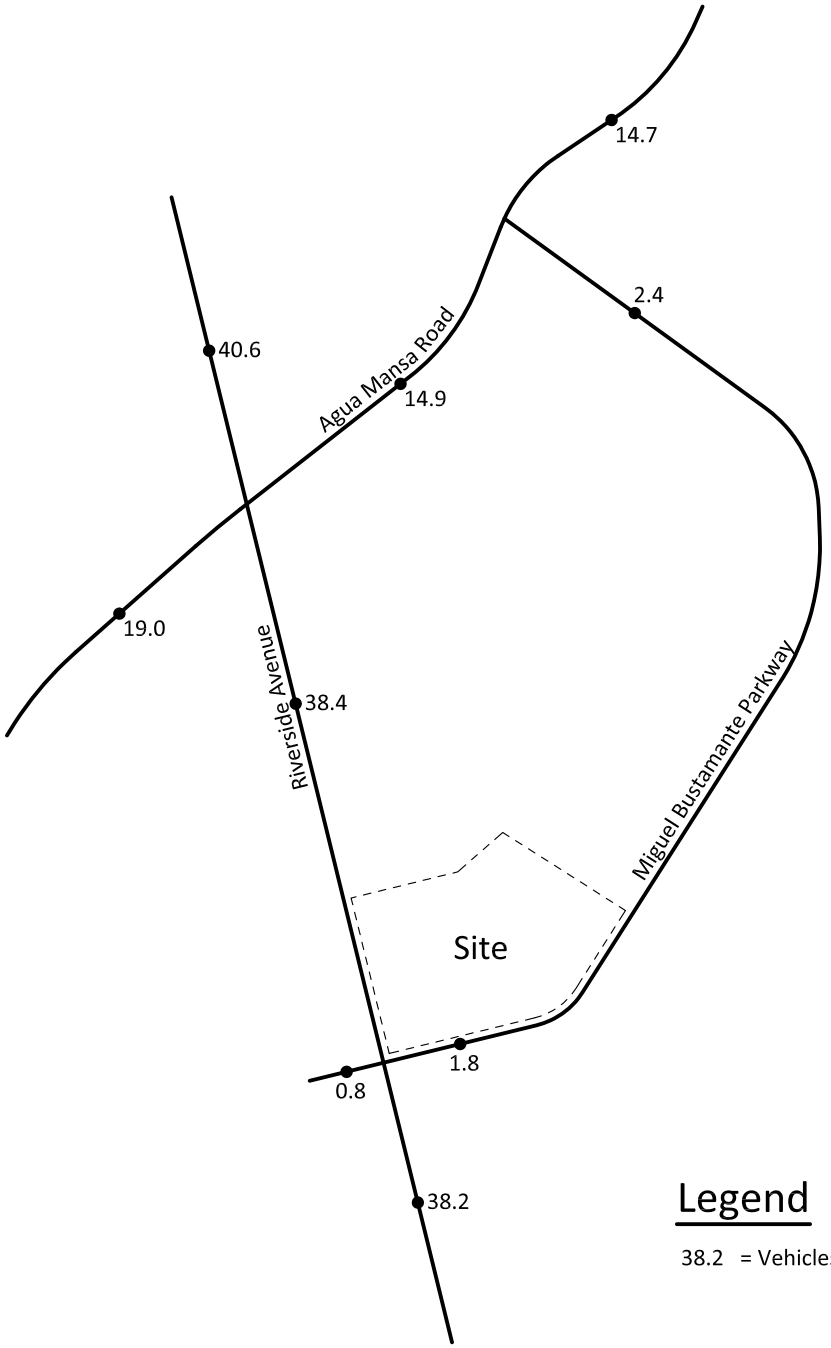


5450/31

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 32
Year 2035 Without Project Average Daily Traffic Volumes

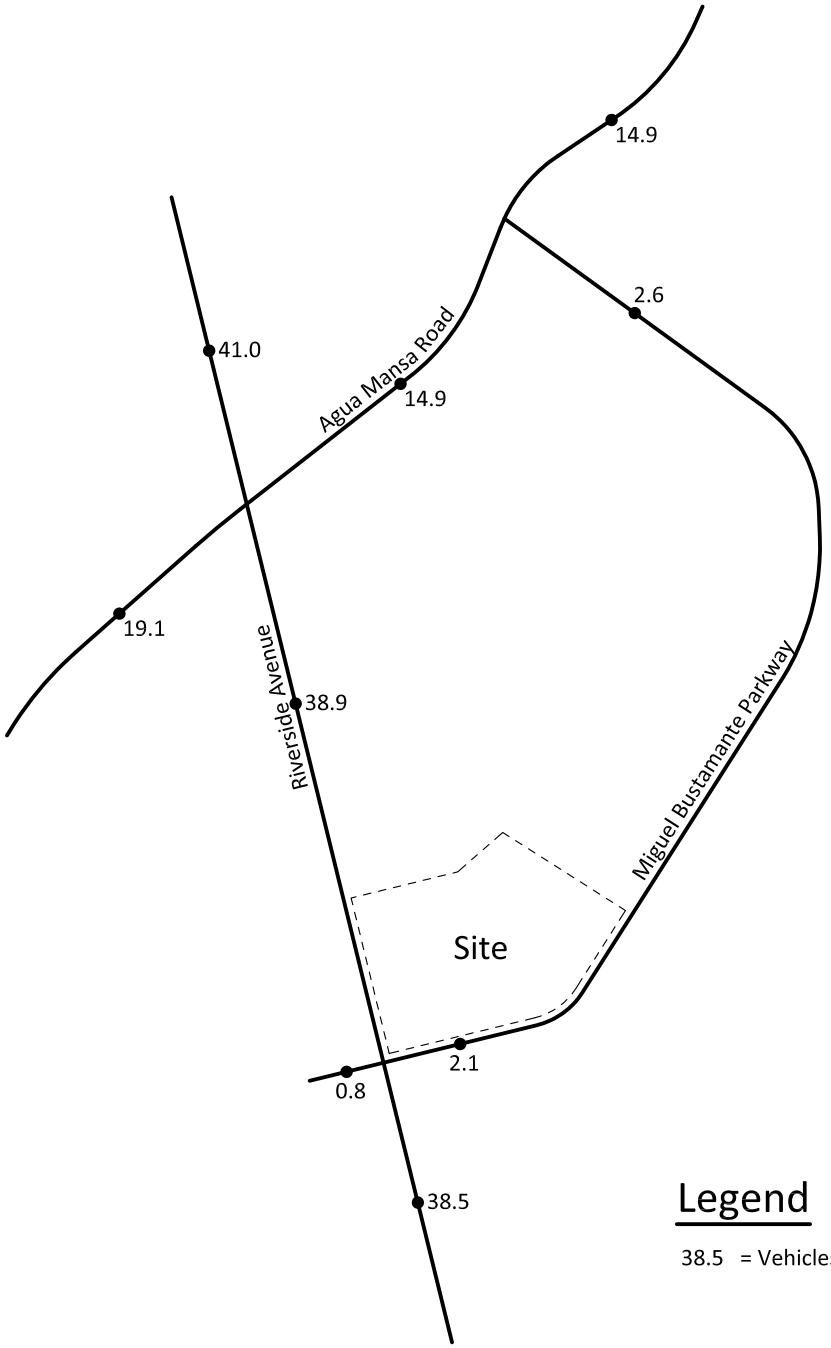


5450/32

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 33
Year 2035 With Project Average Daily Traffic Volumes

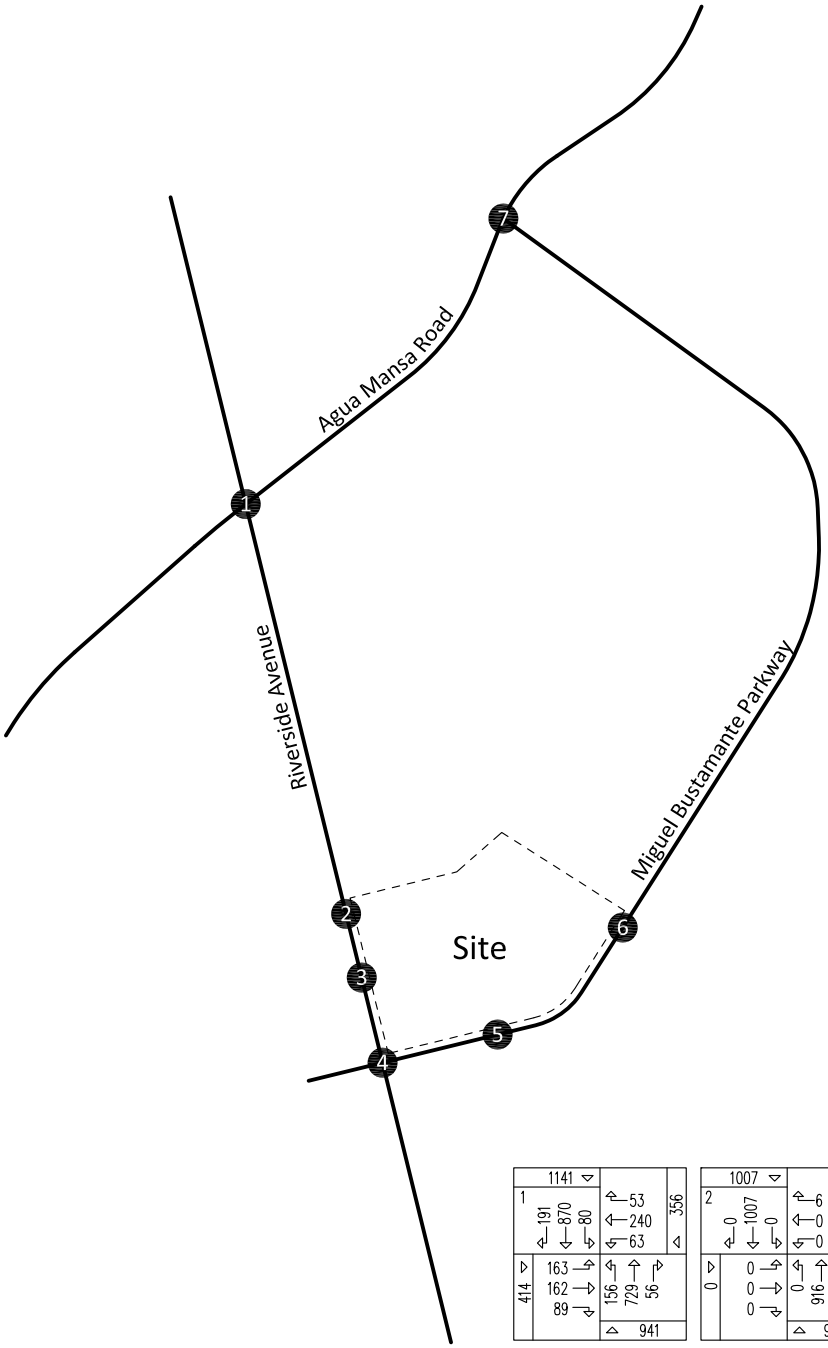


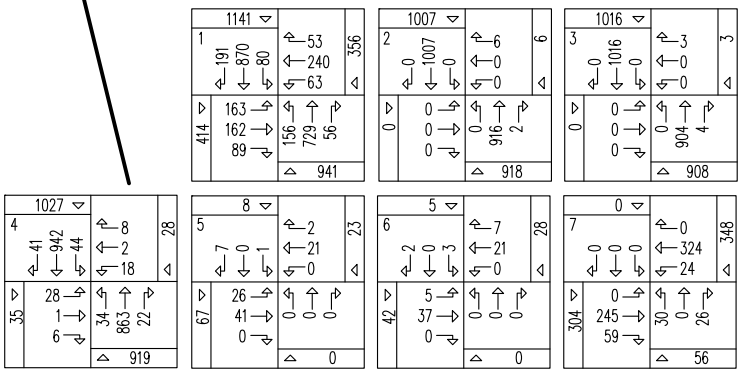
5450/33

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 34
Existing Plus Project
Morning Peak Hour Intersection Turning Movement Volumes





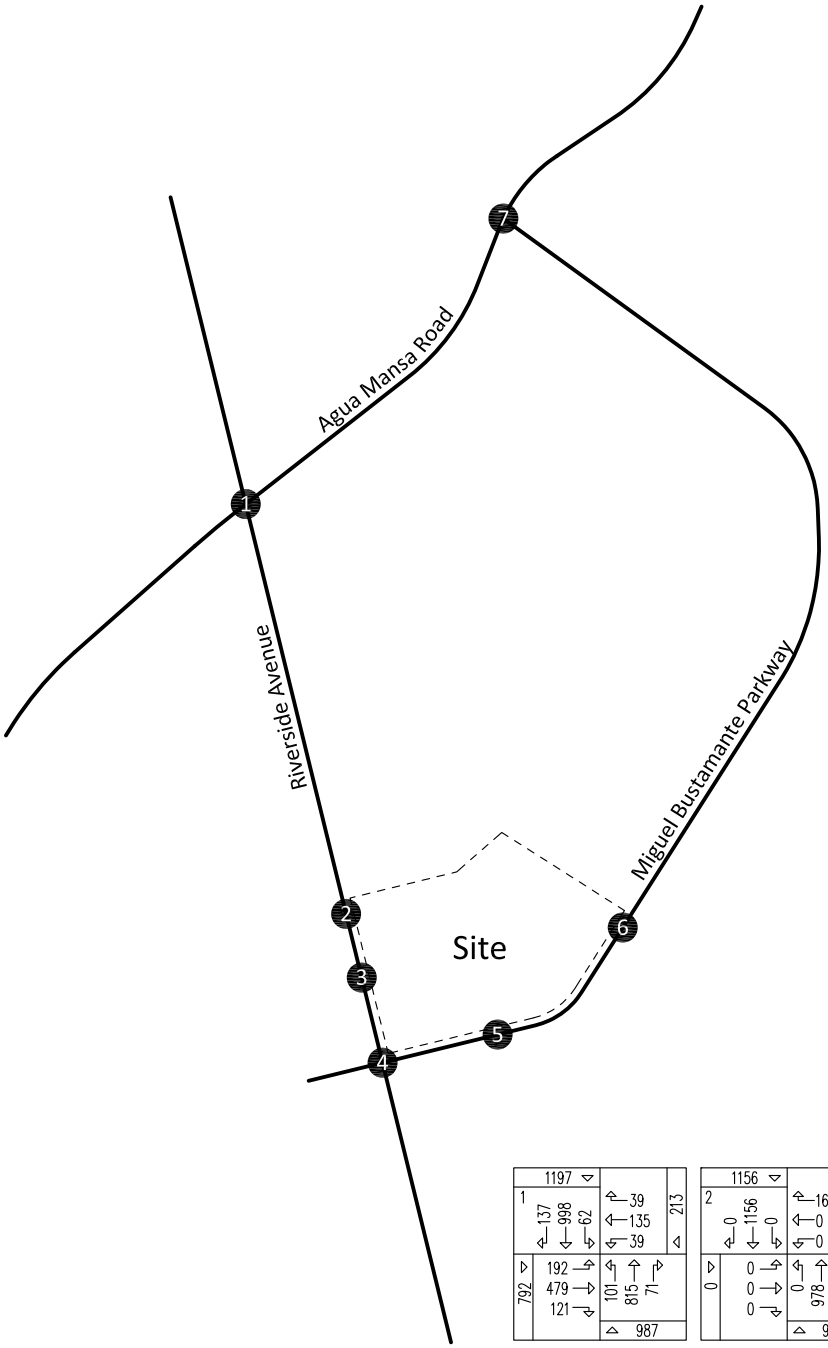
NTS

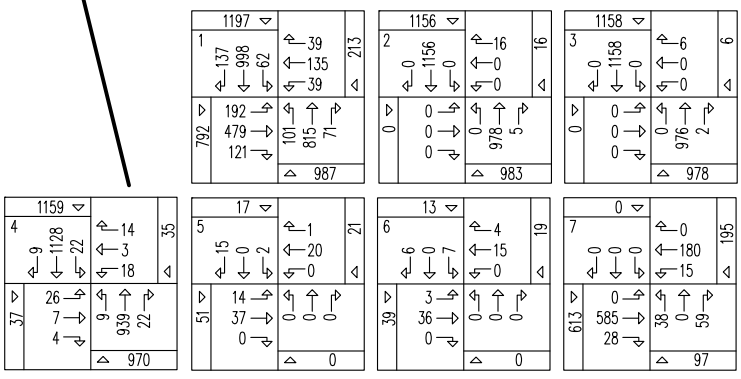
5450/34

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 35
Existing Plus Project
Evening Peak Hour Intersection Turning Movement Volumes





N

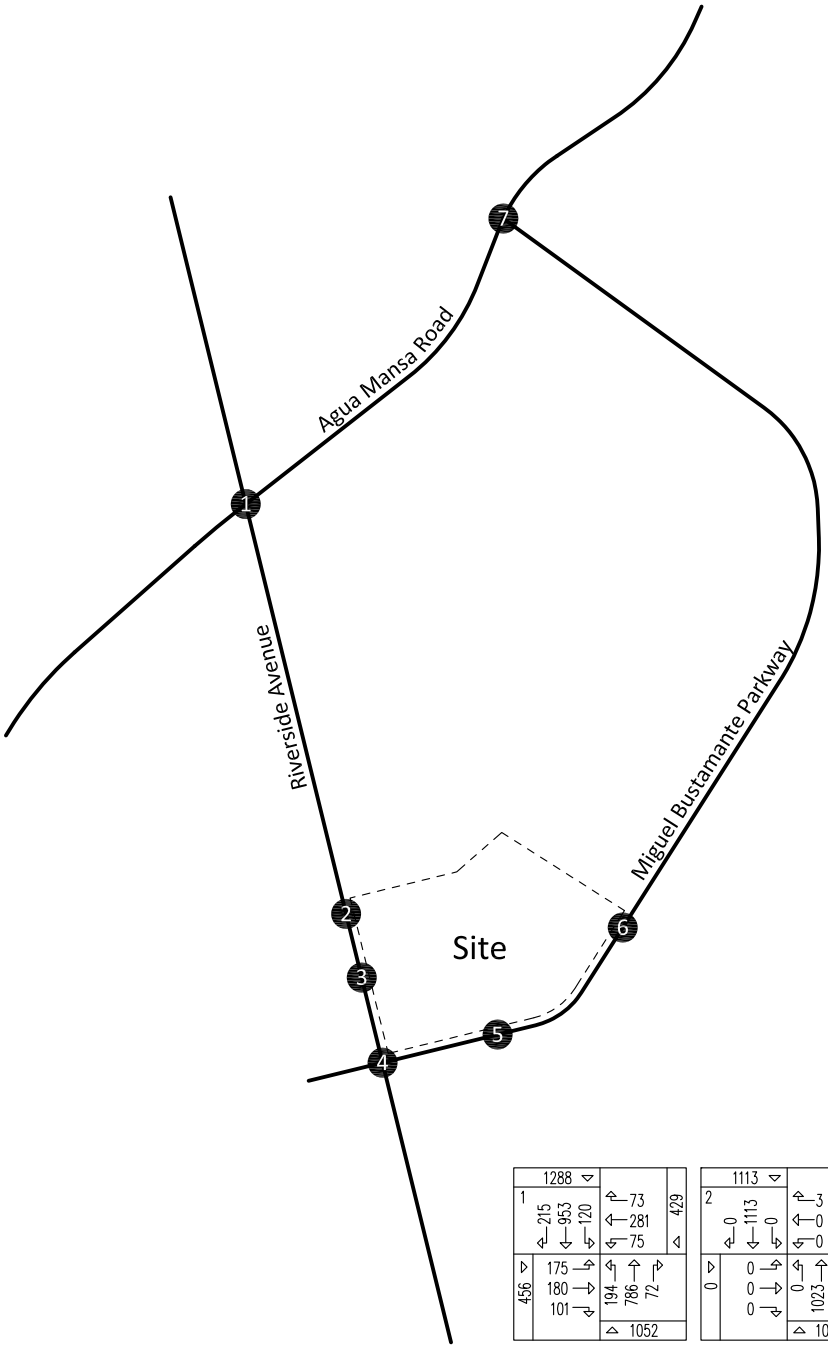
NTS

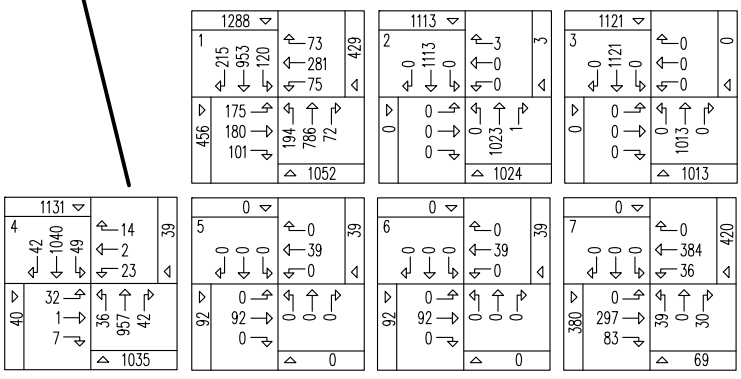
5450/35

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 36
Opening Year (2016) Without Project
Morning Peak Hour Intersection Turning Movement Volumes





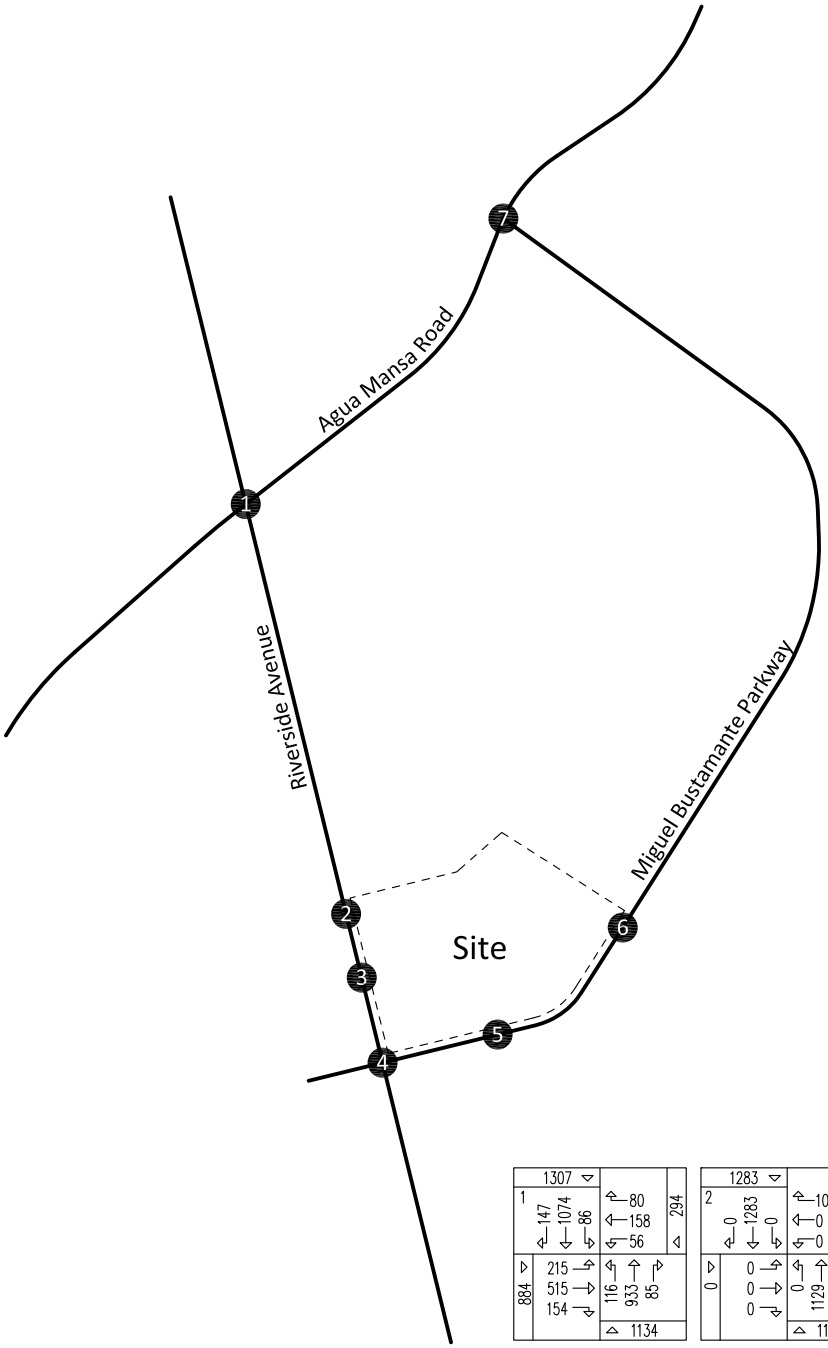
NTS

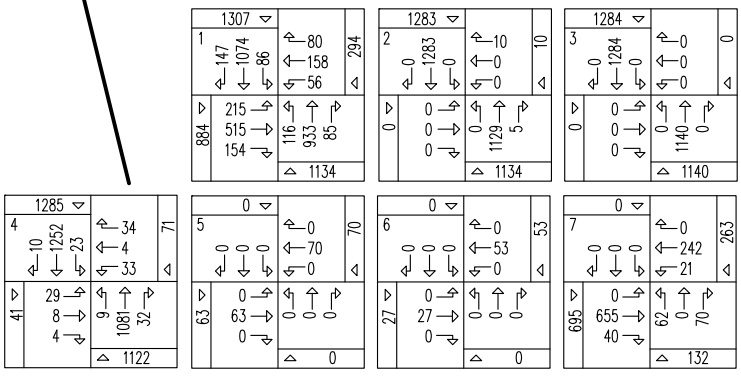
5450/36

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 37
Opening Year (2016) Without Project
Evening Peak Hour Intersection Turning Movement Volumes





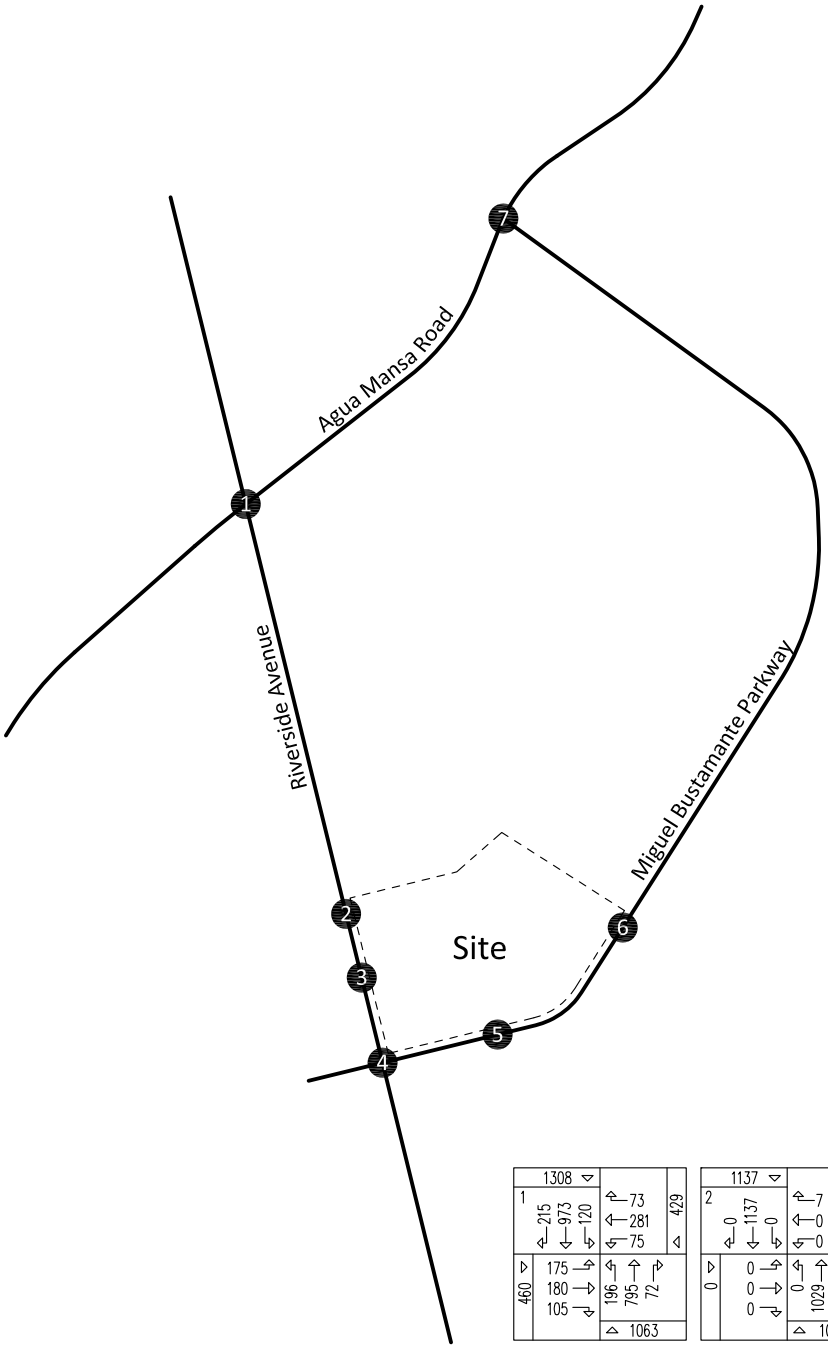
NTS

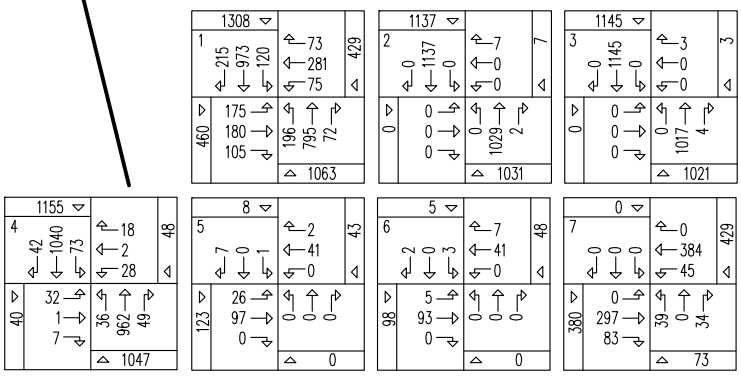
5450/37

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 38
Opening Year (2016) With Project
Morning Peak Hour Intersection Turning Movement Volumes





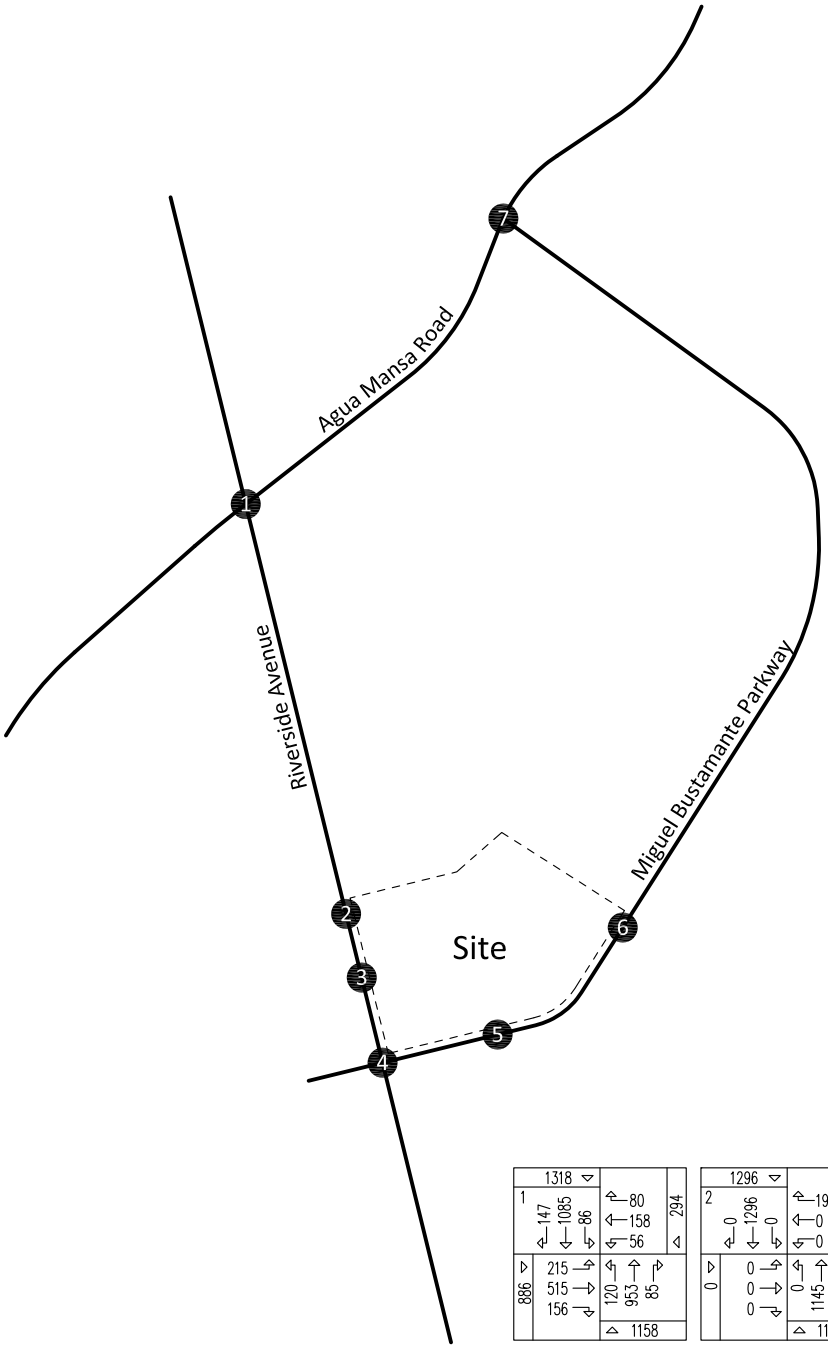
NTS

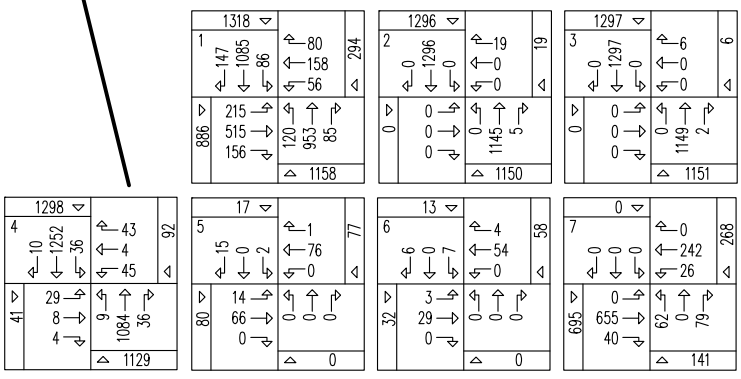
5450/38

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 39
Opening Year (2016) With Project
Evening Peak Hour Intersection Turning Movement Volumes





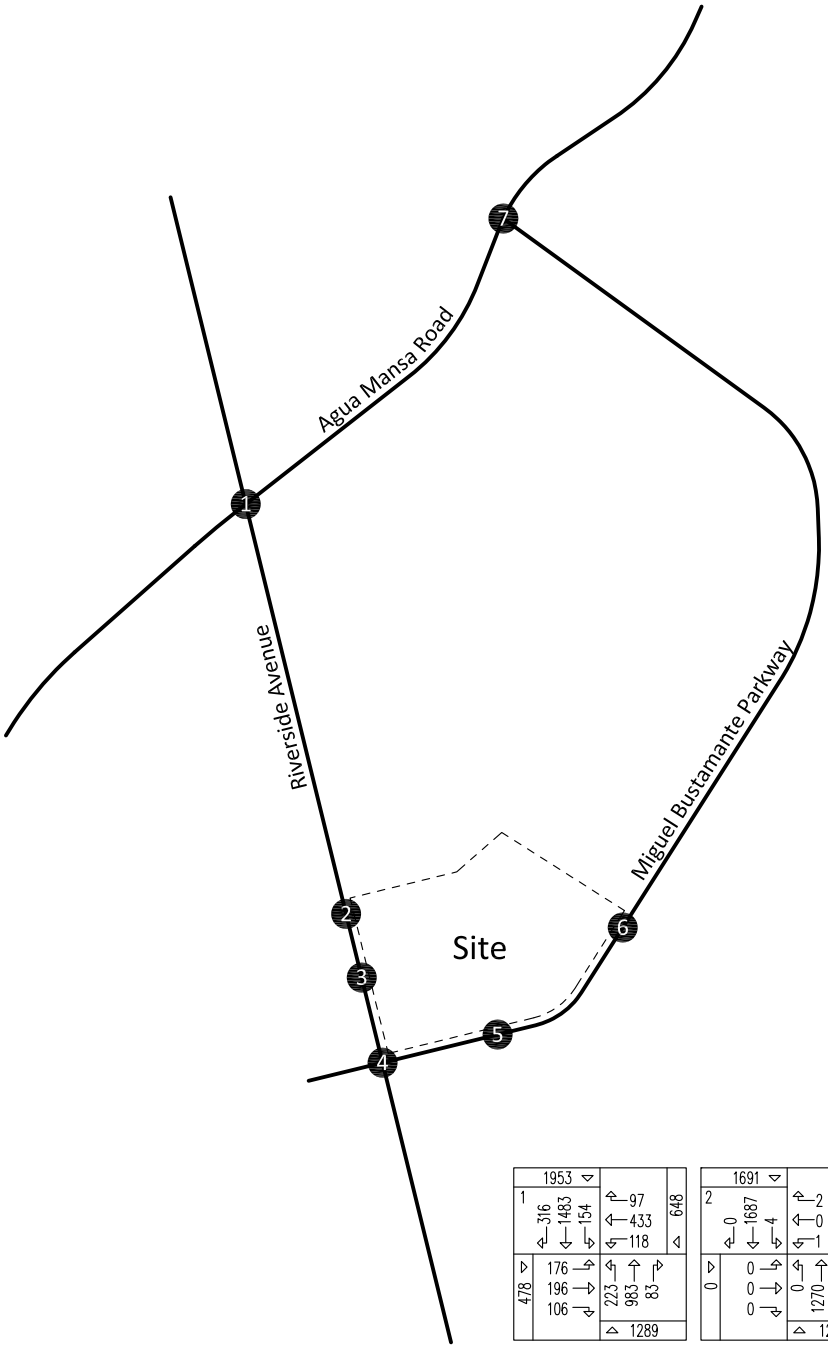
NTS

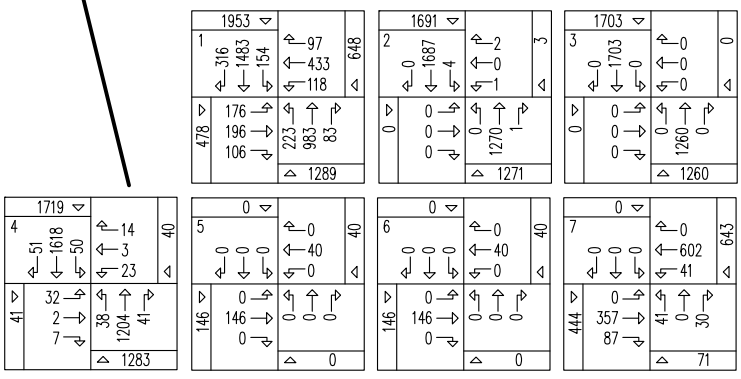
5450/39

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 40
Year 2035 Without Project
Morning Peak Hour Intersection Turning Movement Volumes





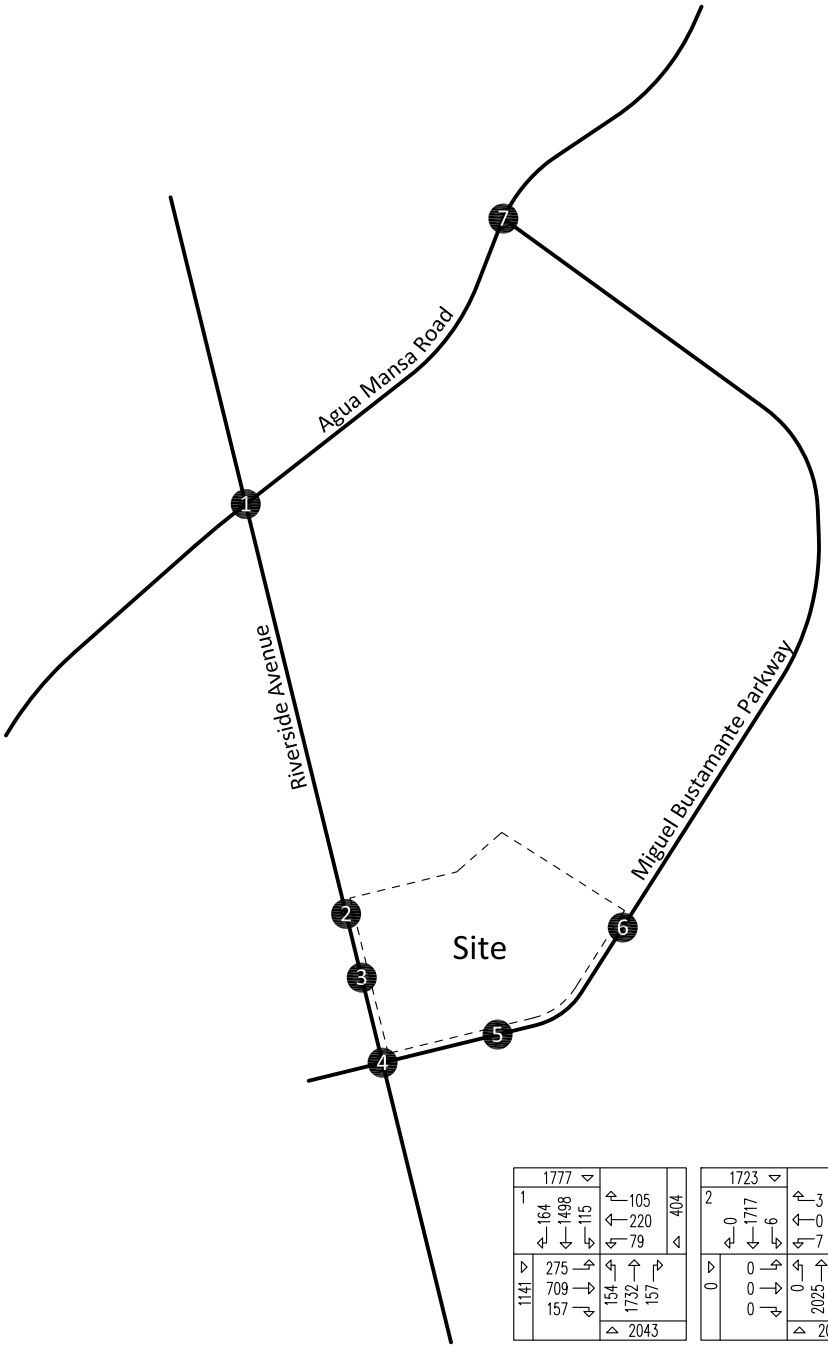
NTS

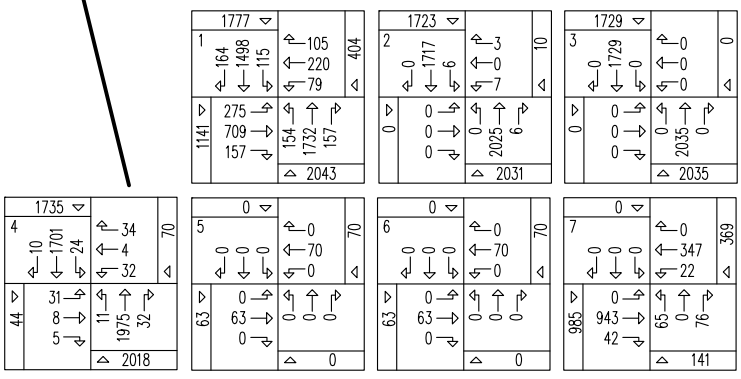
5450/40

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 41
Year 2035 Without Project
Evening Peak Hour Intersection Turning Movement Volumes





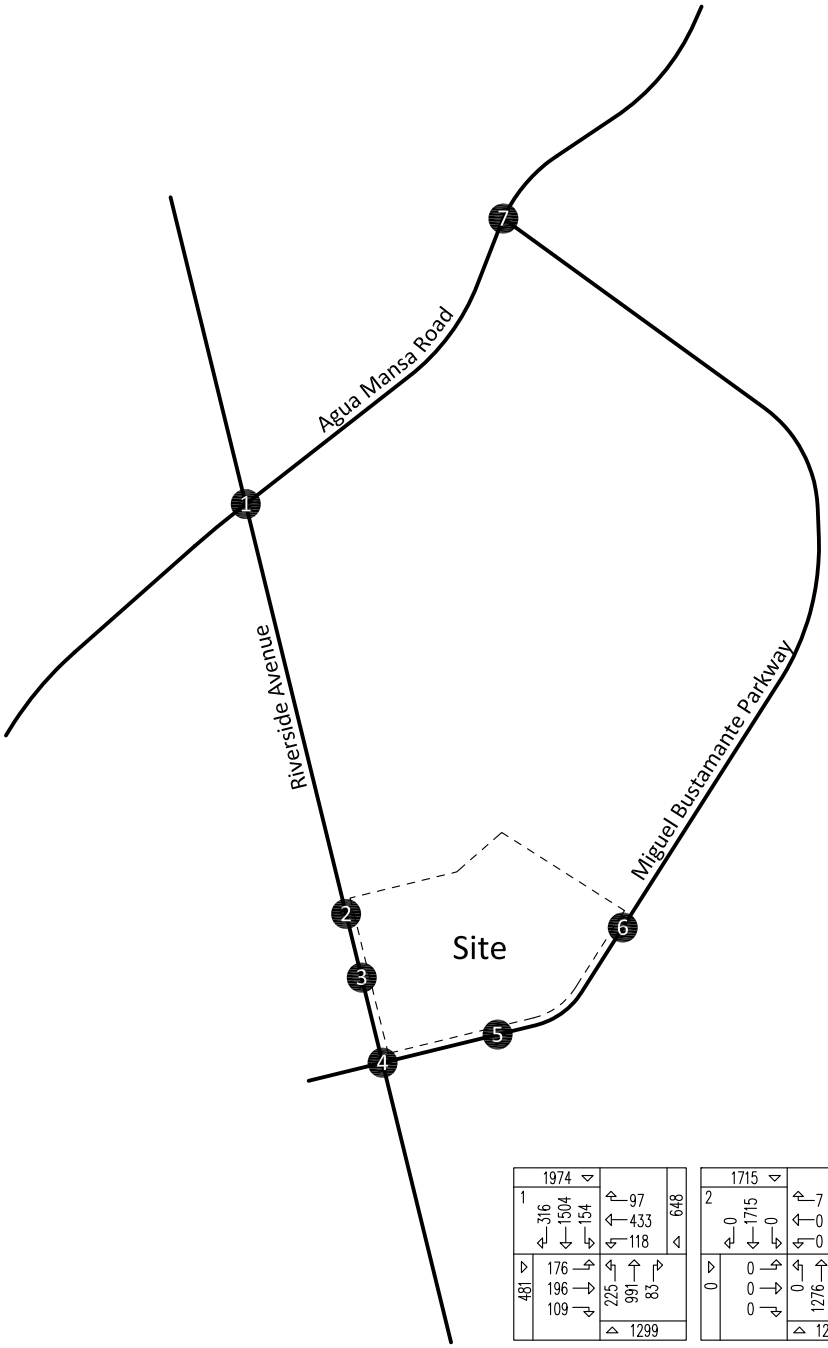
NTS

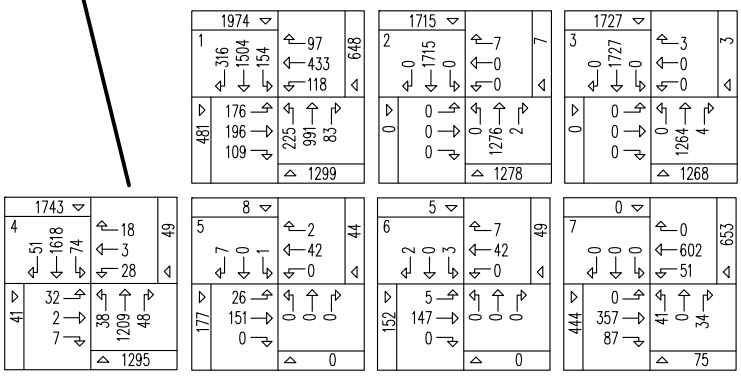
5450/41

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 42
Year 2035 With Project
Morning Peak Hour Intersection Turning Movement Volumes



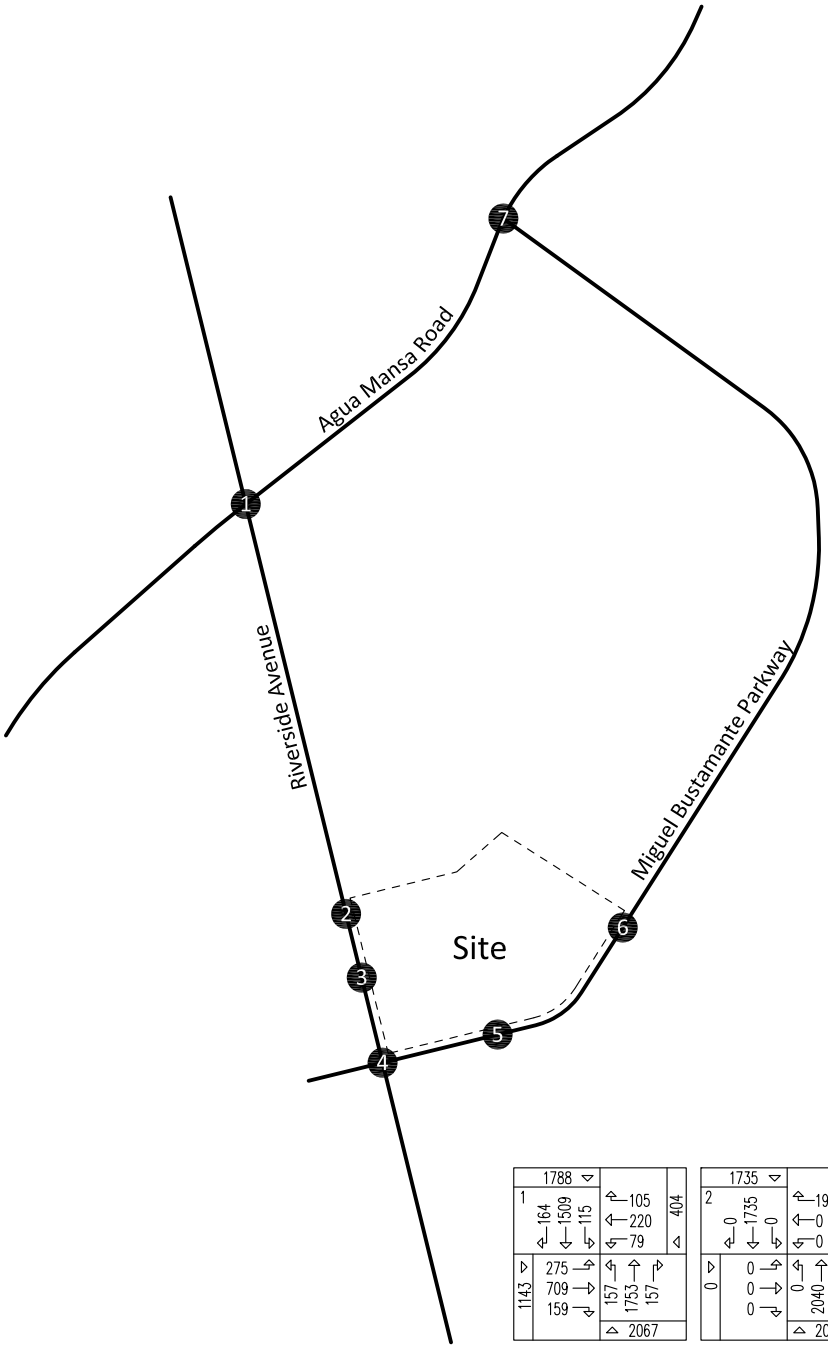


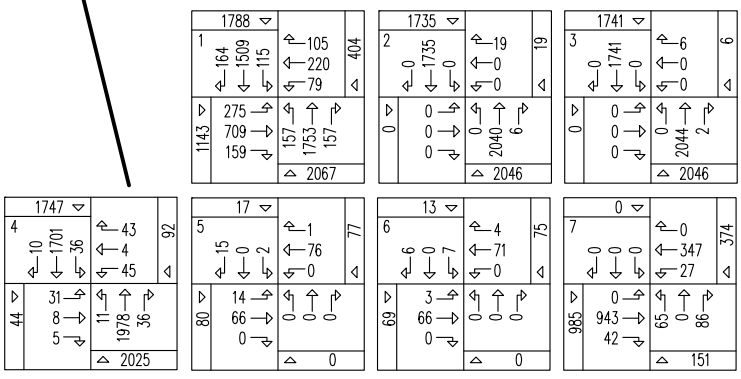
5450/42

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 43
Year 2035 With Project
Evening Peak Hour Intersection Turning Movement Volumes





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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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V. Project Mitigation

A. Required Improvements and Costs

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Opening Year (2016) and Year 2035 traffic conditions. The improvements were determined through the operations analysis of Section V.

The approximate costs for the Year 2035 improvements have generally been estimated using cost guidelines in the Congestion Management Program Handbook (see Appendix G). A unit cost of $400,000 for installation of a traffic signal has been substituted for the somewhat lower value cited in the Congestion Management Program materials. For adding a through lane, a unit cost of $290,000 has been assumed. The needed improvements and resulting costs are summarized in Table 9 for study area intersections.

The total cost of needed and unfunded intersection improvements is $320,000.

B. Project Contribution and Fair Share Costs

The project fair share contributions have also been calculated for Year 2035 improvement locations. The project share of cost has been based on the proportion of project peak hour traffic contributed to the improvement location relative to the total new peak hour Year 2035 traffic volume.

Table 10 presents a summary of improvement cost and project cost shares at the Year 2035 intersection improvement locations. The intersection fair share cost calculations are based on the evening peak hour traffic volumes. As shown in Table 10, the project's fair share of identified intersection costs is $7,564.

The dollar figures are rough order of magnitude estimates only. They 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.

As mitigation for the potential traffic impacts, the proposed project shall contribute on a fair share basis, through an adopted traffic impact fee program, in the implementation of the recommended intersection lane improvements or freeway improvements, or in dollar equivalent in lieu mitigation contributions, or in the implementation of additional capacity on parallel routes to offset potential impacts to study area intersections.

Table 9

Summary of Intersection Improvements and Costs

Intersection	Improvement	Total Cost
Riverside Avenue (NS) at:		
Agua Mansa Road (EW) - #1	Construct NB Right Turn Lane[2]	$ - [1]
	Construct EB Thru Lane[2]	$ 290,000
Miguel Bustamante Parkway (EW) - #4	Traffic Signal Phasing Modification[2]	$ 10,000
	Restripe WB Shared Left/Thru and Right Turn Lanes to Left Turn and Thru/Right Turn Lanes[2]	$ 10,000
	Restripe EB Shared Left/Thru and Right Turn Lanes to Left Turn and Thru/Right Turn Lanes[2]	$ 10,000
Total		$ 320,000

[1] San Bernardino Associated Governments Development Mitigation Nexus Study improvement.

[2] Improvements are only needed for Year 2035.

Table 10

Project Fair Share Intersection Traffic Contribution

Intersection	Total Cost		Existing Traffic	Year 2035 With Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic	Project Cost Share
Riverside Avenue (NS) at:								
Agua Mansa Road (EW) - #1	$ 290,000	Morning	2,817	4,402	35	1,585	2.2%	$ 6,404
		Evening	3,152	5,402	37	2,250	1.6%	$ -
Miguel Bustamante Parkway (EW) - #4	$ 30,000	Morning	1,964	3,128	45	1,164	3.9%	$ 1,160
		Evening	2,160	3,908	41	1,748	2.3%	$ -
Total								$ 7,564

VI. Conclusions and Recommendations

A. Summary

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The City of Colton is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with full occupancy of the development in Year 2016, at which time it will be generating traffic at its full potential, and for the current traffic forecast year, which is the Year 2035.

A series of scoping discussions were conducted with the City of Colton to define the desired analysis locations for each future analysis year. In addition, the San Bernardino Associated Governments staff has also been contacted to discuss the project and its associated travel patterns

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments are required to be included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute traffic greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10, I-215, or SR-60 Freeways. The project does not contribute traffic greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside the City of Colton.

The average daily traffic volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). Traffic model plots are included in Appendix D. This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2014 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 21 years of the 27 year time frame, a factor of 0.78 (i.e., 21/27) was used.

The Year 2035 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure

data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Project traffic volumes were then added to the Year 2035 SBTAM traffic model volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

B. Existing Conditions

Regional access to the project site is provided by the I-10, I-215, and SR-60 Freeways. Local access is provided by various roadways in the vicinity of the site. The east-west roadways which will be most affected by the project include Agua Mansa Road and Miguel Bustamante Parkway. The north-south roadways which will be most affected by the project include Riverside Avenue and Miguel Bustamante Parkway. The project will take access to Riverside Avenue and Miguel Bustamante Parkway.

The existing delay and Level of Service for the intersection in the vicinity of the project are shown in Table 1. The study area intersections currently operate within acceptable Levels of Service during the peak hours for existing traffic conditions.

C. Project Traffic

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and City of Fontana, Truck Trip Generation Study, August 2003.

This methodology for generating trips generated for a high-cube warehouse distribution center is standard practice throughout Southern California. Jurisdictions that have utilized this methodology within the past few years include but are not limited to: San Bernardino Associated Governments, County of San Bernardino, County of Riverside, City of Rialto, City of Fontana, City of Redlands, City of San Bernardino, City of Ontario, City of Chino, City of Hesperia, City of Beaumont, City of Banning, City of Rancho Cucamonga, City of Moreno Valley, City of Norco, and City of Riverside.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and

other additional information on future development and traffic impacts in the area were reviewed.

As shown in Table 2, the proposed development is projected to generate a total of approximately 986 daily vehicle trips, 65 of which will occur during the morning peak hour and 70 of which will occur during the evening peak hour.

D. Future Conditions

An Existing Plus Project, Opening Year (2016) analysis, and Year 2035 analysis are included in this report. Existing Plus Project traffic operations analysis have been completed for the morning and evening peak hour and are shown in Table 3. Opening Year (2016) traffic operations analysis have been completed for the morning and evening peak hour and are shown in Tables 5 and 6. Morning and evening peak hour traffic operations analysis are summarized in Tables 7 and 8 for Year 2035.

For Existing Plus Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

For Opening Year (2016) Without Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours

For Opening Year (2016) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

For Year 2035 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Riverside Avenue (NS) at:
- Agua Mansa Road (EW) - #1
- Project North Access (EW) - #2
- Miguel Bustamante Parkway (EW) - #4

As shown in Table 7, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 Without Project traffic conditions, with improvements.

For Year 2035 With Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Riverside Avenue (NS) at:
- Agua Mansa Road (EW) - #1
- Miguel Bustamante Parkway (EW) - #4

As shown in Table 8, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 With Project traffic conditions, with improvements.

E. Recommendations

Site-specific circulation and access recommendations are depicted on Figure 44.

Construct Riverside Avenue from the north project boundary to Miguel Bustamante Parkway as a Major Arterial at its ultimate half-section width including landscaping and parkway improvements in conjunction with development, as necessary.

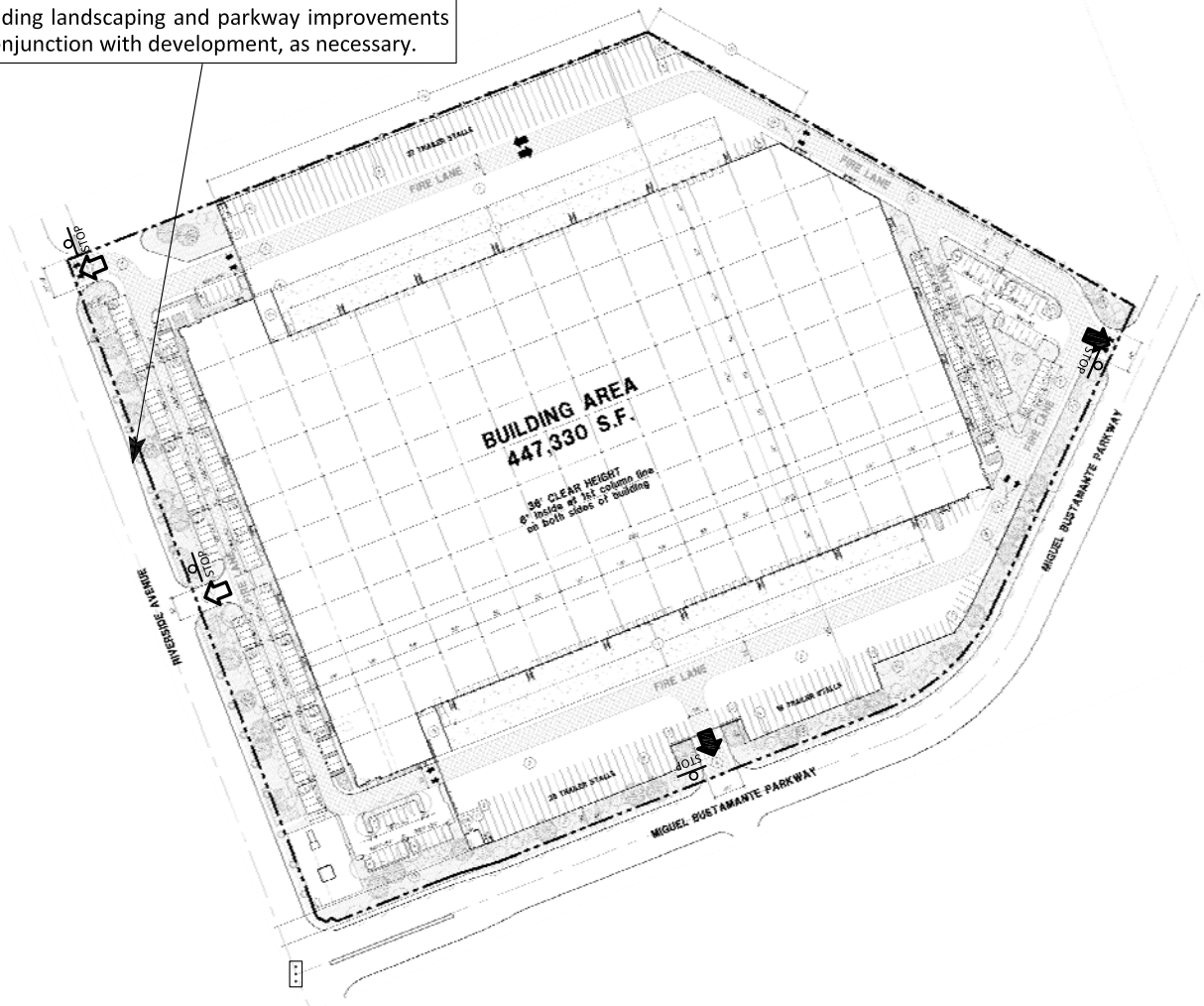
The project site should provide sufficient parking spaces to meet City of Colton parking code requirements in order to service on-site parking demand.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

Sight distance at the project accesses shall comply with standard California Department of Transportation and City of Colton sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

Figure 44
Circulation Recommendations

Construct Riverside Avenue from the north project boundary to Miguel Bustamante Parkway as a Major Arterial at its ultimate half-section width including landscaping and parkway improvements in conjunction with development, as necessary.



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Legend

- = Traffic Signal
- STOP = Stop Sign
- = Full Access Driveway
- = Right Turns In/Out Only Access Driveway

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Appendices

Appendix A – Glossary of Transportation Terms

Appendix B – Traffic Count Worksheets

Appendix C – Future Growth Increment Calculation Worksheets

Appendix D – Traffic Model Plots

Appendix E – Explanation and Calculation of Intersection Delay

Appendix F – Preliminary Construction Cost Estimates for Congestion Management Program

APPENDIX A

Glossary of Transportation Terms

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

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 total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway 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.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour 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 EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

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.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

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.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

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.

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

Traffic Count Worksheets

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC tel: 951 249 3226 pacific@aimtd.com

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
Thu, May 15, 14	NORTH & SOUTH:	Riverside	LOCATION #:	2
	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ◄ W — N ▲ / S ▼ — E ►

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB 0	SB X	EB 0	WB X	TTL
AM	7:00 AM	30	172	7	10	174	32	26	28	10	13	54	8	564	4	0	0	0	4
	7:15 AM	30	154	13	6	165	32	33	38	18	9	39	9	546	2	0	0	0	2
	7:30 AM	22	179	17	13	202	30	28	36	10	16	46	6	605	3	0	0	0	3
	7:45 AM	32	180	7	13	210	32	25	30	18	20	64	9	640	0	0	0	0	0
	8:00 AM	24	187	11	8	157	32	28	34	16	15	30	9	551	1	0	0	0	1
	8:15 AM	22	112	9	7	179	32	33	29	17	4	25	11	480	4	0	0	0	4
	8:30 AM	17	127	16	11	119	22	29	29	18	12	23	10	433	0	0	0	0	0
	8:45 AM	24	122	7	16	130	31	42	22	17	5	23	3	442	3	0	1	0	4
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	201	1,233	87	84	1,336	243	244	246	124	94	304	65	4,261	17	0	1	0	18
	APPROACH %	13%	81%	6%	5%	80%	15%	40%	40%	20%	20%	66%	14%						
	APP/DEPART	1,521	/	1,542	1,663	/	1,554	614	/	417	463	/	748	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	114	685	44	42	751	126	112	132	56	58	203	32	2,355					
	APPROACH %	14%	81%	5%	5%	82%	14%	37%	44%	19%	20%	69%	11%						
	PEAK HR FACTOR		0.962			0.901			0.843			0.788		0.920					
	APP/DEPART	843	/	829	919	/	865	300	/	218	293	/	443	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	26	189	16	17	164	29	43	105	56	10	34	8	697	3	0	0	0	3
	4:15 PM	25	186	17	16	198	25	25	89	24	9	25	8	647	1	1	0	0	2
	4:30 PM	16	185	15	12	223	26	35	104	21	5	23	6	671	0	0	0	0	0
	4:45 PM	25	201	14	10	230	21	35	111	21	6	27	9	710	2	0	0	0	2
	5:00 PM	19	156	22	19	222	26	37	115	32	11	27	10	696	1	1	0	0	2
	5:15 PM	20	208	13	11	232	33	28	112	20	13	37	1	728	1	1	0	0	2
	5:30 PM	20	193	20	16	198	19	40	88	18	6	24	5	647	4	0	1	0	5
	5:45 PM	13	200	22	11	196	25	36	81	21	9	21	4	639	0	0	0	0	0
	VOLUMES	164	1,518	139	112	1,663	204	279	805	213	69	218	51	5,435	12	3	1	0	16
	APPROACH %	9%	83%	8%	6%	84%	10%	22%	62%	16%	20%	64%	15%						
	APP/DEPART	1,821	/	1,848	1,979	/	1,945	1,297	/	1,056	338	/	586	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	80	750	64	52	907	106	135	442	94	35	114	26	2,805					
	APPROACH %	9%	84%	7%	5%	85%	10%	20%	66%	14%	20%	65%	15%						
	PEAK HR FACTOR		0.927			0.965			0.912			0.858		0.963					
	APP/DEPART	894	/	911	1,065	/	1,036	671	/	558	175	/	300	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

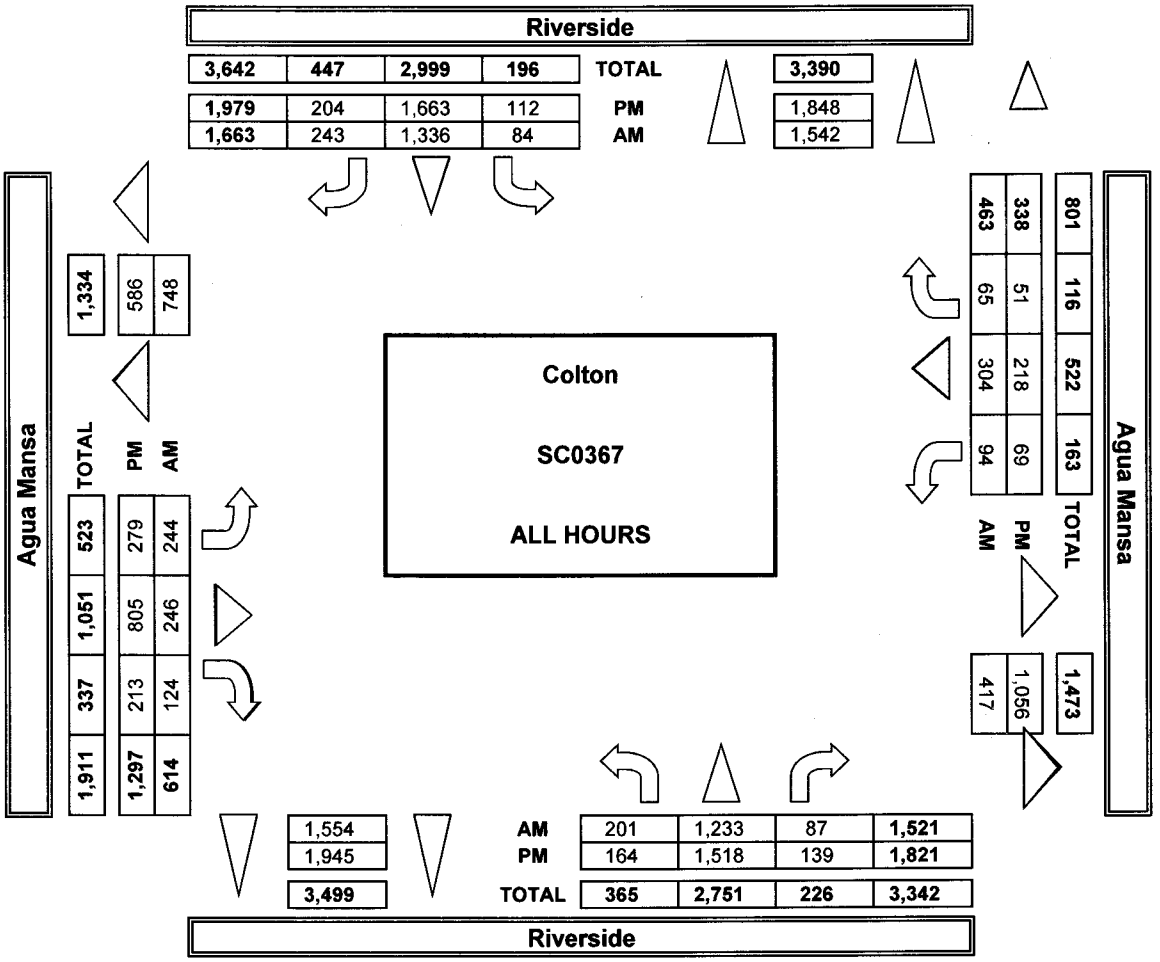
SOUTH SIDE

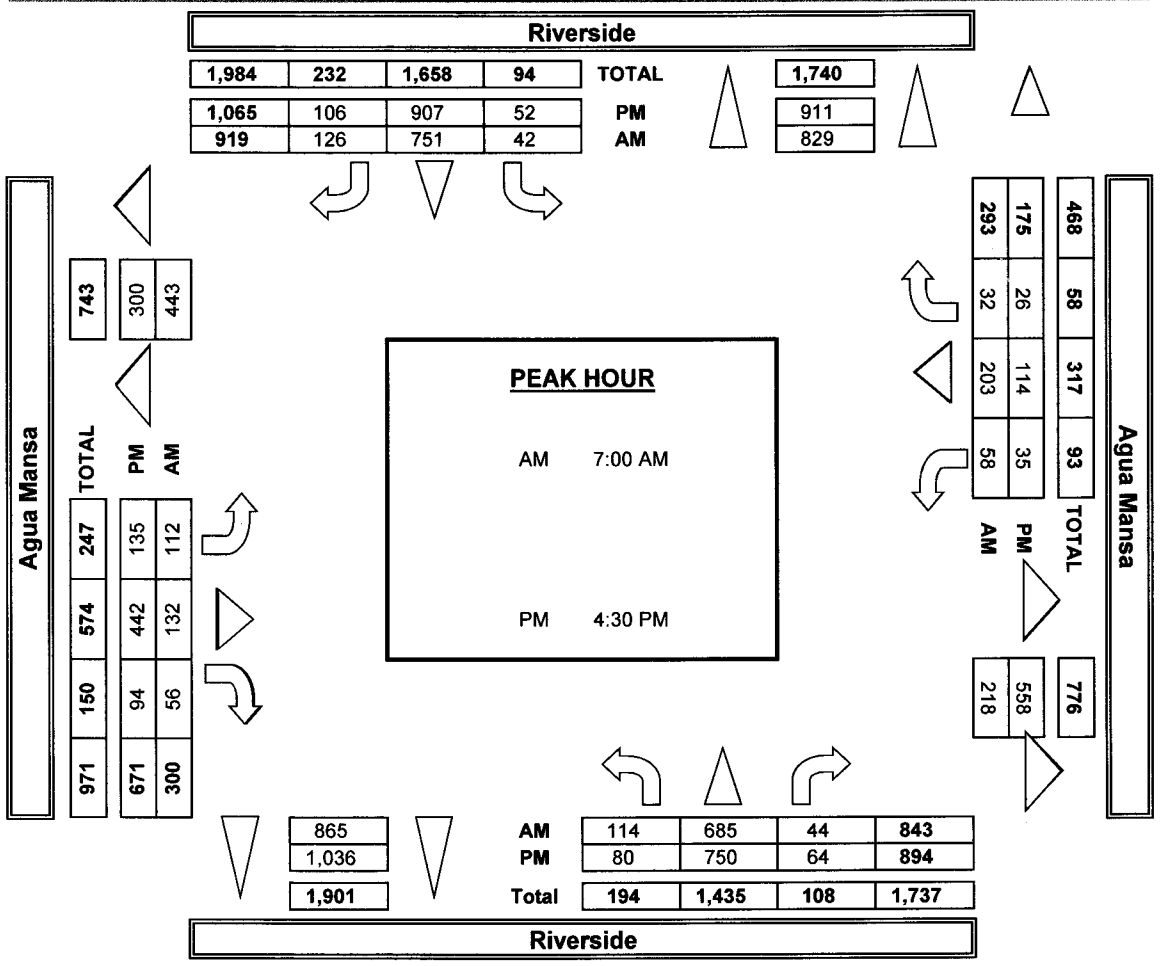
Riverside

		ALL PED AND BIKE					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS					SCHOOL AGE PED		
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TRAFFIC DATA SERVICES

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 1:	NOTES:
PASSENGER VEHICLES	

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	24	167	5	6	144	21	20	20	6	10	42	3	468					0
	7:15 AM	24	147	8	5	150	20	25	30	12	8	36	5	470					0
	7:30 AM	13	169	14	4	175	26	17	27	7	16	43	3	514					0
	7:45 AM	20	169	6	6	187	19	15	24	11	19	52	6	534					0
	8:00 AM	16	168	11	3	130	16	21	18	14	13	18	5	433					0
	8:15 AM	15	99	6	2	150	19	25	20	7	3	17	6	369					0
	8:30 AM	11	111	13	3	87	14	20	21	8	9	17	4	318					0
	8:45 AM	10	105	6	8	104	21	27	13	10	4	12	3	323					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	133	1,135	69	37	1,127	156	170	173	75	82	237	35	3,429	0	0	0	0	0
	APPROACH %	10%	85%	5%	3%	85%	12%	41%	41%	18%	23%	67%	10%						
	APP/DEPART	1,337	/	1,340	1,320	/	1,284	418	/	279	354	/	526	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	81	652	33	21	656	86	77	101	36	53	173	17	1,986					
	APPROACH %	11%	85%	4%	3%	86%	11%	36%	47%	17%	22%	71%	7%						
	PEAK HR FACTOR		0.977			0.900			0.799			0.789		0.930					
	APP/DEPART	766	/	746	763	/	745	214	/	155	243	/	340	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	16	183	13	14	149	20	34	98	50	9	26	5	617					0
	4:15 PM	17	172	17	11	180	21	12	82	17	8	21	5	563					0
	4:30 PM	13	169	12	11	201	20	28	93	16	3	21	2	589					0
	4:45 PM	21	190	13	10	209	15	25	93	15	6	20	5	622					0
	5:00 PM	14	145	20	16	196	20	28	105	26	10	23	7	610					0
	5:15 PM	13	199	12	8	216	29	19	106	14	12	32	0	660					0
	5:30 PM	15	174	20	12	180	15	29	81	13	5	23	3	570					0
	5:45 PM	9	183	18	7	173	17	25	76	16	8	19	4	555					0
	VOLUMES	118	1,415	125	89	1,504	157	200	734	167	61	185	31	4,786	0	0	0	0	0
	APPROACH %	7%	85%	8%	5%	86%	9%	18%	67%	15%	22%	67%	11%						
	APP/DEPART	1,658	/	1,646	1,750	/	1,732	1,101	/	948	277	/	460	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	61	703	57	45	822	84	100	397	71	31	96	14	2,481					
	APPROACH %	7%	86%	7%	5%	86%	9%	18%	70%	13%	22%	68%	10%						
	PEAK HR FACTOR		0.916			0.940			0.893			0.801		0.940					
	APP/DEPART	821	/	817	951	/	924	568	/	499	141	/	241	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	4	1	1	0	15	3	3	4	1	2	6	1	41					0
	7:15 AM	2	6	2	0	7	2	4	3	2	0	0	3	31					0
	7:30 AM	3	7	1	0	14	0	3	7	0	0	1	1	37					0
	7:45 AM	4	2	0	1	16	1	1	4	1	1	5	0	36					0
	8:00 AM	5	6	0	1	15	5	0	7	0	0	8	0	47					0
	8:15 AM	3	11	2	1	21	1	3	4	3	0	2	1	52					0
	8:30 AM	2	5	1	3	18	2	0	3	6	1	2	0	43					0
	8:45 AM	8	5	1	1	15	4	6	7	4	1	1	0	53					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	31	43	8	7	121	18	20	39	17	5	25	6	340	0	0	0	0	0
	APPROACH %	38%	52%	10%	5%	83%	12%	26%	51%	22%	14%	69%	17%						
	APP/DEPART	82	/	69	146	/	143	76	/	54	36	/	74	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	18	27	4	6	69	12	9	21	13	2	13	1	195					
	APPROACH %	37%	55%	8%	7%	79%	14%	21%	49%	30%	13%	81%	6%						
	PEAK HR FACTOR		0.766			0.946			0.632			0.500		0.920					
	APP/DEPART	49	/	37	87	/	84	43	/	31	16	/	43	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	5	0	1	0	9	3	3	6	1	1	5	1	35					0
	4:15 PM	3	9	0	1	7	0	2	5	2	1	3	0	33					0
	4:30 PM	0	6	2	0	11	3	0	10	2	2	1	3	40					0
	4:45 PM	4	6	0	0	9	1	3	13	4	0	4	1	45					0
	5:00 PM	3	6	1	2	15	2	1	6	1	1	1	3	42					0
	5:15 PM	5	4	0	0	7	0	2	5	3	0	1	0	27					0
	5:30 PM	3	13	0	0	11	1	2	5	1	0	0	0	36					0
	5:45 PM	4	7	2	0	11	0	1	1	0	1	0	0	27					0
	VOLUMES	27	51	6	3	80	10	14	51	14	6	15	8	285	0	0	0	0	0
	APPROACH %	32%	61%	7%	3%	86%	11%	18%	65%	18%	21%	52%	28%						
	APP/DEPART	84	/	73	93	/	100	79	/	60	29	/	52	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	10	27	3	3	42	6	6	34	9	4	9	7	160					
	APPROACH %	25%	68%	8%	6%	82%	12%	12%	69%	18%	20%	45%	35%						
	PEAK HR FACTOR		0.833			0.671			0.613			0.833		0.889					
	APP/DEPART	40	/	40	51	/	55	49	/	40	20	/	25	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM PM MD OTHER

N ▲ | ◄ W | E ► | S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	1	3	1	1	2	1	0	1	1	1	0	1	13					0
	7:15 AM	2	0	1	0	3	4	1	2	1	0	1	0	15					0
	7:30 AM	3	0	2	1	4	0	1	2	0	0	1	1	15					0
	7:45 AM	1	4	0	1	4	1	1	0	3	0	3	0	18					0
	8:00 AM	2	8	0	3	5	3	1	5	0	0	1	1	29					0
	8:15 AM	2	2	0	2	3	2	1	2	3	0	3	0	20					0
	8:30 AM	2	1	2	3	5	2	0	1	0	0	3	0	19					0
	8:45 AM	1	5	0	2	3	2	2	2	2	0	1	0	20					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	14	23	6	13	29	15	7	15	10	1	13	3	149	0	0	0	0	0
	APPROACH %	33%	53%	14%	23%	51%	26%	22%	47%	31%	6%	76%	18%						
	APP/DEPART	43	/	33	57	/	40	32	/	34	17	/	42	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	7	16	2	10	16	9	4	10	5	0	8	1	88					
	APPROACH %	28%	64%	8%	29%	46%	26%	21%	53%	26%	0%	89%	11%						
	PEAK HR FACTOR		0.625			0.795			0.792			0.750		0.759					
	APP/DEPART	25	/	21	35	/	21	19	/	22	9	/	24	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	4	4	1	0	5	1	2	0	2	0	3	1	23					0
	4:15 PM	3	2	0	2	10	2	0	1	1	0	0	0	21					0
	4:30 PM	1	8	1	0	11	0	2	0	1	0	0	0	24					0
	4:45 PM	0	3	0	0	3	1	1	1	1	0	2	1	13					0
	5:00 PM	2	3	1	0	8	1	1	1	3	0	0	0	20					0
	5:15 PM	0	2	1	1	5	2	0	0	1	0	3	0	15					0
	5:30 PM	0	4	0	3	2	2	2	1	3	0	0	0	17					0
	5:45 PM	0	5	1	0	10	2	1	3	1	0	0	0	23					0
	VOLUMES	10	31	5	6	54	11	9	7	13	0	8	2	156	0	0	0	0	0
	APPROACH %	22%	67%	11%	8%	76%	15%	31%	24%	45%	0%	80%	20%						
	APP/DEPART	46	/	42	71	/	67	29	/	18	10	/	29	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	8	17	2	2	29	4	5	2	5	0	5	2	81					
	APPROACH %	30%	63%	7%	6%	83%	11%	42%	17%	42%	0%	71%	29%						
	PEAK HR FACTOR		0.675			0.625			0.750			0.438		0.844					
	APP/DEPART	27	/	24	35	/	34	12	/	6	7	/	17	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	1	1	0	3	13	6	3	3	2	0	5	3	40					0
	7:15 AM	2	1	2	1	5	5	3	3	3	1	1	0	27					0
	7:30 AM	3	3	0	8	8	4	7	0	3	0	1	1	38					0
	7:45 AM	7	5	1	5	3	11	7	2	3	0	3	3	50					0
	8:00 AM	1	5	0	1	7	8	5	4	2	2	3	3	41					0
	8:15 AM	2	0	1	2	5	10	4	3	4	1	3	4	39					0
	8:30 AM	2	10	0	2	9	3	8	4	4	1	0	6	49					0
	8:45 AM	5	7	0	5	8	4	6	0	1	0	9	0	45					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	23	32	4	27	58	51	43	19	22	5	25	20	329	0	0	0	0	0
	APPROACH %	39%	54%	7%	20%	43%	38%	51%	23%	26%	10%	50%	40%						
	APP/DEPART	59	/	95	136	/	85	84	/	50	50	/	99	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	12	20	2	10	24	32	24	13	13	4	9	16	179					
	APPROACH %	35%	59%	6%	15%	36%	48%	48%	26%	26%	14%	31%	55%						
	PEAK HR FACTOR		0.654			0.868			0.781			0.906		0.895					
	APP/DEPART	34	/	60	66	/	41	50	/	25	29	/	53	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	1	1	1	3	0	5	4	1	3	0	0	1	20					0
	4:15 PM	2	3	0	2	1	2	11	1	4	0	1	3	30					0
	4:30 PM	2	2	0	1	0	3	5	1	2	0	1	1	18					0
	4:45 PM	0	2	1	0	9	4	6	3	1	0	1	2	29					0
	5:00 PM	0	2	0	1	3	3	7	3	2	0	3	0	24					0
	5:15 PM	2	3	0	2	4	2	7	1	2	1	1	1	26					0
	5:30 PM	2	2	0	1	5	1	7	1	1	1	1	2	24					0
	5:45 PM	0	5	1	4	2	5	9	1	4	0	2	0	33					0
	VOLUMES	9	20	3	14	24	25	56	12	19	2	10	10	204	0	0	0	0	0
	APPROACH %	28%	63%	9%	22%	38%	40%	64%	14%	22%	9%	45%	45%						
	APP/DEPART	32	/	86	63	/	45	87	/	29	22	/	44	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	4	12	1	8	14	11	30	6	9	2	7	3	107					
	APPROACH %	24%	71%	6%	24%	42%	33%	67%	13%	20%	17%	58%	25%						
	PEAK HR FACTOR		0.708			0.750			0.804			0.750		0.811					
	APP/DEPART	17	/	45	33	/	25	45	/	15	12	/	22	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	2	/	2	0					
	BEGIN PEAK HR		8:30 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	1	0	1					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.250		0.250					
	APP/DEPART	0	/	0	0	/	0	0	/	0	1	/	1	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.250			0.250			0.000			0.000		0.250					
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

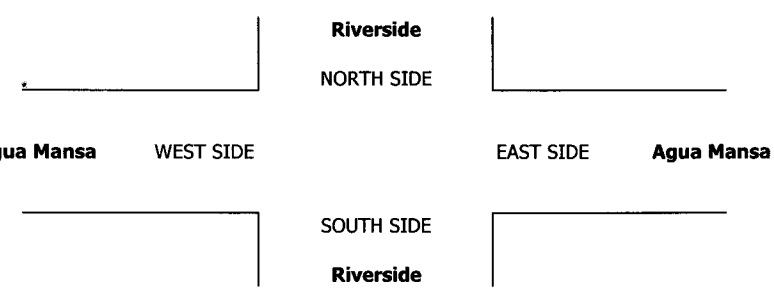
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	2
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM 7:00 AM	0	0	0	0	0	1	0	0	0	0	1	0	2					0
AM 7:15 AM	0	0	0	0	0	1	0	0	0	0	0	1	2					0
AM 7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1					0
AM 7:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	2					0
AM 8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1					0
AM 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 8:30 AM	0	0	0	0	0	1	1	0	0	1	0	0	3					0
AM 8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1					0
AM 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM VOLUMES	0	0	0	0	1	3	4	0	0	1	2	1	12	0	0	0	0	0
AM APPROACH %	0%	0%	0%	0%	25%	75%	100%	0%	0%	25%	50%	25%						
AM APP/DEPART	0	/	5	4	/	2	4	/	0	4	/	5	0					
AM BEGIN PEAK HR		7:00 AM																
AM VOLUMES	0	0	0	0	1	2	1	0	0	0	2	1	7					
AM APPROACH %	0%	0%	0%	0%	33%	67%	100%	0%	0%	0%	67%	33%						
AM PEAK HR FACTOR		0.000			0.750			0.250			0.750		0.875					
AM APP/DEPART	0	/	2	3	/	1	1	/	0	3	/	4	0					
PM 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1					0
PM 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1					0
PM VOLUMES	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0
PM APPROACH %	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	0%						
PM APP/DEPART	0	/	0	1	/	0	1	/	1	0	/	1	0					
PM BEGIN PEAK HR		4:00 PM																
PM VOLUMES	0	0	0	0	0	1	1	2	1	0	0	0	5					
PM APPROACH %	0%	0%	0%	0%	0%	100%	25%	50%	25%	0%	0%	0%						
PM PEAK HR FACTOR		0.000			0.250			1.000			0.000		1.250					
PM APP/DEPART	0	/	1	1	/	1	4	/	2	0	/	1	0					



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC tel: 951 249 3226 pacific@aimtd.com

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
Thu, May 15, 14	NORTH & SOUTH:	Riverside	LOCATION #:	3
	EAST & WEST:	Trucking	CONTROL:	SIGNAL

NOTES:

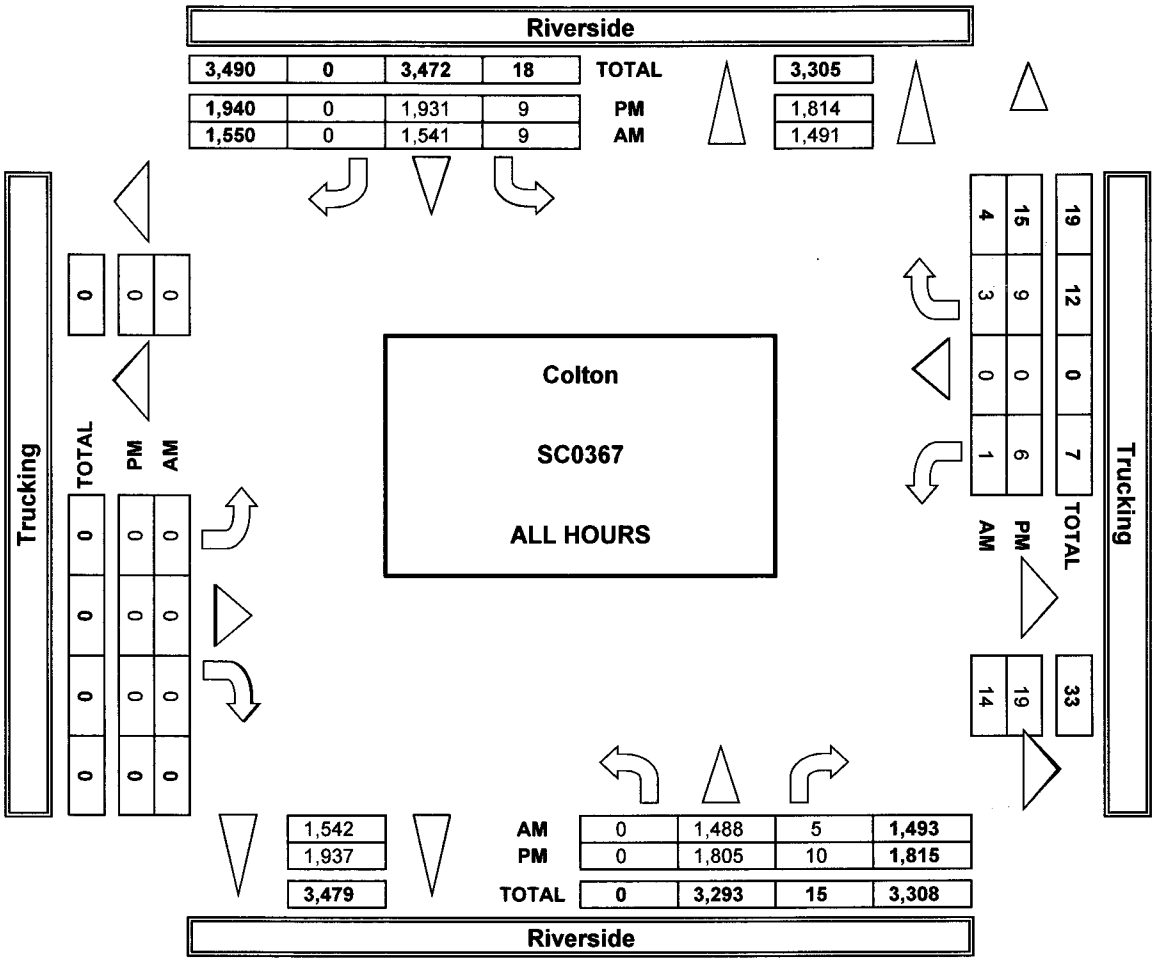
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

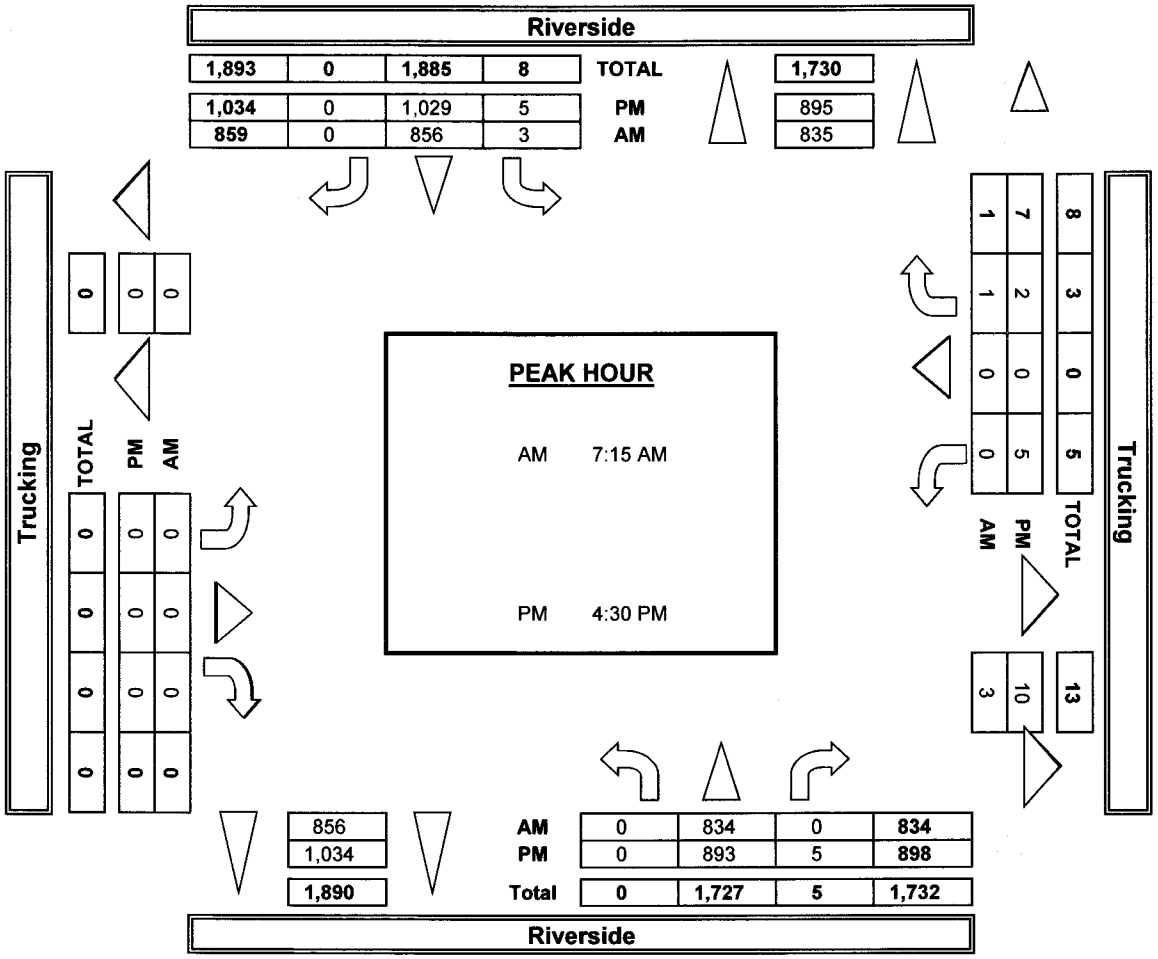
		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB 0	SB 0	EB X	WB 0	TTL
AM	7:00 AM	0	206	2	3	193	0	0	0	0	0	0	1	405	0	0	0	0	0
	7:15 AM	0	198	0	1	188	0	0	0	0	0	0	1	388	0	0	0	0	0
	7:30 AM	0	212	0	0	231	0	0	0	0	0	0	0	443	0	0	0	0	0
	7:45 AM	0	207	0	0	250	0	0	0	0	0	0	0	457	0	0	0	0	0
	8:00 AM	0	217	0	2	187	0	0	0	0	0	0	0	406	0	0	0	0	0
	8:15 AM	0	143	0	0	200	0	0	0	0	0	0	0	343	0	0	0	0	0
	8:30 AM	0	158	2	2	144	0	0	0	0	0	0	0	306	0	0	0	0	0
	8:45 AM	0	147	1	1	148	0	0	0	0	1	0	1	299	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1,488	5	9	1,541	0	0	0	0	1	0	3	3,047	0	0	0	0	0
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	25%	0%	75%						
	APP/DEPART	1,493	/	1,491	1,550	/	1,542	0	/	14	4	/	0	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	0	834	0	3	856	0	0	0	0	0	0	1	1,694					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.961			0.859			0.000			0.250		0.927					
	APP/DEPART	834	/	835	859	/	856	0	/	3	1	/	0	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	225	3	0	228	0	0	0	0	0	0	2	458	0	0	0	0	0
	4:15 PM	0	222	2	3	227	0	0	0	0	1	0	1	456	0	0	0	0	0
	4:30 PM	0	220	2	1	249	0	0	0	0	2	0	0	474	0	0	0	0	0
	4:45 PM	0	236	0	1	255	0	0	0	0	1	0	1	494	0	0	0	0	0
	5:00 PM	0	196	3	1	266	0	0	0	0	1	0	0	467	0	0	0	0	0
	5:15 PM	0	241	0	2	259	0	0	0	0	1	0	1	504	0	0	0	0	0
	5:30 PM	0	233	0	1	219	0	0	0	0	0	0	3	456	0	0	0	0	0
	5:45 PM	0	232	0	0	228	0	0	0	0	0	0	1	461	0	0	0	0	0
	VOLUMES	0	1,805	10	9	1,931	0	0	0	0	6	0	9	3,770	0	0	0	0	0
	APPROACH %	0%	99%	1%	0%	100%	0%	0%	0%	0%	40%	0%	60%						
	APP/DEPART	1,815	/	1,814	1,940	/	1,937	0	/	19	15	/	0	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	893	5	5	1,029	0	0	0	0	5	0	2	1,939					
	APPROACH %	0%	99%	1%	0%	100%	0%	0%	0%	0%	71%	0%	29%						
	PEAK HR FACTOR		0.932			0.968			0.000			0.875		0.962					
	APP/DEPART	898	/	895	1,034	/	1,034	0	/	10	7	/	0	0					

		ALL PED AND BIKE					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS					SCHOOL AGE PED		
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TRAFFIC DATA SERVICES

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 1: PASSENGER VEHICLES

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	193	2	3	156	0	0	0	0	0	0	1	355					0
	7:15 AM	0	180	0	1	166	0	0	0	0	0	0	1	348					0
	7:30 AM	0	193	0	0	201	0	0	0	0	0	0	0	394					0
	7:45 AM	0	193	0	0	219	0	0	0	0	0	0	0	412					0
	8:00 AM	0	190	0	2	156	0	0	0	0	0	0	0	348					0
	8:15 AM	0	120	0	0	160	0	0	0	0	0	0	0	280					0
	8:30 AM	0	135	2	2	100	0	0	0	0	0	0	0	239					0
	8:45 AM	0	115	1	1	114	0	0	0	0	0	0	1	232					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	1,319	5	9	1,272	0	0	0	0	0	0	3	2,608	0	0	0	0	0
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	0%	0%	100%						
	APP/DEPART	1,324	/	1,322	1,281	/	1,272	0	/	14	3	/	0	0					
	BEGIN PEAK HR	7:00 AM																	
	VOLUMES	0	759	2	4	742	0	0	0	0	0	0	2	1,509					
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	0%	0%	100%						
	PEAK HR FACTOR		0.976			0.852			0.000			0.500		0.916					
	APP/DEPART	761	/	761	746	/	742	0	/	6	2	/	0	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	206	3	0	206	0	0	0	0	0	0	2	417					0
	4:15 PM	0	200	2	2	202	0	0	0	0	1	0	1	408					0
	4:30 PM	0	198	2	1	220	0	0	0	0	2	0	0	423					0
	4:45 PM	0	220	0	1	228	0	0	0	0	1	0	1	451					0
	5:00 PM	0	178	3	1	233	0	0	0	0	1	0	0	416					0
	5:15 PM	0	224	0	2	236	0	0	0	0	1	0	1	464					0
	5:30 PM	0	209	0	1	195	0	0	0	0	0	0	3	408					0
	5:45 PM	0	207	0	0	199	0	0	0	0	0	0	1	407					0
	VOLUMES	0	1,642	10	8	1,719	0	0	0	0	6	0	9	3,394	0	0	0	0	0
	APPROACH %	0%	99%	1%	0%	100%	0%	0%	0%	0%	40%	0%	60%						
	APP/DEPART	1,652	/	1,651	1,727	/	1,725	0	/	18	15	/	0	0					
	BEGIN PEAK HR	4:30 PM																	
	VOLUMES	0	820	5	5	917	0	0	0	0	5	0	2	1,754					
	APPROACH %	0%	99%	1%	1%	99%	0%	0%	0%	0%	71%	0%	29%						
	PEAK HR FACTOR		0.921			0.968			0.000			0.583		0.945					
	APP/DEPART	825	/	822	922	/	922	0	/	10	7	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	6	0	0	18	0	0	0	0	0	0	0	24					0
	7:15 AM	0	10	0	0	9	0	0	0	0	0	0	0	19					0
	7:30 AM	0	11	0	0	14	0	0	0	0	0	0	0	25					0
	7:45 AM	0	6	0	0	18	0	0	0	0	0	0	0	24					0
	8:00 AM	0	11	0	0	15	0	0	0	0	0	0	0	26					0
	8:15 AM	0	16	0	0	24	0	0	0	0	0	0	0	40					0
	8:30 AM	0	8	0	0	25	0	0	0	0	0	0	0	33					0
	8:45 AM	0	14	0	0	20	0	0	0	0	1	0	0	35					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	82	0	0	143	0	0	0	0	1	0	0	226	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%						
	APP/DEPART	82	/	82	143	/	144	0	/	0	1	/	0	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	49	0	0	84	0	0	0	0	1	0	0	134					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%						
	PEAK HR FACTOR		0.766			0.840			0.000			0.250		0.838					
	APP/DEPART	49	/	49	84	/	85	0	/	0	1	/	0	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	6	0	0	11	0	0	0	0	0	0	0	17					0
	4:15 PM	0	12	0	1	9	0	0	0	0	0	0	0	22					0
	4:30 PM	0	8	0	0	15	0	0	0	0	0	0	0	23					0
	4:45 PM	0	10	0	0	13	0	0	0	0	0	0	0	23					0
	5:00 PM	0	10	0	0	17	0	0	0	0	0	0	0	27					0
	5:15 PM	0	9	0	0	10	0	0	0	0	0	0	0	19					0
	5:30 PM	0	16	0	0	12	0	0	0	0	0	0	0	28					0
	5:45 PM	0	13	0	0	12	0	0	0	0	0	0	0	25					0
	VOLUMES	0	84	0	1	99	0	0	0	0	0	0	0	184	0	0	0	0	0
	APPROACH %	0%	100%	0%	1%	99%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	84	/	84	100	/	99	0	/	1	0	/	0	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	48	0	0	51	0	0	0	0	0	0	0	99					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.750			0.750			0.000			0.000		0.884					
	APP/DEPART	48	/	48	51	/	51	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM 7:00 AM	0	5	0	0	4	0	0	0	0	0	0	0	9					0
7:15 AM	0	3	0	0	4	0	0	0	0	0	0	0	7					0
7:30 AM	0	5	0	0	4	0	0	0	0	0	0	0	9					0
7:45 AM	0	5	0	0	7	0	0	0	0	0	0	0	12					0
8:00 AM	0	10	0	0	5	0	0	0	0	0	0	0	15					0
8:15 AM	0	4	0	0	6	0	0	0	0	0	0	0	10					0
8:30 AM	0	3	0	0	5	0	0	0	0	0	0	0	8					0
8:45 AM	0	6	0	0	5	0	0	0	0	0	0	0	11					0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
VOLUMES	0	41	0	0	40	0	0	0	0	0	0	0	81	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	41	/	41	40	/	40	0	/	0	0	/	0	0					
BEGIN PEAK HR		7:30 AM																
VOLUMES	0	24	0	0	22	0	0	0	0	0	0	0	46					
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.600			0.786			0.000			0.000		0.767					
APP/DEPART	24	/	24	22	/	22	0	/	0	0	/	0	0					
PM 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:00 PM	0	9	0	0	7	0	0	0	0	0	0	0	16					0
4:15 PM	0	5	0	0	11	0	0	0	0	0	0	0	16					0
4:30 PM	0	10	0	0	12	0	0	0	0	0	0	0	22					0
4:45 PM	0	3	0	0	4	0	0	0	0	0	0	0	7					0
5:00 PM	0	6	0	0	11	0	0	0	0	0	0	0	17					0
5:15 PM	0	3	0	0	6	0	0	0	0	0	0	0	9					0
5:30 PM	0	4	0	0	5	0	0	0	0	0	0	0	9					0
5:45 PM	0	6	0	0	11	0	0	0	0	0	0	0	17					0
VOLUMES	0	46	0	0	67	0	0	0	0	0	0	0	113	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	46	/	46	67	/	67	0	/	0	0	/	0	0					
BEGIN PEAK HR		4:15 PM																
VOLUMES	0	24	0	0	38	0	0	0	0	0	0	0	62					
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.600			0.792			0.000			0.000		0.705					
APP/DEPART	24	/	24	38	/	38	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MID / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	2	0	0	15	0	0	0	0	0	0	0	17					0
	7:15 AM	0	5	0	0	9	0	0	0	0	0	0	0	14					0
	7:30 AM	0	3	0	0	11	0	0	0	0	0	0	0	14					0
	7:45 AM	0	3	0	0	6	0	0	0	0	0	0	0	9					0
	8:00 AM	0	6	0	0	11	0	0	0	0	0	0	0	17					0
	8:15 AM	0	3	0	0	10	0	0	0	0	0	0	0	13					0
	8:30 AM	0	12	0	0	14	0	0	0	0	0	0	0	26					0
	8:45 AM	0	12	0	0	9	0	0	0	0	0	0	0	21					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	46	0	0	85	0	0	0	0	0	0	0	131	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	46	/	46	85	/	85	0	/	0	0	/	0	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	33	0	0	44	0	0	0	0	0	0	0	77					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.688			0.786			0.000			0.000		0.740					
	APP/DEPART	33	/	33	44	/	44	0	/	0	0	/	0	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	6					0
	4:15 PM	0	5	0	0	5	0	0	0	0	0	0	0	10					0
	4:30 PM	0	4	0	0	2	0	0	0	0	0	0	0	6					0
	4:45 PM	0	3	0	0	10	0	0	0	0	0	0	0	13					0
	5:00 PM	0	2	0	0	5	0	0	0	0	0	0	0	7					0
	5:15 PM	0	5	0	0	7	0	0	0	0	0	0	0	12					0
	5:30 PM	0	4	0	0	7	0	0	0	0	0	0	0	11					0
	5:45 PM	0	6	0	0	6	0	0	0	0	0	0	0	12					0
	VOLUMES	0	32	0	0	45	0	0	0	0	0	0	0	77	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	32	/	32	45	/	45	0	/	0	0	/	0	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	14	0	0	29	0	0	0	0	0	0	0	43					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.700			0.725			0.000			0.000		0.827					
	APP/DEPART	14	/	14	29	/	29	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
	BEGIN PEAK HR		9:45 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.250			0.250			0.000			0.000		0.250					
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	3
THURSDAY	EAST & WEST:	Trucking	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM / PM / MID / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Trucking			WESTBOUND Trucking				U-TURNS				
LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5	TOTAL	NB	SB	EB	WB	TTL
AM 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1					0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0					
BEGIN PEAK HR		7:30 AM																
VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1					
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.250			0.000			0.000		0.250					
APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0					
PM 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
BEGIN PEAK HR		5:45 PM																
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Trucking WEST SIDE EAST SIDE **Trucking**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC tel: 951 249 3226 pacific@aimtd.com

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
Thu, May 15, 14	NORTH & SOUTH:	Riverside	LOCATION #:	4
	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

NOTES:

AM PM MD Other — ◄ W — N ▲ S ▼ — E ►

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
AM	7:00 AM	7	205	4	1	187	9	6	0	1	3	0	0	423
	7:15 AM	8	194	2	3	183	6	4	0	0	1	0	1	402
	7:30 AM	8	205	4	0	218	8	3	1	1	4	0	2	454
	7:45 AM	8	204	1	7	238	8	4	0	2	4	2	1	479
	8:00 AM	3	212	4	1	182	4	5	0	0	1	0	2	414
	8:15 AM	4	137	0	1	197	5	1	1	2	1	0	2	351
	8:30 AM	6	153	1	1	141	4	2	0	1	5	0	3	317
	8:45 AM	5	145	5	2	143	5	3	0	0	1	0	2	311
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	49	1,455	21	16	1,489	49	28	2	7	20	2	13	3,151
	APPROACH %	3%	95%	1%	1%	96%	3%	76%	5%	19%	57%	6%	37%	
	APP/DEPART	1,525	/	1,496	1,554	/	1,516	37	/	39	35	/	100	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	31	808	11	11	826	31	17	1	4	12	2	4	1,758
	APPROACH %	4%	95%	1%	1%	95%	4%	77%	5%	18%	67%	11%	22%	
	PEAK HR FACTOR		0.979			0.858			0.786			0.643		0.918
	APP/DEPART	850	/	829	868	/	842	22	/	23	18	/	64	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	4	215	2	1	226	5	9	2	2	2	1	1	470
	4:15 PM	7	214	1	1	217	8	5	0	0	1	0	1	455
	4:30 PM	0	206	1	0	252	2	13	6	0	3	1	2	486
	4:45 PM	3	230	5	1	256	3	2	0	0	0	0	2	502
	5:00 PM	3	196	9	1	263	1	4	1	0	2	1	0	481
	5:15 PM	2	238	3	1	255	2	4	0	2	0	0	0	507
	5:30 PM	1	221	6	0	212	4	8	4	3	1	0	0	460
	5:45 PM	2	231	1	1	223	3	3	2	1	3	0	1	471
	VOLUMES	22	1,751	28	6	1,904	28	48	15	8	12	3	7	3,832
	APPROACH %	1%	97%	2%	0%	98%	1%	68%	21%	11%	55%	14%	32%	
	APP/DEPART	1,801	/	1,806	1,938	/	1,924	71	/	49	22	/	53	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	8	870	18	3	1,026	8	23	7	2	5	2	4	1,976
	APPROACH %	1%	97%	2%	0%	99%	1%	72%	22%	6%	45%	18%	36%	
	PEAK HR FACTOR		0.922			0.978			0.421			0.458		0.974
	APP/DEPART	896	/	897	1,037	/	1,033	32	/	28	11	/	18	0

U-TURNS

AM	NB	SB	EB	WB	TTL
	X	X	X	X	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0
VOLUMES	0	0	0	0	0

PM	NB	SB	EB	WB	TTL
	X	X	X	X	
03:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
VOLUMES	0	0	0	0	0

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

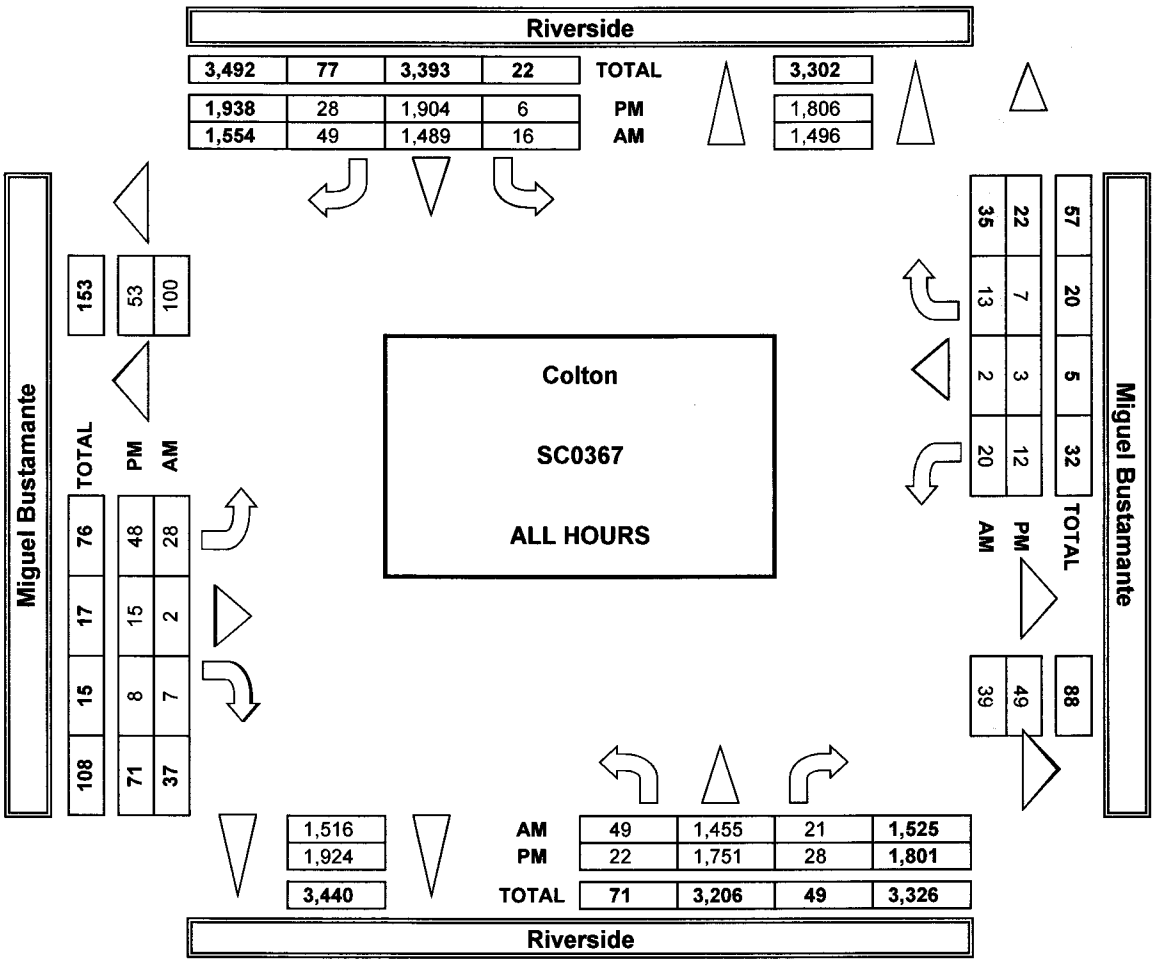
SOUTH SIDE

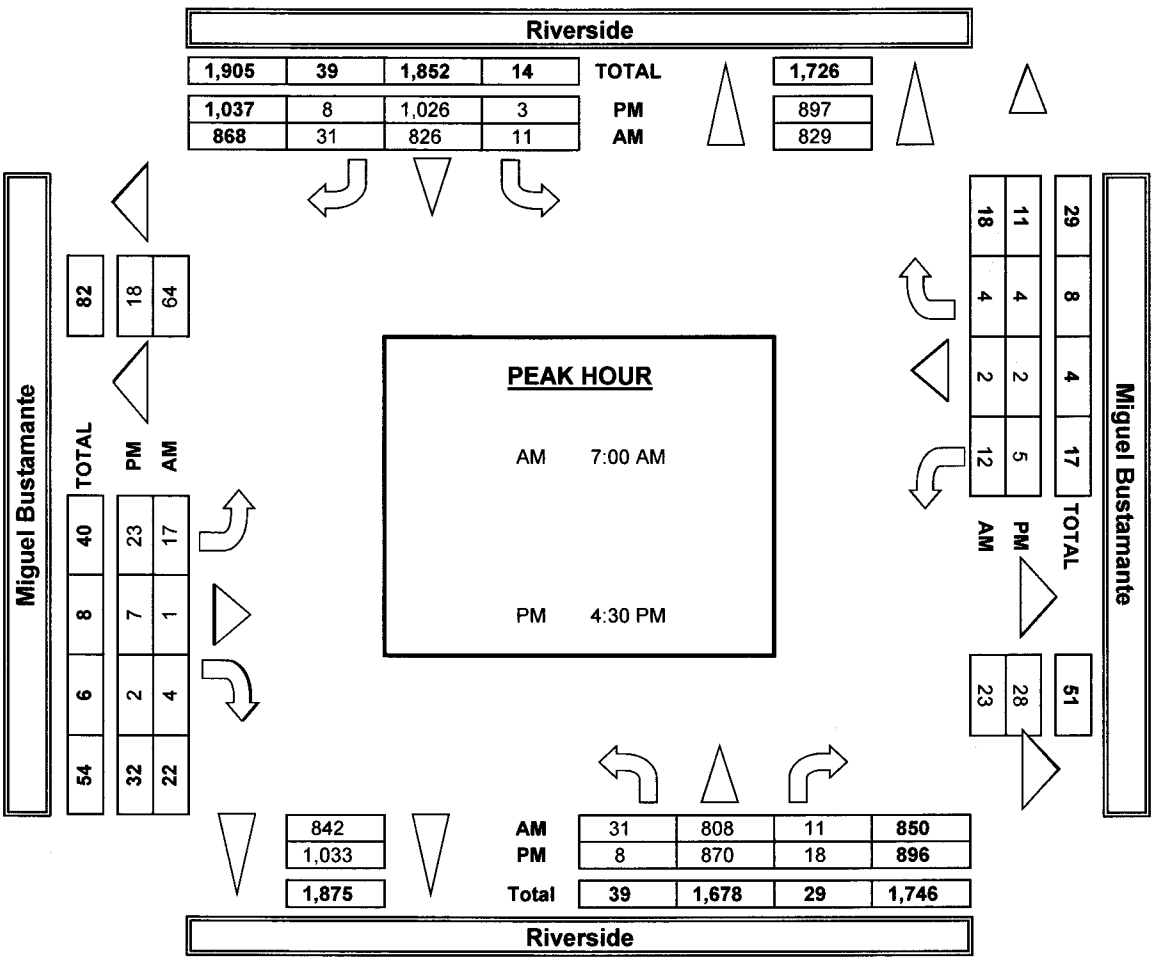
Riverside

		ALL PED AND BIKE					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS					SCHOOL AGE PED		
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TRAFFIC DATA SERVICES

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER COMB	▲ N ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	6	196	2	1	152	7	2	0	0	2	0	0	368					0
	7:15 AM	7	179	1	1	165	3	1	0	0	1	0	1	359					0
	7:30 AM	7	188	3	0	189	7	1	1	0	4	0	2	402					0
	7:45 AM	8	193	0	3	213	6	1	0	1	4	2	1	432					0
	8:00 AM	3	189	3	1	151	4	2	0	0	1	0	1	355					0
	8:15 AM	3	116	0	0	159	4	0	1	2	0	0	1	286					0
	8:30 AM	6	134	1	0	100	2	0	0	1	1	0	1	246					0
	8:45 AM	3	117	5	2	111	2	0	0	0	1	0	1	242					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	43	1,312	15	8	1,240	35	7	2	4	14	2	8	2,690	0	0	0	0	0
	APPROACH %	3%	96%	1%	1%	97%	3%	54%	15%	31%	58%	8%	33%						
	APP/DEPART	1,370	/	1,327	1,283	/	1,258	13	/	25	24	/	80	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	28	756	6	5	719	23	5	1	1	11	2	4	1,561					
	APPROACH %	4%	96%	1%	1%	96%	3%	71%	14%	14%	65%	12%	24%						
	PEAK HR FACTOR		0.968			0.841			0.875			0.607		0.903					
	APP/DEPART	790	/	765	747	/	731	7	/	12	17	/	53	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	3	198	2	1	205	4	7	2	1	1	1	1	426					0
	4:15 PM	2	193	1	1	194	6	4	0	0	1	0	1	403					0
	4:30 PM	0	185	1	0	223	2	12	6	0	2	0	2	433					0
	4:45 PM	1	215	5	0	230	3	2	0	0	0	0	1	457					0
	5:00 PM	3	178	9	0	231	1	4	1	0	2	0	0	429					0
	5:15 PM	2	222	3	0	234	1	3	0	1	0	0	0	466					0
	5:30 PM	1	200	6	0	189	3	5	4	3	1	0	0	412					0
	5:45 PM	2	209	1	1	196	1	0	2	1	2	0	1	416					0
	VOLUMES	14	1,600	28	3	1,702	21	37	15	6	9	1	6	3,442	0	0	0	0	0
	APPROACH %	1%	97%	2%	0%	99%	1%	64%	26%	10%	56%	6%	38%						
	APP/DEPART	1,642	/	1,643	1,726	/	1,717	58	/	46	16	/	36	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	6	800	18	0	918	7	21	7	1	4	0	3	1,785					
	APPROACH %	1%	97%	2%	0%	99%	1%	72%	24%	3%	57%	0%	43%						
	PEAK HR FACTOR		0.907			0.984			0.403			0.438		0.958					
	APP/DEPART	824	/	824	925	/	923	29	/	25	7	/	13	0					

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	3	2	0	16	2	3	0	1	0	0	0	27					0
	7:15 AM	1	7	1	0	8	1	3	0	0	0	0	0	21					0
	7:30 AM	1	9	0	0	14	0	2	0	1	0	0	0	27					0
	7:45 AM	0	5	1	2	16	0	1	0	1	0	0	0	26					0
	8:00 AM	0	10	0	0	15	0	0	0	0	0	0	1	26					0
	8:15 AM	1	16	0	1	23	0	0	0	0	1	0	0	42					0
	8:30 AM	0	6	0	0	25	0	1	0	0	1	0	1	34					0
	8:45 AM	1	14	0	0	21	0	0	0	0	0	0	0	36					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	4	70	4	3	138	3	10	0	3	2	0	2	239	0	0	0	0	0
	APPROACH %	5%	90%	5%	2%	96%	2%	77%	0%	23%	50%	0%	50%						
	APP/DEPART	78	/	82	144	/	143	13	/	7	4	/	7	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	2	46	0	1	84	0	1	0	0	2	0	2	138					
	APPROACH %	4%	96%	0%	1%	99%	0%	100%	0%	0%	50%	0%	50%						
	PEAK HR FACTOR		0.706			0.850			0.250			0.500		0.821					
	APP/DEPART	48	/	49	85	/	86	1	/	1	4	/	2	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	1	5	0	0	11	0	1	0	1	1	0	0	20					0
	4:15 PM	5	11	0	0	9	0	1	0	0	0	0	0	26					0
	4:30 PM	0	7	0	0	15	0	1	0	0	1	1	0	25					0
	4:45 PM	2	9	0	0	13	0	0	0	0	0	0	1	25					0
	5:00 PM	0	10	0	0	17	0	0	0	0	0	1	0	28					0
	5:15 PM	0	9	0	0	10	0	0	0	0	0	0	0	19					0
	5:30 PM	0	14	0	0	12	0	2	0	0	0	0	0	28					0
	5:45 PM	0	10	0	0	11	1	3	0	0	1	0	0	26					0
	VOLUMES	8	75	0	0	98	1	8	0	1	3	2	1	197	0	0	0	0	0
	APPROACH %	10%	90%	0%	0%	99%	1%	89%	0%	11%	50%	33%	17%						
	APP/DEPART	83	/	84	99	/	102	9	/	0	6	/	11	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	7	37	0	0	54	0	2	0	0	1	2	1	104					
	APPROACH %	16%	84%	0%	0%	100%	0%	100%	0%	0%	25%	50%	25%						
	PEAK HR FACTOR		0.688			0.794			0.500			0.500		0.929					
	APP/DEPART	44	/	40	54	/	55	2	/	0	4	/	9	0					

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

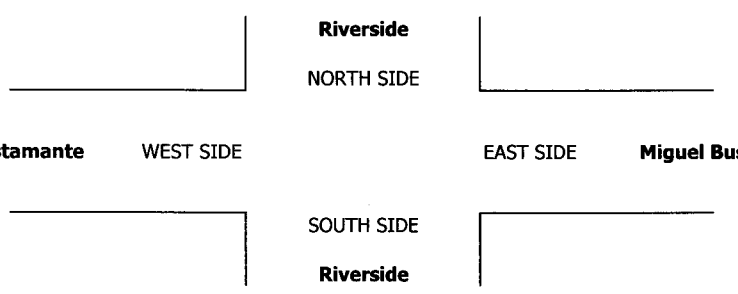
CLASS 3: 3-AXLE TRUCKS

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM 7:00 AM	0	5	0	0	4	0	0	0	0	1	0	0	10					0
7:15 AM	0	3	0	0	4	0	0	0	0	0	0	0	7					0
7:30 AM	0	5	0	0	4	0	0	0	0	0	0	0	9					0
7:45 AM	0	5	0	0	5	2	0	0	0	0	0	0	12					0
8:00 AM	0	10	0	0	5	0	0	0	0	0	0	0	15					0
8:15 AM	0	2	0	0	6	0	1	0	0	0	0	1	10					0
8:30 AM	0	3	0	0	5	0	0	0	0	0	0	0	8					0
8:45 AM	0	5	0	0	4	1	0	0	0	0	0	1	11					0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
VOLUMES	0	38	0	0	37	3	1	0	0	1	0	2	82	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	93%	8%	100%	0%	0%	33%	0%	67%						
APP/DEPART	38	/	41	40	/	38	1	/	0	3	/	3	0					
BEGIN PEAK HR		7:30 AM																
VOLUMES	0	22	0	0	20	2	1	0	0	0	0	1	46					
APPROACH %	0%	100%	0%	0%	91%	9%	100%	0%	0%	0%	0%	100%						
PEAK HR FACTOR		0.550			0.786			0.250			0.250		0.767					
APP/DEPART	22	/	24	22	/	20	1	/	0	1	/	2	0					
PM 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:00 PM	0	9	0	0	6	1	0	0	0	0	0	0	16					0
4:15 PM	0	5	0	0	11	0	0	0	0	0	0	0	16					0
4:30 PM	0	10	0	0	12	0	0	0	0	0	0	0	22					0
4:45 PM	0	3	0	0	4	0	0	0	0	0	0	0	7					0
5:00 PM	0	6	0	0	11	0	0	0	0	0	0	0	17					0
5:15 PM	0	3	0	0	5	1	0	0	0	0	0	0	9					0
5:30 PM	0	4	0	0	5	0	0	0	0	0	0	0	9					0
5:45 PM	0	6	0	0	10	1	0	0	0	0	0	0	17					0
VOLUMES	0	46	0	0	64	3	0	0	0	0	0	0	113	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	96%	4%	0%	0%	0%	0%	0%	0%						
APP/DEPART	46	/	46	67	/	64	0	/	0	0	/	3	0					
BEGIN PEAK HR		4:15 PM																
VOLUMES	0	24	0	0	38	0	0	0	0	0	0	0	62					
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.600			0.792			0.000			0.000		0.705					
APP/DEPART	24	/	24	38	/	38	0	/	0	0	/	0	0					



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MID / OTHER / DATE — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	1	1	0	0	15	0	1	0	0	0	0	0	18					0
	7:15 AM	0	5	0	1	6	2	0	0	0	0	0	0	14					0
	7:30 AM	0	3	1	0	10	1	0	0	0	0	0	0	15					0
	7:45 AM	0	1	0	2	4	0	2	0	0	0	0	0	9					0
	8:00 AM	0	3	1	0	11	0	3	0	0	0	0	0	18					0
	8:15 AM	0	3	0	0	9	1	0	0	0	0	0	0	13					0
	8:30 AM	0	10	0	1	11	2	1	0	0	3	0	1	29					0
	8:45 AM	1	9	0	0	7	2	3	0	0	0	0	0	22					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	2	35	2	4	73	8	10	0	0	3	0	1	138	0	0	0	0	0
	APPROACH %	5%	90%	5%	5%	86%	9%	100%	0%	0%	75%	0%	25%						
	APP/DEPART	39	/	46	85	/	76	10	/	6	4	/	10	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	1	25	1	1	38	5	7	0	0	3	0	1	82					
	APPROACH %	4%	93%	4%	2%	86%	11%	100%	0%	0%	75%	0%	25%						
	PEAK HR FACTOR		0.675			0.786			0.583			0.250		0.707					
	APP/DEPART	27	/	33	44	/	41	7	/	2	4	/	6	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	2	0	0	3	0	1	0	0	0	0	0	6					0
	4:15 PM	0	5	0	0	3	2	0	0	0	0	0	0	10					0
	4:30 PM	0	4	0	0	2	0	0	0	0	0	0	0	6					0
	4:45 PM	0	3	0	1	9	0	0	0	0	0	0	0	13					0
	5:00 PM	0	2	0	1	4	0	0	0	0	0	0	0	7					0
	5:15 PM	0	4	0	1	6	0	1	0	1	0	0	0	13					0
	5:30 PM	0	3	0	0	6	1	1	0	0	0	0	0	11					0
	5:45 PM	0	6	0	0	6	0	0	0	0	0	0	0	12					0
	VOLUMES	0	29	0	3	39	3	3	0	1	0	0	0	78	0	0	0	0	0
	APPROACH %	0%	100%	0%	7%	87%	7%	75%	0%	25%	0%	0%	0%						
	APP/DEPART	29	/	32	45	/	40	4	/	3	0	/	3	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	12	0	3	25	1	2	0	1	0	0	0	44					
	APPROACH %	0%	100%	0%	10%	86%	3%	67%	0%	33%	0%	0%	0%						
	PEAK HR FACTOR		0.750			0.725			0.375			0.000		0.846					
	APP/DEPART	12	/	14	29	/	26	3	/	3	0	/	1	0					

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

CLASS 5:	NOTES:
RV	

AM
PM
MD
OTHER
(1-HR)

N ▲ ◄ W E ► S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	0	0	0	1	0	0	0	0	0	0	0	0	1					
	APPROACH %	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.250			0.000			0.000		0.250					
	APP/DEPART	0	/	0	1	/	0	0	/	1	0	/	0	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	0	2					
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.250			0.250			0.000			0.000		0.250					
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Riverside	LOCATION #:	4
THURSDAY	EAST & WEST:	Miguel Bustamante	CONTROL:	SIGNAL

CLASS 6:	NOTES:
BUSES	

AM PM MD OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Riverside			SOUTHBOUND Riverside			EASTBOUND Miguel Bustamante			WESTBOUND Miguel Bustamante				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	0	0	0	1	0	0	0	0	0	0	0	1					
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.250			0.000			0.000		0.250					
	APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
	BEGIN PEAK HR		5:45 PM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					

Riverside

NORTH SIDE

Miguel Bustamante WEST SIDE EAST SIDE **Miguel Bustamante**

SOUTH SIDE

Riverside

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC tel: 951 249 3226 pacific@aimtd.com

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
Thu, May 15, 14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa			
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	4	0	4	0	0	0	0	43	6	1	70	0	128
	7:15 AM	2	0	1	0	0	0	0	49	5	2	57	0	116
	7:30 AM	4	0	5	0	0	0	0	64	6	4	61	0	144
	7:45 AM	4	0	3	0	0	0	0	43	8	2	89	0	149
	8:00 AM	5	0	4	0	0	0	0	49	7	2	52	0	119
	8:15 AM	7	0	2	0	0	0	0	37	4	2	35	0	87
	8:30 AM	7	0	1	0	0	0	0	45	5	1	39	0	98
	8:45 AM	2	0	6	0	0	0	0	30	11	2	28	0	79
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	35	0	26	0	0	0	0	360	52	16	431	0	920
	APPROACH %	57%	0%	43%	0%	0%	0%	0%	87%	13%	4%	96%	0%	
	APP/DEPART	61	/	0	0	/	68	412	/	386	447	/	466	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	14	0	13	0	0	0	0	199	25	9	277	0	537
	APPROACH %	52%	0%	48%	0%	0%	0%	0%	89%	11%	3%	97%	0%	
	PEAK HR FACTOR		0.750			0.000			0.800			0.786		0.901
	APP/DEPART	27	/	0	0	/	34	224	/	212	286	/	291	0
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	3	0	7	0	0	0	0	128	6	1	49	0	194
	4:15 PM	2	0	5	0	0	0	0	114	5	2	34	0	162
	4:30 PM	3	0	15	0	0	0	0	131	0	3	34	0	186
	4:45 PM	6	0	9	0	0	0	0	134	4	0	38	0	191
	5:00 PM	4	0	8	0	0	0	0	154	3	3	43	0	215
	5:15 PM	4	0	8	0	0	0	0	131	4	0	49	0	196
	5:30 PM	4	0	8	0	0	0	0	116	4	1	29	0	162
	5:45 PM	2	0	5	0	0	0	0	108	4	2	32	0	153
	VOLUMES	28	0	65	0	0	0	0	1,016	30	12	308	0	1,459
	APPROACH %	30%	0%	70%	0%	0%	0%	0%	97%	3%	4%	96%	0%	
	APP/DEPART	93	/	0	0	/	42	1,046	/	1,081	320	/	336	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	17	0	40	0	0	0	0	550	11	6	164	0	788
	APPROACH %	30%	0%	70%	0%	0%	0%	0%	98%	2%	4%	96%	0%	
	PEAK HR FACTOR		0.792			0.000			0.893			0.867		0.916
	APP/DEPART	57	/	0	0	/	17	561	/	590	170	/	181	0

U-TURNS

AM	NB	SB	EB	WB	TTL
	0	X	0	0	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0
	0	0	0	0	0

PM					
03:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
	0	0	0	0	0

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

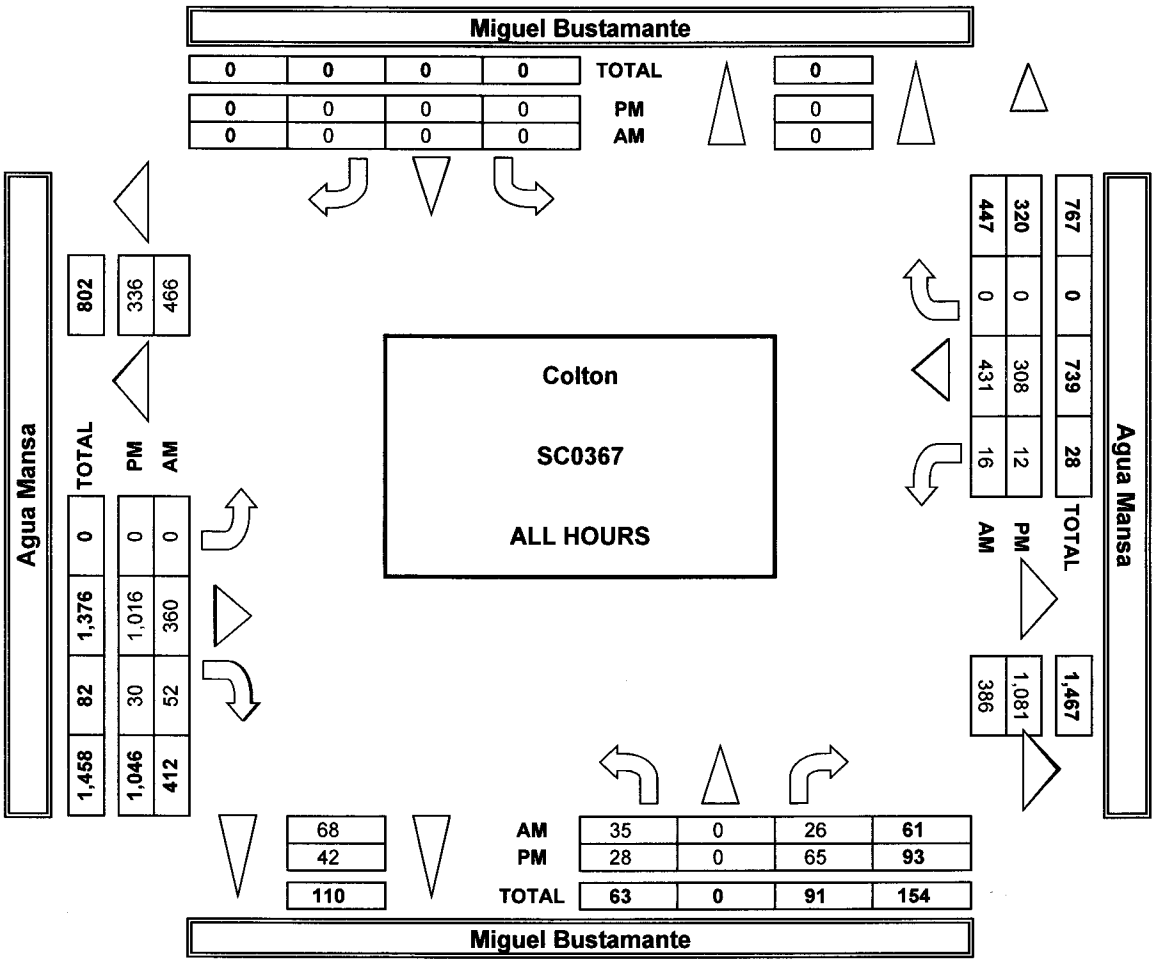
SOUTH SIDE

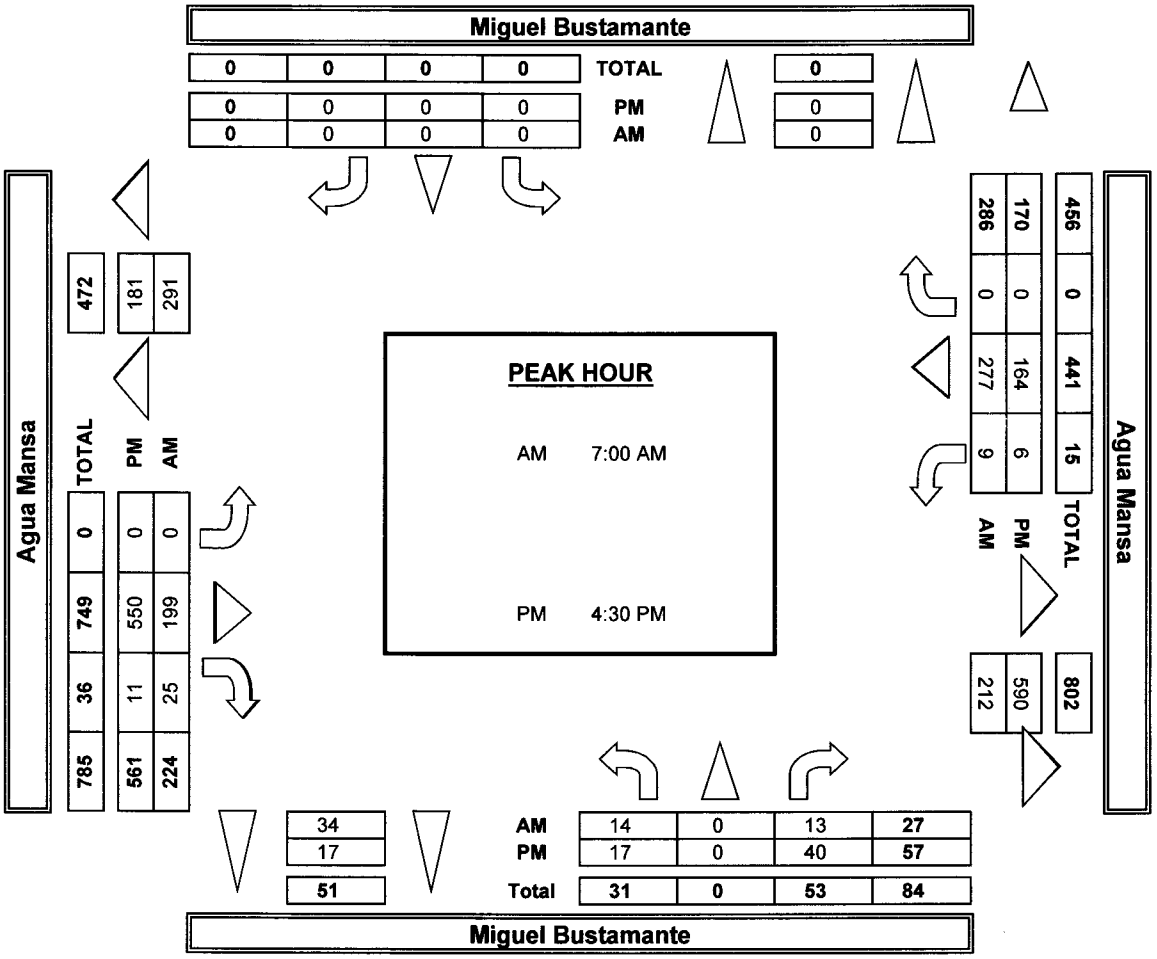
Miguel Bustamante

		ALL PED AND BIKE					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS					SCHOOL AGE PED		
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PACIFIC TRAFFIC DATA SERVICES

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 1:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
PASSENGER VEHICLES			

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	2	0	0	0	0	35	0	1	54	0	92					0
	7:15 AM	1	0	0	0	0	0	0	38	2	0	50	0	91					0
	7:30 AM	2	0	4	0	0	0	0	46	3	2	57	0	114					0
	7:45 AM	1	0	1	0	0	0	0	36	1	2	76	0	117					0
	8:00 AM	0	0	3	0	0	0	0	33	2	1	39	0	78					0
	8:15 AM	3	0	1	0	0	0	0	22	2	2	25	0	55					0
	8:30 AM	2	0	1	0	0	0	0	33	1	0	30	0	67					0
	8:45 AM	1	0	3	0	0	0	0	19	4	2	17	0	46					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	10	0	15	0	0	0	0	262	15	10	348	0	660	0	0	0	0	0
	APPROACH %	40%	0%	60%	0%	0%	0%	0%	95%	5%	3%	97%	0%						
	APP/DEPART	25	/	0	0	/	25	277	/	277	358	/	358	0					
	BEGIN PEAK HR	7:00 AM																	
	VOLUMES	4	0	7	0	0	0	0	155	6	5	237	0	414					
	APPROACH %	36%	0%	64%	0%	0%	0%	0%	96%	4%	2%	98%	0%						
	PEAK HR FACTOR	0.458			0.000			0.821			0.776			0.885					
	APP/DEPART	11	/	0	0	/	11	161	/	162	242	/	241	0					
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	2	0	5	0	0	0	0	119	2	1	38	0	167					0
	4:15 PM	1	0	1	0	0	0	0	105	2	0	30	0	139					0
	4:30 PM	1	0	12	0	0	0	0	116	0	0	28	0	157					0
	4:45 PM	0	0	6	0	0	0	0	118	1	0	33	0	158					0
	5:00 PM	1	0	8	0	0	0	0	144	0	2	38	0	193					0
	5:15 PM	0	0	6	0	0	0	0	124	1	0	46	0	177					0
	5:30 PM	2	0	7	0	0	0	0	110	1	1	29	0	150					0
	5:45 PM	0	0	4	0	0	0	0	99	0	2	31	0	136					0
	VOLUMES	7	0	49	0	0	0	0	935	7	6	273	0	1,277	0	0	0	0	0
	APPROACH %	13%	0%	88%	0%	0%	0%	0%	99%	1%	2%	98%	0%						
	APP/DEPART	56	/	0	0	/	13	942	/	984	279	/	280	0					
	BEGIN PEAK HR	4:30 PM																	
	VOLUMES	2	0	32	0	0	0	0	502	2	2	145	0	685					
	APPROACH %	6%	0%	94%	0%	0%	0%	0%	100%	0%	1%	99%	0%						
	PEAK HR FACTOR	0.654			0.000			0.875			0.799			0.887					
	APP/DEPART	34	/	0	0	/	4	504	/	534	147	/	147	0					

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Miguel Bustamante

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM 7:00 AM	1	0	0	0	0	0	0	3	2	0	8	0	14					0
AM 7:15 AM	1	0	1	0	0	0	0	5	0	0	2	0	9					0
AM 7:30 AM	1	0	0	0	0	0	0	8	0	1	1	0	11					0
AM 7:45 AM	0	0	0	0	0	0	0	4	1	0	6	0	11					0
AM 8:00 AM	0	0	0	0	0	0	0	7	1	0	8	0	16					0
AM 8:15 AM	0	0	0	0	0	0	0	7	0	0	3	0	10					0
AM 8:30 AM	0	0	0	0	0	0	0	7	0	0	3	0	10					0
AM 8:45 AM	0	0	1	0	0	0	0	7	2	0	2	0	12					0
AM 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
AM VOLUMES	3	0	2	0	0	0	0	48	6	1	33	0	93	0	0	0	0	0
AM APPROACH %	60%	0%	40%	0%	0%	0%	0%	89%	11%	3%	97%	0%						
AM APP/DEPART	5	/	0	0	/	7	54	/	50	34	/	36	0					
AM BEGIN PEAK HR		8:00 AM																
AM VOLUMES	0	0	1	0	0	0	0	28	3	0	16	0	48					
AM APPROACH %	0%	0%	100%	0%	0%	0%	0%	90%	10%	0%	100%	0%						
AM PEAK HR FACTOR		0.250			0.000			0.861			0.500		0.750					
AM APP/DEPART	1	/	0	0	/	3	31	/	29	16	/	16	0					
PM 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
PM 4:00 PM	0	0	1	0	0	0	0	7	0	0	7	0	15					0
PM 4:15 PM	1	0	0	0	0	0	0	6	0	1	3	0	11					0
PM 4:30 PM	1	0	3	0	0	0	0	12	0	2	5	0	23					0
PM 4:45 PM	2	0	1	0	0	0	0	13	0	0	3	0	19					0
PM 5:00 PM	2	0	0	0	0	0	0	8	1	1	3	0	15					0
PM 5:15 PM	0	0	0	0	0	0	0	5	0	0	1	0	6					0
PM 5:30 PM	0	0	0	0	0	0	0	5	0	0	0	0	5					0
PM 5:45 PM	1	0	0	0	0	0	0	3	0	0	0	0	4					0
PM VOLUMES	7	0	5	0	0	0	0	59	1	4	22	0	98	0	0	0	0	0
PM APPROACH %	58%	0%	42%	0%	0%	0%	0%	98%	2%	15%	85%	0%						
PM APP/DEPART	12	/	0	0	/	5	60	/	64	26	/	29	0					
PM BEGIN PEAK HR		4:15 PM																
PM VOLUMES	6	0	4	0	0	0	0	39	1	4	14	0	68					
PM APPROACH %	60%	0%	40%	0%	0%	0%	0%	98%	3%	22%	78%	0%						
PM PEAK HR FACTOR		0.625			0.000			0.769			0.643		0.739					
PM APP/DEPART	10	/	0	0	/	5	40	/	43	18	/	20	0					

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Miguel Bustamante

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 3:	NOTES:
3-AXLE TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	1	0	0	0	0	3	0	0	2	0	6					0
	7:15 AM	0	0	0	0	0	0	0	3	0	1	1	0	5					0
	7:30 AM	0	0	1	0	0	0	0	5	0	0	2	0	8					0
	7:45 AM	0	0	0	0	0	0	0	1	0	0	3	0	4					0
	8:00 AM	1	0	0	0	0	0	0	6	2	0	1	0	10					0
	8:15 AM	0	0	0	0	0	0	0	4	0	0	3	0	7					0
	8:30 AM	0	0	0	0	0	0	0	2	1	0	3	0	6					0
	8:45 AM	0	0	1	0	0	0	0	2	2	0	1	0	6					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	1	0	3	0	0	0	0	26	5	1	16	0	52	0	0	0	0	0
	APPROACH %	25%	0%	75%	0%	0%	0%	0%	84%	16%	6%	94%	0%						
	APP/DEPART	4	/	0	0	/	6	31	/	29	17	/	17	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	1	0	1	0	0	0	0	14	5	0	8	0	29					
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	74%	26%	0%	100%	0%						
	PEAK HR FACTOR		0.500			0.000			0.594			0.667		0.725					
	APP/DEPART	2	/	0	0	/	5	19	/	15	8	/	9	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	1	0	0	0	0	0	0	1	0	0	3	0	5					0
	4:15 PM	0	0	0	0	0	0	0	1	2	0	0	0	3					0
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1					0
	4:45 PM	1	0	0	0	0	0	0	1	0	0	2	0	4					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	1	0	0	0	0	0	0	2	0	0	2	0	5					0
	5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2					0
	5:45 PM	0	0	0	0	0	0	0	3	1	0	0	0	4					0
	VOLUMES	3	0	0	0	0	0	0	10	4	0	7	0	24	0	0	0	0	0
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	71%	29%	0%	100%	0%						
	APP/DEPART	3	/	0	0	/	4	14	/	10	7	/	10	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	2	0	0	0	0	0	0	4	2	0	5	0	13					
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	67%	33%	0%	100%	0%						
	PEAK HR FACTOR		0.500			0.000			0.500			0.417		0.650					
	APP/DEPART	2	/	0	0	/	2	6	/	4	5	/	7	0					

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Miguel Bustamante

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	3	0	1	0	0	0	0	2	4	0	5	0	15					0
	7:15 AM	0	0	0	0	0	0	0	3	3	1	2	0	9					0
	7:30 AM	1	0	0	0	0	0	0	5	3	1	1	0	11					0
	7:45 AM	3	0	2	0	0	0	0	2	6	0	3	0	16					0
	8:00 AM	4	0	0	0	0	0	0	3	2	1	4	0	14					0
	8:15 AM	4	0	1	0	0	0	0	4	2	0	4	0	15					0
	8:30 AM	5	0	0	0	0	0	0	3	3	1	2	0	14					0
	8:45 AM	1	0	1	0	0	0	0	2	3	0	8	0	15					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	21	0	5	0	0	0	0	24	26	4	29	0	109	0	0	0	0	0
	APPROACH %	81%	0%	19%	0%	0%	0%	0%	48%	52%	12%	88%	0%						
	APP/DEPART	26	/	0	0	/	30	50	/	29	33	/	50	0					
	BEGIN PEAK HR	7:45 AM																	
	VOLUMES	16	0	3	0	0	0	0	12	13	2	13	0	59					
	APPROACH %	84%	0%	16%	0%	0%	0%	0%	48%	52%	13%	87%	0%						
	PEAK HR FACTOR	0.950			0.000			0.781			0.750			0.922					
	APP/DEPART	19	/	0	0	/	15	25	/	15	15	/	29	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	1	0	0	0	0	1	4	0	1	0	7					0
	4:15 PM	0	0	4	0	0	0	0	2	1	1	1	0	9					0
	4:30 PM	1	0	0	0	0	0	0	2	0	1	1	0	5					0
	4:45 PM	3	0	2	0	0	0	0	1	3	0	0	0	9					0
	5:00 PM	1	0	0	0	0	0	0	2	2	0	2	0	7					0
	5:15 PM	3	0	2	0	0	0	0	0	3	0	0	0	8					0
	5:30 PM	2	0	1	0	0	0	0	0	2	0	0	0	5					0
	5:45 PM	1	0	1	0	0	0	0	3	3	0	1	0	9					0
	VOLUMES	11	0	11	0	0	0	0	11	18	2	6	0	59	0	0	0	0	0
	APPROACH %	50%	0%	50%	0%	0%	0%	0%	38%	62%	25%	75%	0%						
	APP/DEPART	22	/	0	0	/	20	29	/	22	8	/	17	0					
	BEGIN PEAK HR	4:15 PM																	
	VOLUMES	5	0	6	0	0	0	0	7	6	2	4	0	30					
	APPROACH %	45%	0%	55%	0%	0%	0%	0%	54%	46%	33%	67%	0%						
	PEAK HR FACTOR	0.550			0.000			0.650			0.750			0.833					
	APP/DEPART	11	/	0	0	/	8	13	/	13	6	/	9	0					

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE

EAST SIDE **Agua Mansa**

SOUTH SIDE

Miguel Bustamante

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 5:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
RV			

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	1	0	0	0	0	0	0	0	2	0	3	0	0	0	0	0
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	APP/DEPART	1	/	0	0	/	0	0	/	1	2	/	2	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	0	1	0	0	0	0	0	0	0	1	0	2					
	APPROACH %	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.250			0.000			0.000			0.250		0.500					
	APP/DEPART	1	/	0	0	/	0	0	/	1	1	/	1	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					
	BEGIN PEAK HR		5:45 PM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.000		0.000					
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0					

Miguel Bustamante

NORTH SIDE

Agua Mansa WEST SIDE EAST SIDE **Agua Mansa**

SOUTH SIDE

Miguel Bustamante

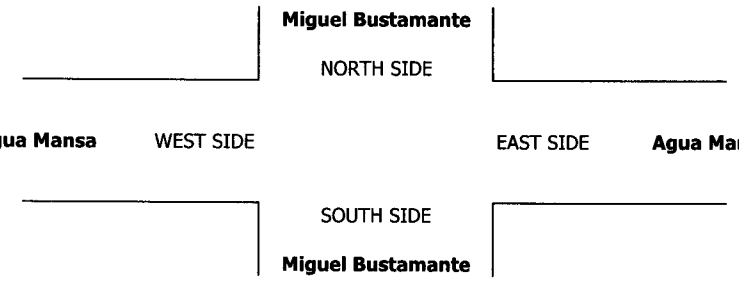
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	Colton	PROJECT #:	SC0367
5/15/14	NORTH & SOUTH:	Miguel Bustamante	LOCATION #:	1
THURSDAY	EAST & WEST:	Agua Mansa	CONTROL:	SIGNAL

CLASS 6:	NOTES:	AM / PM / MD / OTHER / OTHER	▲ N / ◄ W / E ► / S ▼
BUSES			

		NORTHBOUND Miguel Bustamante			SOUTHBOUND Miguel Bustamante			EASTBOUND Agua Mansa			WESTBOUND Agua Mansa				U-TURNS				
	LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	APP/DEPART	0	/	0	0	/	0	0	/	0	3	/	3	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	0	0	0	0	0	0	0	0	0	0	3	0	3					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.000			0.000			0.750		0.750					
	APP/DEPART	0	/	0	0	/	0	0	/	0	3	/	3	0					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
	APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	0	0	0	0	0	0	1	0	0	0	0	1					
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%						
	PEAK HR FACTOR		0.000			0.000			0.250			0.000		0.250					
	APP/DEPART	0	/	0	0	/	0	1	/	1	0	/	0	0					



APPENDIX C

Future Growth Increment Calculation Worksheets

INTERSECTION	LEG	MODEL 2008 ADT	EXISTING 2014 ADT	MODEL 2035 ADT	FUTURE 2035 ADT[1]	OPENING 2016 ADT
RIVERSIDE AVENUE (NS) / AGUA MANSA ROAD (EW) - #1	North	34,654	25,400	53,083	39,700	26,800
	South	34,466	24,200	51,759	37,700	25,500
	East	6,622	9,500	12,766	14,300	10,000
	West	11,442	13,300	18,486	18,800	13,800
RIVERSIDE AVENUE (NS) / PROJECT NORTH ACCESS (EW) - #2	North	34,466	24,200	51,759	37,700	25,500
	South	34,466	24,300	51,759	37,800	25,600
	East	-	200	-	200	200
	West	-	0	-	-	-
RIVERSIDE AVENUE (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #4	North	34,466	24,300	51,759	37,800	25,600
	South	34,466	24,200	51,759	37,700	25,500
	East	-	600	-	700	600
	West	-	700	-	800	700
MIGUEL BUSTAMANTE PARKWAY (NS) / AGUA MANSA ROAD (EW) - #7	North	-	0	-	-	-
	South	-	1,400	-	1,500	1,400
	East	6,622	9,500	12,766	14,300	10,000
	West	6,622	9,600	12,766	14,400	10,100

[1] Adjusted for minimum 10% growth over existing average daily traffic volumes for Year 2035.

RIVERSIDE AVENUE (NS) / AGUA MANSA ROAD (EW) - #1

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				86	656	21		
				<	v	>		
		77	^				^	17
		101	>				<	173
		36	v				v	53
				<	^	>		
				81	652	33		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					763	746		
					v	^		
		340	<	IN =	1986	<	243	
		214	>	OUT =	1986	>	155	
					v	^		
					745	766		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				105	194	59		
				<	v	>		
		86	^				^	36
		61	>				<	67
		49	v				v	10
				<	^	>		
				73	68	23		

PCE FACTORS BY AXLE:

2: 1.5 3: 2.0 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				191	850	80		
				<	v	>		
		163	^				^	53
		162	>				<	240
		85	v				v	63
				<	^	>		
				154	720	56		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					3563	2709		
					v	^		
		1234	<	IN =	8047	<	739	
		943	>	OUT =	8048	>	616	
					v	^		
					3489	2802		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					123	91		
					v	^		
		33	<	IN =	277	<	25	
		40	>	OUT =	277	>	25	
					v	^		
					128	89		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					1395	1060		
					v	^		
		480	<	IN =	3150	<	289	
		372	>	OUT =	3150	>	242	
					v	^		
					1368	1094		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					6200	3669		
					v	^		
		2506	<	IN =	12945	<	1667	
		1149	>	OUT =	12945	>	982	
					v	^		
					5788	3929		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					160	147		
					v	^		
		58	<	IN =	396	<	43	
		46	>	OUT =	396	>	36	
					v	^		
					155	147		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

					2409	1443		
					v	^		
		972	<	IN =	5051	<	648	
		452	>	OUT =	5051	>	385	
					v	^		
					2251	1542		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					1014	383		
					v	^		
		492	<			<	359	
		80	>			>	143	
					v	^		
					883	448		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					1010	380		
					v	^		
		490	<	IN =	1900	<	360	
		80	>	OUT =	1890	>	140	
					v	^		
					880	450		

FUTURE YEAR GROWTH: 2014 TO 2016

2 YEARS

					70	30		
					v	^		
		40	<			<	30	
		10	>			>	10	
					v	^		
					70	30		

INITIAL FUTURE YEAR VOLUMES:

2016

					1190	970		
					v	^		
		630	<	IN =	2960	<	390	
		420	>	OUT =	2980	>	310	
					v	^		
					1070	960		

BALANCED FUTURE YEAR VOLUMES:

2016

					1200	970		
					v	^		
		630	<	IN =	2980	<	390	
		420	>	OUT =	2980	>	310	
					v	^		
					1070	970		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				84	822	45		
				<	v	>		
		100	^				^	14
		397	>				<	96
		71	v				v	31
				<	^	>		
				61	703	57		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					951	817		
					v	^		
		241	<	IN =	2481	<	141	
		568	>	OUT =	2481	>	499	
					v	^		
					924	821		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				53	165	17		
				<	v	>		
		92	^				^	25
		82	>				<	39
		48	v				v	8
				<	^	>		
				36	92	14		

PCE FACTORS BY AXLE:

2: 1.5 3: 2 4+: 3.0

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				137	987	62		
				<	v	>		
		192	^				^	39
		479	>				<	135
		119	v				v	39
				<	^	>		
				97	795	71		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					5641	4603		
					v	^		
		1689	<	IN =	13943	<	1272	
		2664	>	OUT =	13943	>	1599	
					v	^		
					6052	4366		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					176	135		
					v	^		
		54	<	IN =	432	<	43	
		82	>	OUT =	432	>	57	
					v	^		
					186	131		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					1623	1323		
					v	^		
		486	<	IN =	4012	<	367	
		766	>	OUT =	4012	>	462	
					v	^		
					1741	1255		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					8093	9291		
					v	^		
		2368	<	IN =	23403	<	2042	
		4202	>	OUT =	23403	>	3202	
					v	^		
					8542	9066		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					303	246		
					v	^		
		82	<	IN =	731	<	70	
		115	>	OUT =	731	>	95	
					v	^		
					308	243		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

					2342	2663		
					v	^		
		684	<	IN =	6736	<	589	
		1205	>	OUT =	6736	>	920	
					v	^		
					2469	2599		

RAW GROWTH (PCE'S): 2008 TO 2035

CONVERSION OF TRUCKS TO: 2035

FACTOR = 1.00

					718	1340		
					v	^		
		197	<			<	222	
		439	>			>	458	
					v	^		
					728	1344		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035

10 MINIMUM GROWTH %

					720	1340		
					v	^		
		200	<	IN =	2720	<	220	
		440	>	OUT =	2730	>	460	
					v	^		
					730	1340		

FUTURE YEAR GROWTH: 2014 TO 2016

2 YEARS

					50	100		
					v	^		
		10	<			<	20	
		30	>			>	30	
					v	^		
					50	100		

INITIAL FUTURE YEAR VOLUMES:

2016

					1240	1130		
					v	^		
		380	<	IN =	3350	<	230	
		820	>	OUT =	3350	>	640	
					v	^		
					1200	1060		

BALANCED FUTURE YEAR VOLUMES:

2016

					1240	1130		
					v	^		
		380	<	IN =	3350	<	230	
		820	>	OUT =	3350	>	640	
					v	^		
					1200	1060		

RIVERSIDE AVENUE (NS) / AGUA MANSA ROAD (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH BOUND	LEFT	**154**	SOUTH LEG		NORTH BOUND	LEFT	**97**	SOUTH LEG	
	THRU	**720**	IN ...	**970**		THRU	**795**	IN ...	**1,060**
	RIGHT	**56**	OUT ...	**1,070**		RIGHT	**71**	OUT ...	**1,200**
SOUTH BOUND	LEFT	**80**	NORTH LEG		SOUTH BOUND	LEFT	**62**	NORTH LEG	
	THRU	**850**	IN ...	**1,200**		THRU	**987**	IN ...	**1,240**
	RIGHT	**191**	OUT ...	**970**		RIGHT	**137**	OUT ...	**1,130**
EAST BOUND	LEFT	**163**	WEST LEG		EAST BOUND	LEFT	**192**	WEST LEG	
	THRU	**162**	IN ...	**420**		THRU	**479**	IN ...	**820**
	RIGHT	**85**	OUT ...	**630**		RIGHT	**119**	OUT ...	**380**
WEST BOUND	LEFT	**63**	EAST LEG		WEST BOUND	LEFT	**39**	EAST LEG	
	THRU	**240**	IN ...	**390**		THRU	**135**	IN ...	**230**
	RIGHT	**53**	OUT ...	**310**		RIGHT	**39**	OUT ...	**640**

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	**154**	**163**	NORTH LEG	NORTH BOUND	LEFT	**97**	**100**	NORTH LEG
	THRU	**720**	**748**	RATIO **8.1%**		THRU	**795**	**883**	RATIO **8.8%**
	RIGHT	**56**	**59**	ADT 26,800		RIGHT	**71**	**78**	ADT 26,800
SOUTH BOUND	LEFT	**80**	**85**	SOUTH LEG	SOUTH BOUND	LEFT	**62**	**66**	SOUTH LEG
	THRU	**850**	**912**	RATIO **8.0%**		THRU	**987**	**1,036**	RATIO **8.9%**
	RIGHT	**191**	**204**	ADT 25,500		RIGHT	**137**	**138**	ADT 25,500
EAST BOUND	LEFT	**163**	**165**	EAST LEG	EAST BOUND	LEFT	**192**	**202**	EAST LEG
	THRU	**162**	**166**	RATIO **7.0%**		THRU	**479**	**496**	RATIO **8.7%**
	RIGHT	**85**	**88**	ADT 10,000		RIGHT	**119**	**121**	ADT 10,000
WEST BOUND	LEFT	**63**	**70**	WEST LEG	WEST BOUND	LEFT	**39**	**43**	WEST LEG
	THRU	**240**	**263**	RATIO **7.6%**		THRU	**135**	**143**	RATIO **8.7%**
	RIGHT	**53**	**57**	ADT 13,800		RIGHT	**39**	**44**	ADT 13,800

RIVERSIDE AVENUE (NS) / AGUA MANSA ROAD (EW) - #1

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**154**	SOUTH LEG		NORTH	LEFT	**97**	SOUTH LEG	
BOUND	THRU	**720**	IN ...	**1,280**	BOUND	THRU	**795**	IN ...	**2,000**
	RIGHT	**56**	OUT ...	**1,680**		RIGHT	**71**	OUT ...	**1,720**
SOUTH	LEFT	**80**	NORTH LEG		SOUTH	LEFT	**62**	NORTH LEG	
BOUND	THRU	**850**	IN ...	**1,910**	BOUND	THRU	**987**	IN ...	**1,750**
	RIGHT	**191**	OUT ...	**1,240**		RIGHT	**137**	OUT ...	**2,070**
EAST	LEFT	**163**	WEST LEG		EAST	LEFT	**192**	WEST LEG	
BOUND	THRU	**162**	IN ...	**470**	BOUND	THRU	**479**	IN ...	**1,130**
	RIGHT	**85**	OUT ...	**970**		RIGHT	**119**	OUT ...	**530**
WEST	LEFT	**63**	EAST LEG		WEST	LEFT	**39**	EAST LEG	
BOUND	THRU	**240**	IN ...	**640**	BOUND	THRU	**135**	IN ...	**380**
	RIGHT	**53**	OUT ...	**410**		RIGHT	**39**	OUT ...	**970**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**154**	**222**	NORTH LEG	NORTH	LEFT	**97**	**150**	NORTH LEG
BOUND	THRU	**720**	**974**	RATIO **7.9%**	BOUND	THRU	**795**	**1,708**	RATIO **9.6%**
	RIGHT	**56**	**83**	ADT 39,700		RIGHT	**71**	**157**	ADT 39,700
SOUTH	LEFT	**80**	**136**	SOUTH LEG	SOUTH	LEFT	**62**	**106**	SOUTH LEG
BOUND	THRU	**850**	**1,460**	RATIO **7.8%**	BOUND	THRU	**987**	**1,486**	RATIO **9.9%**
	RIGHT	**191**	**316**	ADT 37,700		RIGHT	**137**	**164**	ADT 37,700
EAST	LEFT	**163**	**176**	EAST LEG	EAST	LEFT	**192**	**275**	EAST LEG
BOUND	THRU	**162**	**192**	RATIO **7.3%**	BOUND	THRU	**479**	**707**	RATIO **9.5%**
	RIGHT	**85**	**102**	ADT 14,300		RIGHT	**119**	**155**	ADT 14,300
WEST	LEFT	**63**	**118**	WEST LEG	WEST	LEFT	**39**	**79**	WEST LEG
BOUND	THRU	**240**	**432**	RATIO **7.7%**	BOUND	THRU	**135**	**216**	RATIO **8.9%**
	RIGHT	**53**	**90**	ADT 18,800		RIGHT	**39**	**87**	ADT 18,800

RIVERSIDE AVENUE (NS) / PROJECT NORTH ACCESS (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	742	3		
				<	v	>		
		0	^				^	1
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	756	0		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					745	757		
					v	^		
			0	<	IN =	1502	<	1
			0	>	OUT =	1502	>	3
					v	^		
					742	756		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	238	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
PCE FACTORS BY AXLE:				<	^	>		
2: 1.5 3: 2.0 4+: 3.0				0	154	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	980	3		
				<	v	>		
		0	^				^	1
		0	>				<	0
		0	v				v	0
				<	^	>		
				0	910	0		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					3489	2802		
					v	^		
			0	<	IN =	6291	<	0
			0	>	OUT =	6291	>	0
					v	^		
					3489	2802		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					128	89		
					v	^		
			0	<	IN =	217	<	0
			0	>	OUT =	217	>	0
					v	^		
					128	89		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

					1368	1094		
					v	^		
			0	<	IN =	2463	<	0
			0	>	OUT =	2463	>	0
					v	^		
					1368	1094		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					5788	3929		
					v	^		
			0	<	IN =	9717	<	0
			0	>	OUT =	9717	>	0
					v	^		
					5788	3929		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					155	147		
					v	^		
			0	<	IN =	302	<	0
			0	>	OUT =	302	>	0
					v	^		
					155	147		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

					2251	1542		
					v	^		
			0	<	IN =	3793	<	0
			0	>	OUT =	3793	>	0
					v	^		
					2251	1542		

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

					883	448		
					v	^		
			0	<			<	0
			0	>			>	0
					v	^		
					883	448		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					880	450		
					v	^		
			0	<	IN =	1330	<	0
			0	>	OUT =	1330	>	0
					v	^		
					880	450		

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

					70	30		
					v	^		
			0	<			<	0
			0	>			>	0
					v	^		
					70	30		

INITIAL FUTURE YEAR VOLUMES:

2016

					1050	940		
					v	^		
			0	<	IN =	1990	<	0
			0	>	OUT =	1990	>	0
					v	^		
					1050	940		

BALANCED FUTURE YEAR VOLUMES:

2016

					1050	940		
					v	^		
			0	<	IN =	1990	<	0
			0	>	OUT =	1990	>	0
					v	^		
					1050	940		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				0	917	5		
				<	v	>		
		0	^				^	2
		0	>				<	0
		0	v				v	5
				<	^	>		
				0	820	5		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					922	822		
					v	^		
			0	<	IN =	1754	<	7
			0	>	OUT =	1754	>	10
					v	^		
					922	825		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				0	221	0		
				<	v	>		
		0	^				^	0
		0	>				<	0
		0	v				v	0
PCE FACTORS BY AXLE:				<	^	>		
2: 1.5 3: 2 4+: 3.0				0	142	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				0	1138	5		
				<	v	>		
		0	^				^	2
		0	>				<	0
		0	v				v	5
				<	^	>		
				0	962	5		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					6052	4366		
					v	^		
			0	<	IN =	10418	<	0
			0	>	OUT =	10418	>	0
					v	^		
					6052	4366		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					186	131		
					v	^		
			0	<	IN =	317	<	0
			0	>	OUT =	317	>	0
					v	^		
					186	131		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

					1741	1255		
					v	^		
			0	<	IN =	2996	<	0
			0	>	OUT =	2996	>	0
					v	^		
					1741	1255		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					8542	9066		
					v	^		
			0	<	IN =	17608	<	0
			0	>	OUT =	17608	>	0
					v	^		
					8542	9066		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					308	243		
					v	^		
			0	<	IN =	551	<	0
			0	>	OUT =	551	>	0
					v	^		
					308	243		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

					2469	2599		
					v	^		
			0	<	IN =	5068	<	0
			0	>	OUT =	5068	>	0
					v	^		
					2469	2599		

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

					728	1344		
					v	^		
			0	<			<	0
			0	>			>	0
					v	^		
					728	1344		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					730	1340		
					v	^		
			0	<	IN =	2070	<	0
			0	>	OUT =	2070	>	0
					v	^		
					730	1340		

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

					50	100		
					v	^		
			0	<			<	0
			0	>			>	0
					v	^		
					50	100		

INITIAL FUTURE YEAR VOLUMES:

2016

					1190	1060		
					v	^		
			0	<	IN =	2270	<	10
			0	>	OUT =	2260	>	10
					v	^		
					1190	1070		

BALANCED FUTURE YEAR VOLUMES:

2016

					1190	1060		
					v	^		
			0	<	IN =	2270	<	10
			0	>	OUT =	2270	>	10
					v	^		
					1200	1070		

RIVERSIDE AVENUE (NS) / PROJECT NORTH ACCESS (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**910**	IN ...	**940**	BOUND	THRU	**962**	IN ...	**1,070**
	RIGHT	**0**	OUT ...	**1,050**		RIGHT	**5**	OUT ...	**1,200**
SOUTH	LEFT	**3**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**980**	IN ...	**1,050**	BOUND	THRU	**1,138**	IN ...	**1,190**
	RIGHT	**0**	OUT ...	**940**		RIGHT	**0**	OUT ...	**1,060**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**5**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**1**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**910**	**940**	RATIO **7.8%**	BOUND	THRU	**962**	**1,057**	RATIO **8.9%**
	RIGHT	**0**	**0**	ADT 25,500		RIGHT	**5**	**5**	ADT 25,500
SOUTH	LEFT	**3**	**4**	SOUTH LEG	SOUTH	LEFT	**5**	**6**	SOUTH LEG
BOUND	THRU	**980**	**1,050**	RATIO **7.8%**	BOUND	THRU	**1,138**	**1,193**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 25,600		RIGHT	**0**	**0**	ADT 25,600
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **10.7%**
	RIGHT	**0**	**0**	ADT 200		RIGHT	**0**	**0**	ADT 200
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**5**	**7**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO ######	BOUND	THRU	**0**	**0**	RATIO ######
	RIGHT	**1**	**2**	ADT 0		RIGHT	**2**	**3**	ADT 0

RIVERSIDE AVENUE (NS) / PROJECT NORTH ACCESS (EW) - #2

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**0**	SOUTH LEG		NORTH	LEFT	**0**	SOUTH LEG	
BOUND	THRU	**910**	IN ...	**1,260**	BOUND	THRU	**962**	IN ...	**2,010**
	RIGHT	**0**	OUT ...	**1,660**		RIGHT	**5**	OUT ...	**1,710**
SOUTH	LEFT	**3**	NORTH LEG		SOUTH	LEFT	**5**	NORTH LEG	
BOUND	THRU	**980**	IN ...	**1,660**	BOUND	THRU	**1,138**	IN ...	**1,710**
	RIGHT	**0**	OUT ...	**1,260**		RIGHT	**0**	OUT ...	**2,000**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
WEST	LEFT	**0**	EAST LEG		WEST	LEFT	**5**	EAST LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**10**
	RIGHT	**1**	OUT ...	**0**		RIGHT	**2**	OUT ...	**10**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**0**	**0**	NORTH LEG	NORTH	LEFT	**0**	**0**	NORTH LEG
BOUND	THRU	**910**	**1,260**	RATIO **7.8%**	BOUND	THRU	**962**	**1,997**	RATIO **9.8%**
	RIGHT	**0**	**0**	ADT 37,700		RIGHT	**5**	**6**	ADT 37,700
SOUTH	LEFT	**3**	**4**	SOUTH LEG	SOUTH	LEFT	**5**	**6**	SOUTH LEG
BOUND	THRU	**980**	**1,660**	RATIO **7.7%**	BOUND	THRU	**1,138**	**1,703**	RATIO **9.8%**
	RIGHT	**0**	**0**	ADT 37,800		RIGHT	**0**	**0**	ADT 37,800
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**0**	**0**	RATIO **3.0%**	BOUND	THRU	**0**	**0**	RATIO **10.9%**
	RIGHT	**0**	**0**	ADT 200		RIGHT	**0**	**0**	ADT 200
WEST	LEFT	**0**	**0**	WEST LEG	WEST	LEFT	**5**	**7**	WEST LEG
BOUND	THRU	**0**	**0**	RATIO ######	BOUND	THRU	**0**	**0**	RATIO ######
	RIGHT	**1**	**2**	ADT 0		RIGHT	**2**	**3**	ADT 0

RIVERSIDE AVENUE (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				23	719	5		
				<	v	>		
		5	^				^	4
		1	>				<	2
		1	v				v	11
				<	^	>		
				28	756	6		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					747	765		
					v	^		
		53	<	IN =	1561	<		17
		7	>	OUT =	1561	>		12
					v	^		
					731	790		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				18	223	15		
				<	v	>		
		23	^				^	0
		0	>				<	0
		5	v				v	2
PCE FACTORS BY AXLE:				<	^	>		
2: 1.5 3: 2.0 4+: 3.0				6	102	9		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				41	942	20		
				<	v	>		
		28	^				^	4
		1	>				<	2
		6	v				v	13
				<	^	>		
				34	858	15		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					3489	2802		
					v	^		
		0	<	IN =	6291	<		0
		0	>	OUT =	6291	>		0
					v	^		
					3489	2802		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					128	89		
					v	^		
		0	<	IN =	217	<		0
		0	>	OUT =	217	>		0
					v	^		
					128	89		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

					1368	1094		
					v	^		
		0	<	IN =	2463	<		0
		0	>	OUT =	2463	>		0
					v	^		
					1368	1094		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					5788	3929		
					v	^		
		0	<	IN =	9717	<		0
		0	>	OUT =	9717	>		0
					v	^		
					5788	3929		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					155	147		
					v	^		
		0	<	IN =	302	<		0
		0	>	OUT =	302	>		0
					v	^		
					155	147		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

					2251	1542		
					v	^		
		0	<	IN =	3793	<		0
		0	>	OUT =	3793	>		0
					v	^		
					2251	1542		

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

					883	448		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					883	448		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					880	450		
					v	^		
		10	<	IN =	1330	<		0
		0	>	OUT =	1340	>		0
					v	^		
					880	450		

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

					70	30		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					70	30		

INITIAL FUTURE YEAR VOLUMES:

2016

					1070	920		
					v	^		
		80	<	IN =	2070	<		20
		40	>	OUT =	2070	>		40
					v	^		
					1030	940		

BALANCED FUTURE YEAR VOLUMES:

2016

					1070	920		
					v	^		
		80	<	IN =	2070	<		20
		40	>	OUT =	2070	>		40
					v	^		
					1030	940		

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

				7	918	0		
				<	v	>		
		21	^				^	3
		7	>				<	0
		1	v				v	4
				<	^	>		
				6	800	18		

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

					925	824		
					v	^		
		13	<	IN =	1785	<		7
		29	>	OUT =	1785	>		25
					v	^		
					923	824		

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

				2	210	9		
				<	v	>		
		5	^				^	2
		0	>				<	3
		3	v				v	2
PCE FACTORS BY AXLE:				<	^	>		
2: 1.5 3: 2 4+: 3.0				3	136	0		

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

				9	1128	9		
				<	v	>		
		26	^				^	5
		7	>				<	3
		4	v				v	6
				<	^	>		
				9	936	18		

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

					6052	4366		
					v	^		
		0	<	IN =	10418	<		0
		0	>	OUT =	10418	>		0
					v	^		
					6052	4366		

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

					186	131		
					v	^		
		0	<	IN =	317	<		0
		0	>	OUT =	317	>		0
					v	^		
					186	131		

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

					1741	1255		
					v	^		
		0	<	IN =	2996	<		0
		0	>	OUT =	2996	>		0
					v	^		
					1741	1255		

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

					8542	9066		
					v	^		
		0	<	IN =	17608	<		0
		0	>	OUT =	17608	>		0
					v	^		
					8542	9066		

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

					308	243		
					v	^		
		0	<	IN =	551	<		0
		0	>	OUT =	551	>		0
					v	^		
					308	243		

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

					2469	2599		
					v	^		
		0	<	IN =	5068	<		0
		0	>	OUT =	5068	>		0
					v	^		
					2469	2599		

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

					728	1344		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					728	1344		

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

					730	1340		
					v	^		
		0	<	IN =	2070	<		0
		0	>	OUT =	2070	>		0
					v	^		
					730	1340		

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

					50	100		
					v	^		
		0	<			<		0
		0	>			>		0
					v	^		
					50	100		

INITIAL FUTURE YEAR VOLUMES:

2016

					1200	1070		
					v	^		
		20	<	IN =	2310	<		10
		40	>	OUT =	2310	>		30
					v	^		
					1190	1060		

BALANCED FUTURE YEAR VOLUMES:

2016

					1200	1070		
					v	^		
		20	<	IN =	2310	<		10
		40	>	OUT =	2310	>		30
					v	^		
					1190	1060		

RIVERSIDE AVENUE (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**34**	SOUTH LEG		NORTH	LEFT	**9**	SOUTH LEG	
BOUND	THRU	**858**	IN ...	**940**	BOUND	THRU	**936**	IN ...	**1,060**
	RIGHT	**15**	OUT ...	**1,030**		RIGHT	**18**	OUT ...	**1,190**
SOUTH	LEFT	**20**	NORTH LEG		SOUTH	LEFT	**9**	NORTH LEG	
BOUND	THRU	**942**	IN ...	**1,070**	BOUND	THRU	**1,128**	IN ...	**1,200**
	RIGHT	**41**	OUT ...	**920**		RIGHT	**9**	OUT ...	**1,070**
EAST	LEFT	**28**	WEST LEG		EAST	LEFT	**26**	WEST LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**7**	IN ...	**40**
	RIGHT	**6**	OUT ...	**80**		RIGHT	**4**	OUT ...	**20**
WEST	LEFT	**13**	EAST LEG		WEST	LEFT	**6**	EAST LEG	
BOUND	THRU	**2**	IN ...	**20**	BOUND	THRU	**3**	IN ...	**10**
	RIGHT	**4**	OUT ...	**40**		RIGHT	**5**	OUT ...	**30**

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**34**	**36**	NORTH LEG	NORTH	LEFT	**9**	**9**	NORTH LEG
BOUND	THRU	**858**	**884**	RATIO **7.8%**	BOUND	THRU	**936**	**1,037**	RATIO **8.9%**
	RIGHT	**15**	**17**	ADT 25,600		RIGHT	**18**	**19**	ADT 25,600
SOUTH	LEFT	**20**	**22**	SOUTH LEG	SOUTH	LEFT	**9**	**10**	SOUTH LEG
BOUND	THRU	**942**	**1,009**	RATIO **7.7%**	BOUND	THRU	**1,128**	**1,181**	RATIO **8.9%**
	RIGHT	**41**	**42**	ADT 25,500		RIGHT	**9**	**10**	ADT 25,500
EAST	LEFT	**28**	**32**	EAST LEG	EAST	LEFT	**26**	**29**	EAST LEG
BOUND	THRU	**1**	**1**	RATIO **10.0%**	BOUND	THRU	**7**	**8**	RATIO **9.0%**
	RIGHT	**6**	**7**	ADT 600		RIGHT	**4**	**4**	ADT 600
WEST	LEFT	**13**	**14**	WEST LEG	WEST	LEFT	**6**	**7**	WEST LEG
BOUND	THRU	**2**	**2**	RATIO **17.1%**	BOUND	THRU	**3**	**4**	RATIO **9.3%**
	RIGHT	**4**	**4**	ADT 700		RIGHT	**5**	**6**	ADT 700

RIVERSIDE AVENUE (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #4

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**34**	SOUTH LEG		NORTH	LEFT	**9**	SOUTH LEG	
BOUND	THRU	**858**	IN ...	**1,260**	BOUND	THRU	**936**	IN ...	**2,000**
	RIGHT	**15**	OUT ...	**1,640**		RIGHT	**18**	OUT ...	**1,710**
SOUTH	LEFT	**20**	NORTH LEG		SOUTH	LEFT	**9**	NORTH LEG	
BOUND	THRU	**942**	IN ...	**1,680**	BOUND	THRU	**1,128**	IN ...	**1,720**
	RIGHT	**41**	OUT ...	**1,240**		RIGHT	**9**	OUT ...	**2,010**
EAST	LEFT	**28**	WEST LEG		EAST	LEFT	**26**	WEST LEG	
BOUND	THRU	**1**	IN ...	**40**	BOUND	THRU	**7**	IN ...	**40**
	RIGHT	**6**	OUT ...	**90**		RIGHT	**4**	OUT ...	**20**
WEST	LEFT	**13**	EAST LEG		WEST	LEFT	**6**	EAST LEG	
BOUND	THRU	**2**	IN ...	**20**	BOUND	THRU	**3**	IN ...	**10**
	RIGHT	**4**	OUT ...	**40**		RIGHT	**5**	OUT ...	**30**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**34**	**38**	NORTH LEG	NORTH	LEFT	**9**	**11**	NORTH LEG
BOUND	THRU	**858**	**1,204**	RATIO **7.8%**	BOUND	THRU	**936**	**1,975**	RATIO **9.9%**
	RIGHT	**15**	**16**	ADT 37,800		RIGHT	**18**	**19**	ADT 37,800
SOUTH	LEFT	**20**	**23**	SOUTH LEG	SOUTH	LEFT	**9**	**10**	SOUTH LEG
BOUND	THRU	**942**	**1,618**	RATIO **7.7%**	BOUND	THRU	**1,128**	**1,701**	RATIO **9.9%**
	RIGHT	**41**	**51**	ADT 37,700		RIGHT	**9**	**10**	ADT 37,700
EAST	LEFT	**28**	**32**	EAST LEG	EAST	LEFT	**26**	**31**	EAST LEG
BOUND	THRU	**1**	**2**	RATIO **9.0%**	BOUND	THRU	**7**	**8**	RATIO **7.7%**
	RIGHT	**6**	**7**	ADT 700		RIGHT	**4**	**5**	ADT 700
WEST	LEFT	**13**	**14**	WEST LEG	WEST	LEFT	**6**	**7**	WEST LEG
BOUND	THRU	**2**	**3**	RATIO **16.6%**	BOUND	THRU	**3**	**4**	RATIO **8.6%**
	RIGHT	**4**	**4**	ADT 800		RIGHT	**5**	**6**	ADT 800

AGUA MANSA ROAD (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		155 >				<	237	
		6 v				v	5	
			<	^	>			
			4	0	7			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			241 <	IN =	414 <	242		
			161 >	OUT =	414 >	162		
				v	^			
				11	11			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		90 >				<	87	
		53 v				v	10	
PCE FACTORS BY AXLE:			<	^	>			
2: 1.5 3: 2.0 4+: 3.0			26	0	15			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		245 >				<	324	
		59 v				v	15	
			<	^	>			
			30	0	22			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				0	0			
				v	^			
			739 <	IN =	1355 <	739		
			616 >	OUT =	1355 >	616		
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				0	0			
				v	^			
			25 <	IN =	50 <	25		
			25 >	OUT =	50 >	25		
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			289 <	IN =	532 <	289		
			242 >	OUT =	532 >	242		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				0	0			
				v	^			
			1667 <	IN =	2649 <	1667		
			982 >	OUT =	2649 >	982		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				0	0			
				v	^			
			43 <	IN =	79 <	43		
			36 >	OUT =	79 >	36		
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.38
PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
			648 <	IN =	1033 <	648		
			385 >	OUT =	1033 >	385		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

				0	0			
				v	^			
			359 <		<	359		
			143 >		>	143		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

				0	0			
				v	^			
			360 <	IN =	500 <	360		
			140 >	OUT =	510 >	140		
				v	^			
				10	0			

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

				0	0			
				v	^			
			30 <		<	30		
			10 >		>	10		
				v	^			
				0	0			

INITIAL FUTURE YEAR VOLUMES:

2016

				0	0			
				v	^			
			380 <	IN =	730 <	370		
			310 >	OUT =	730 >	280		
				v	^			
				70	50			

BALANCED FUTURE YEAR VOLUMES:

2016

				0	0			
				v	^			
			380 <	IN =	730 <	370		
			310 >	OUT =	730 >	280		
				v	^			
				70	50			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		502 >				<	145	
		2 v				v	2	
			<	^	>			
			2	0	32			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2014

				0	0			
				v	^			
			147 <	IN =	685 <	147		
			504 >	OUT =	685 >	534		
				v	^			
				4	34			

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (TRUCKS IN PCE'S):

			0	0	0			
			<	v	>			
		0 ^				^	0	
		83 >				<	35	
		26 v				v	8	
PCE FACTORS BY AXLE:			<	^	>			
2: 1.5 3: 2 4+: 3.0			36	0	18			

TOTAL EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (PCES):

2014

			0	0	0			
			<	v	>			
		0 ^				^	0	
		585 >				<	180	
		28 v				v	10	
			<	^	>			
			38	0	50			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2008

				0	0			
				v	^			
			1272 <	IN =	2871 <	1272		
			1599 >	OUT =	2871 >	1599		
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2008

				0	0			
				v	^			
			43 <	IN =	100 <	43		
			57 >	OUT =	100 >	57		
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			367 <	IN =	829 <	367		
			462 >	OUT =	829 >	462		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2035

				0	0			
				v	^			
			2042 <	IN =	5244 <	2042		
			3202 >	OUT =	5244 >	3202		
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCE'S):

2035

				0	0			
				v	^			
			70 <	IN =	165 <	70		
			95 >	OUT =	165 >	95		
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCE'S):

PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
			589 <	IN =	1510 <	589		
			920 >	OUT =	1510 >	920		
				v	^			
				0	0			

RAW GROWTH (PCE'S): 2008 TO 2035
CONVERSION OF TRUCKS TO: 2035
FACTOR = 1.00

				0	0			
				v	^			
			222 <		<	222		
			458 >		>	458		
				v	^			
				0	0			

ADJUSTED GROWTH (PCE'S): 2008 TO 2035
10 MINIMUM GROWTH %

				0	0			
				v	^			
			220 <	IN =	690 <	220		
			460 >	OUT =	680 >	460		
				v	^			
				0	10			

FUTURE YEAR GROWTH: 2014 TO 2016
2 YEARS

				0	0			
				v	^			
			20 <		<	20		
			30 >		>	30		
				v	^			
				0	0			

INITIAL FUTURE YEAR VOLUMES:

2016

				0	0			
				v	^			
			240 <	IN =	940 <	210		
			640 >	OUT =	950 >	670		
				v	^			
				40	90			

BALANCED FUTURE YEAR VOLUMES:

2016

				0	0			
				v	^			
			240 <	IN =	950 <	210		
			650 >	OUT =	950 >	670		
				v	^			
				40	90			

AGUA MANSA ROAD (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	OPENING YEAR TOTAL
NORTH	LEFT	**30**	SOUTH LEG		NORTH	LEFT	**38**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**90**
	RIGHT	**22**	OUT ...	**70**		RIGHT	**50**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**245**	IN ...	**310**	BOUND	THRU	**585**	IN ...	**650**
	RIGHT	**59**	OUT ...	**380**		RIGHT	**28**	OUT ...	**240**
WEST	LEFT	**15**	EAST LEG		WEST	LEFT	**10**	EAST LEG	
BOUND	THRU	**324**	IN ...	**370**	BOUND	THRU	**180**	IN ...	**210**
	RIGHT	**0**	OUT ...	**280**		RIGHT	**0**	OUT ...	**670**

OPENING YEAR TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	OPENING YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**30**	**31**	NORTH LEG	NORTH	LEFT	**38**	**40**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO ######	BOUND	THRU	**0**	**0**	RATIO ######
	RIGHT	**22**	**23**	ADT 0		RIGHT	**50**	**50**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **9.3%**	BOUND	THRU	**0**	**0**	RATIO **9.3%**
	RIGHT	**0**	**0**	ADT 1,400		RIGHT	**0**	**0**	ADT 1,400
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**245**	**257**	RATIO **6.5%**	BOUND	THRU	**585**	**620**	RATIO **8.8%**
	RIGHT	**59**	**61**	ADT 10,000		RIGHT	**28**	**29**	ADT 10,000
WEST	LEFT	**15**	**16**	WEST LEG	WEST	LEFT	**10**	**11**	WEST LEG
BOUND	THRU	**324**	**353**	RATIO **7.0%**	BOUND	THRU	**180**	**200**	RATIO **8.8%**
	RIGHT	**0**	**0**	ADT 10,100		RIGHT	**0**	**0**	ADT 10,100

AGUA MANSA ROAD (NS) / MIGUEL BUSTAMANTE PARKWAY (EW) - #7

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES

NCHRP 255

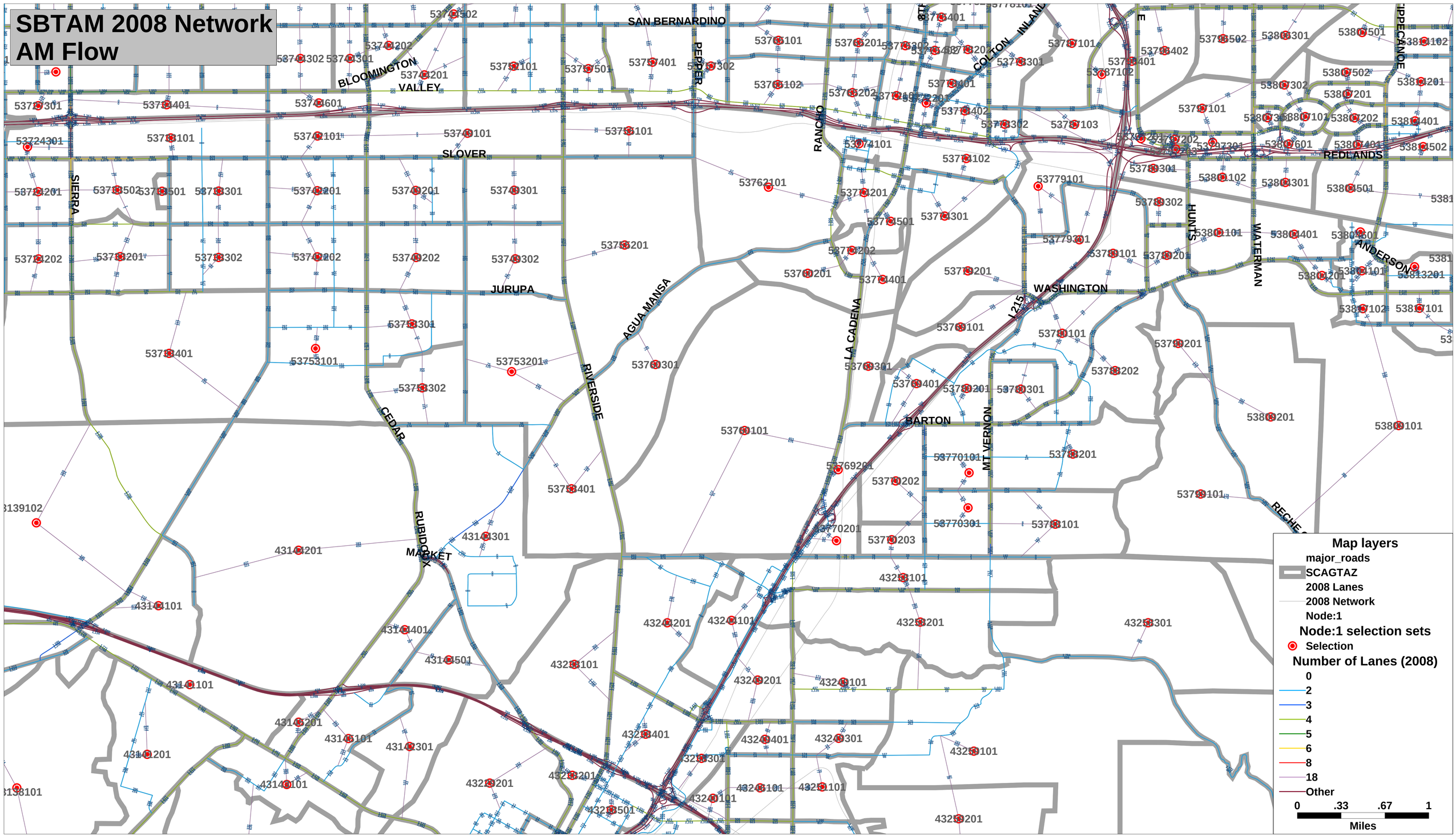
YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	FUTURE YEAR TOTAL
NORTH	LEFT	**30**	SOUTH LEG		NORTH	LEFT	**38**	SOUTH LEG	
BOUND	THRU	**0**	IN ...	**50**	BOUND	THRU	**0**	IN ...	**100**
	RIGHT	**22**	OUT ...	**80**		RIGHT	**50**	OUT ...	**40**
SOUTH	LEFT	**0**	NORTH LEG		SOUTH	LEFT	**0**	NORTH LEG	
BOUND	THRU	**0**	IN ...	**0**	BOUND	THRU	**0**	IN ...	**0**
	RIGHT	**0**	OUT ...	**0**		RIGHT	**0**	OUT ...	**0**
EAST	LEFT	**0**	WEST LEG		EAST	LEFT	**0**	WEST LEG	
BOUND	THRU	**245**	IN ...	**410**	BOUND	THRU	**585**	IN ...	**970**
	RIGHT	**59**	OUT ...	**630**		RIGHT	**28**	OUT ...	**390**
WEST	LEFT	**15**	EAST LEG		WEST	LEFT	**10**	EAST LEG	
BOUND	THRU	**324**	IN ...	**620**	BOUND	THRU	**180**	IN ...	**360**
	RIGHT	**0**	OUT ...	**380**		RIGHT	**0**	OUT ...	**1,000**

YEAR 2035 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	FUTURE YEAR FORECAST	PEAK - DAILY RELATIONSHIP
NORTH	LEFT	**30**	**33**	NORTH LEG	NORTH	LEFT	**38**	**43**	NORTH LEG
BOUND	THRU	**0**	**0**	RATIO ######	BOUND	THRU	**0**	**0**	RATIO ######
	RIGHT	**22**	**23**	ADT 0		RIGHT	**50**	**57**	ADT 0
SOUTH	LEFT	**0**	**0**	SOUTH LEG	SOUTH	LEFT	**0**	**0**	SOUTH LEG
BOUND	THRU	**0**	**0**	RATIO **9.5%**	BOUND	THRU	**0**	**0**	RATIO **9.5%**
	RIGHT	**0**	**0**	ADT 1,500		RIGHT	**0**	**0**	ADT 1,500
EAST	LEFT	**0**	**0**	EAST LEG	EAST	LEFT	**0**	**0**	EAST LEG
BOUND	THRU	**245**	**357**	RATIO **7.0%**	BOUND	THRU	**585**	**943**	RATIO **9.5%**
	RIGHT	**59**	**65**	ADT 14,300		RIGHT	**28**	**31**	ADT 14,300
WEST	LEFT	**15**	**22**	WEST LEG	WEST	LEFT	**10**	**12**	WEST LEG
BOUND	THRU	**324**	**602**	RATIO **7.3%**	BOUND	THRU	**180**	**347**	RATIO **9.5%**
	RIGHT	**0**	**0**	ADT 14,400		RIGHT	**0**	**0**	ADT 14,400

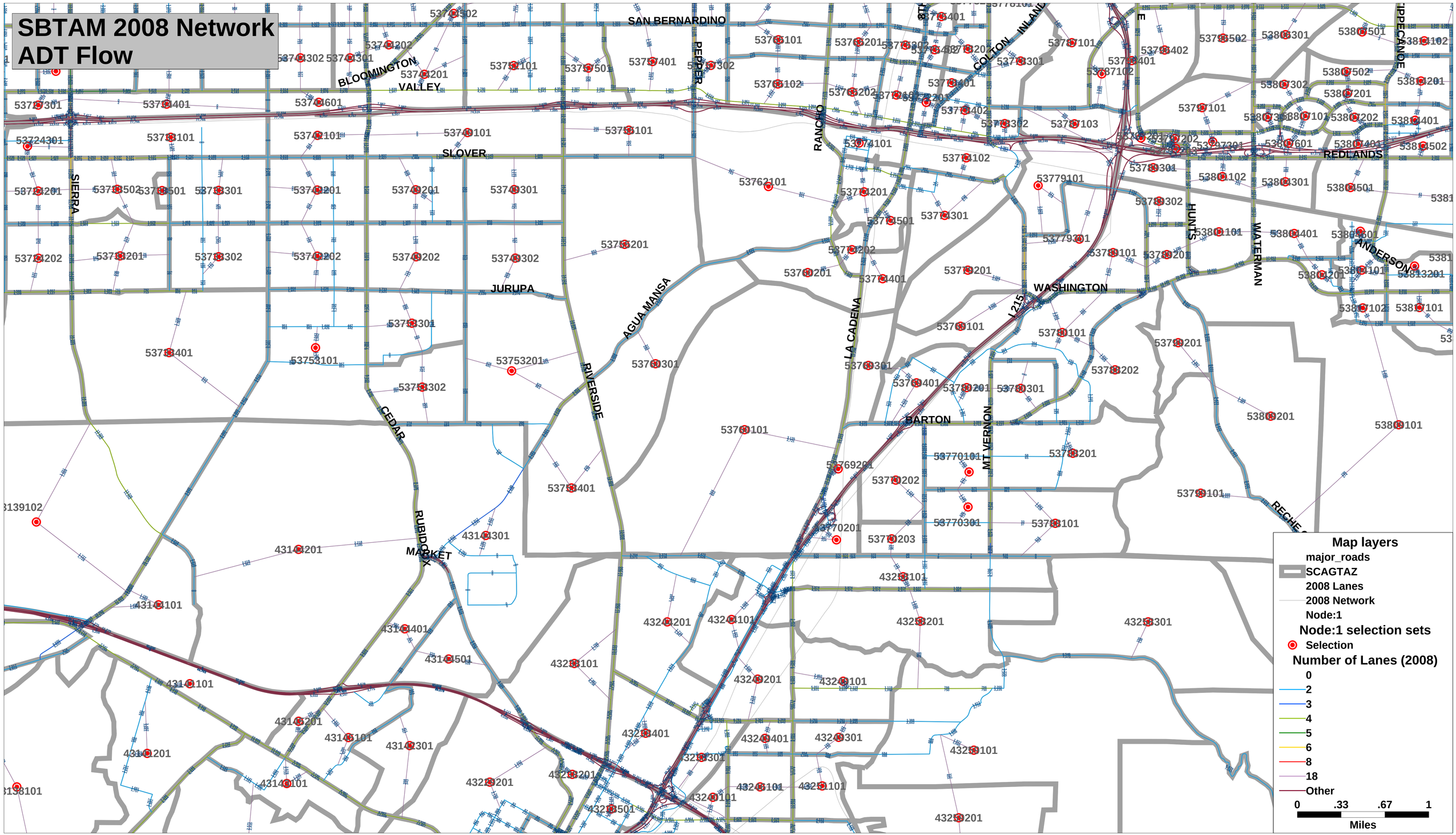
APPENDIX D

Traffic Model Plots

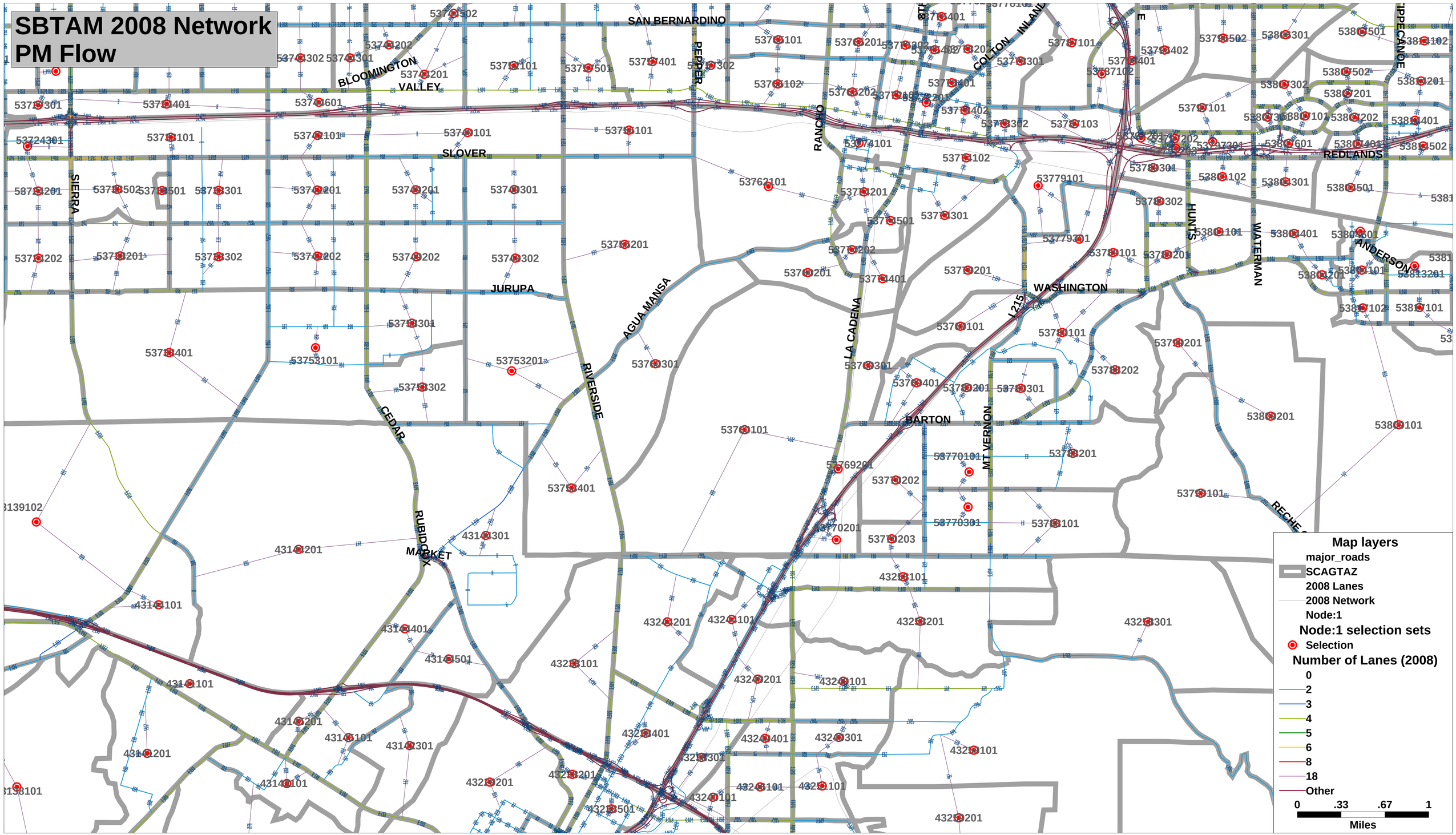
SBTAM 2008 Network
AM Flow



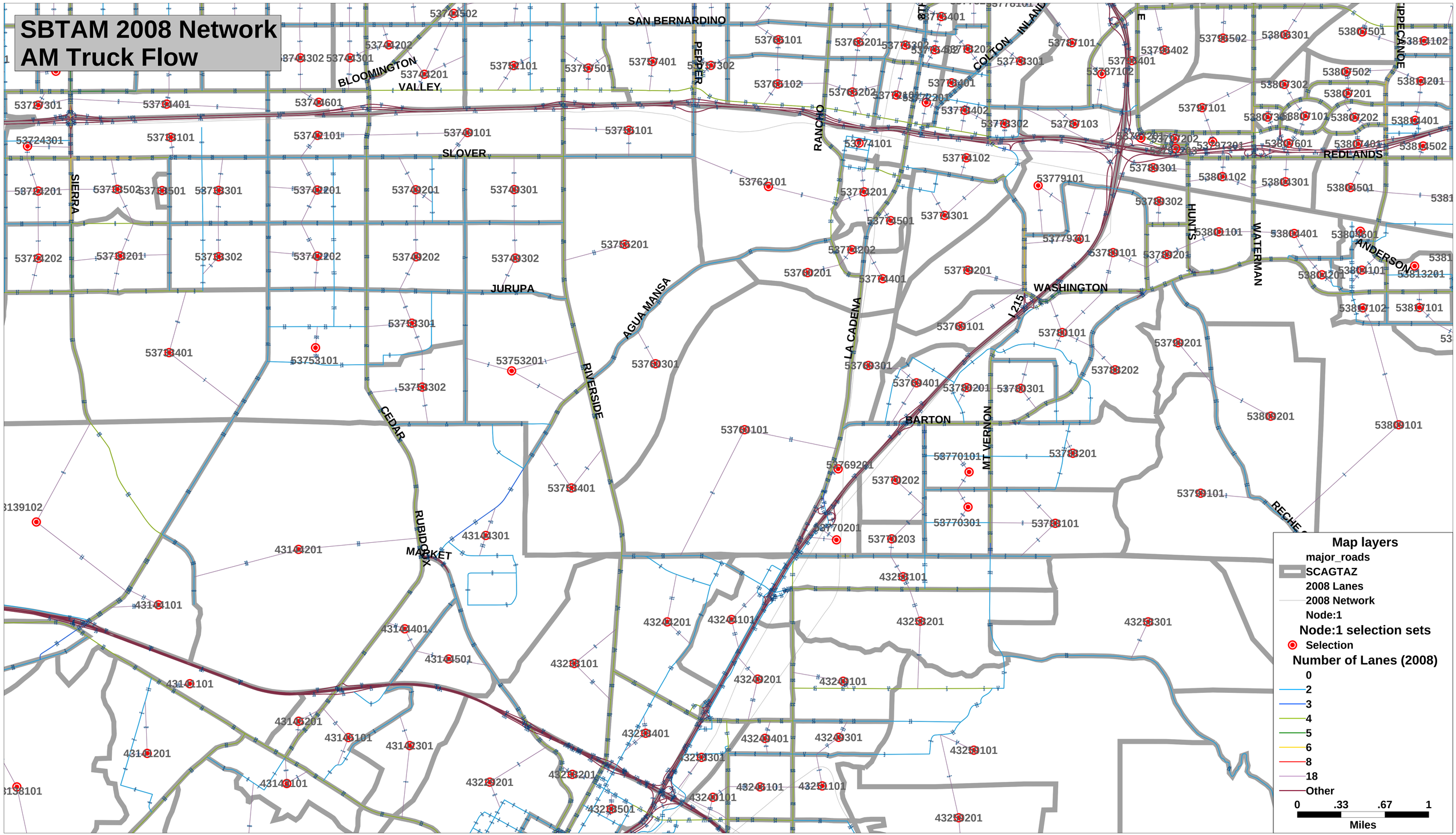
SBTAM 2008 Network
ADT Flow



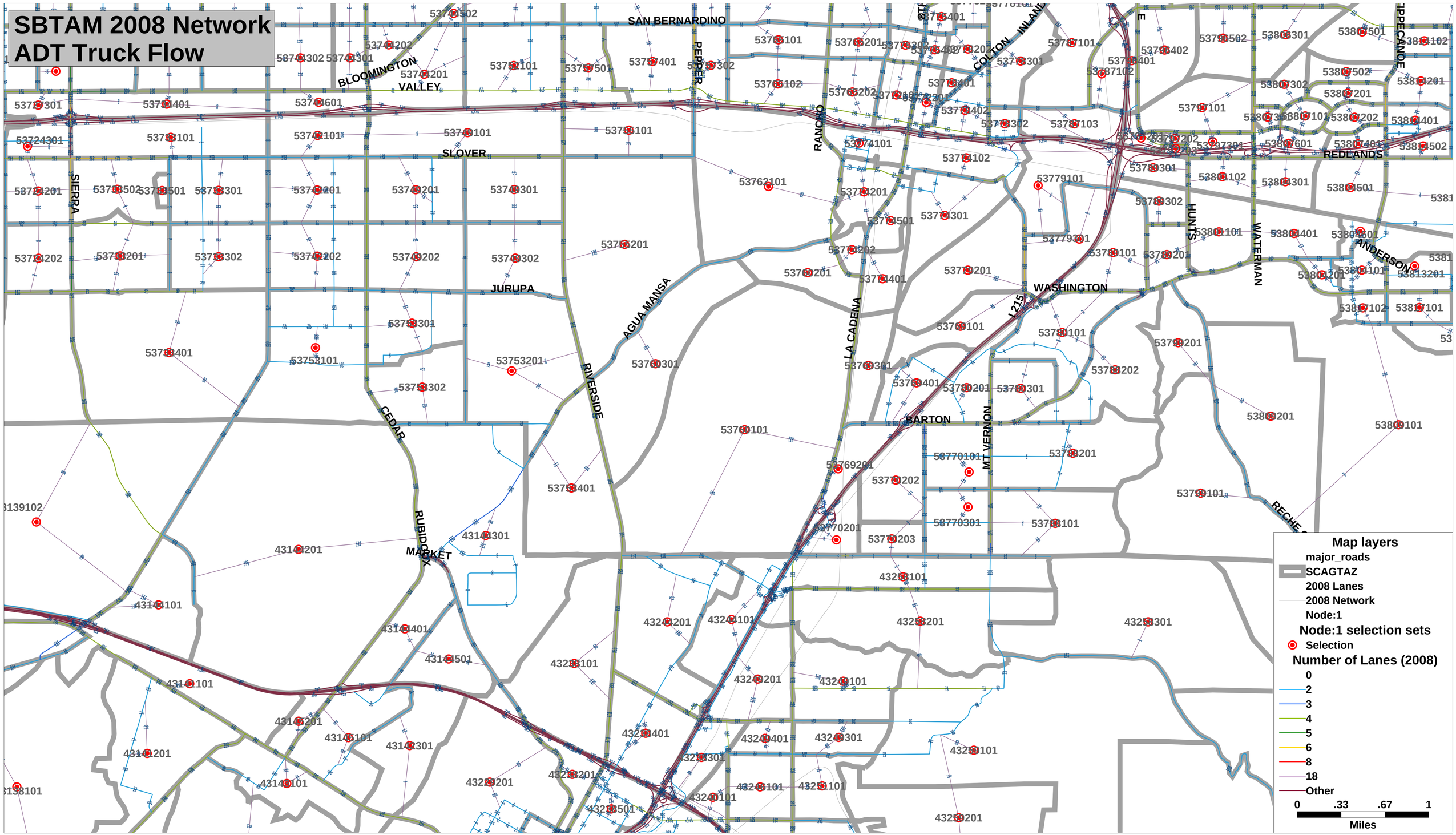
SBTAM 2008 Network
PM Flow



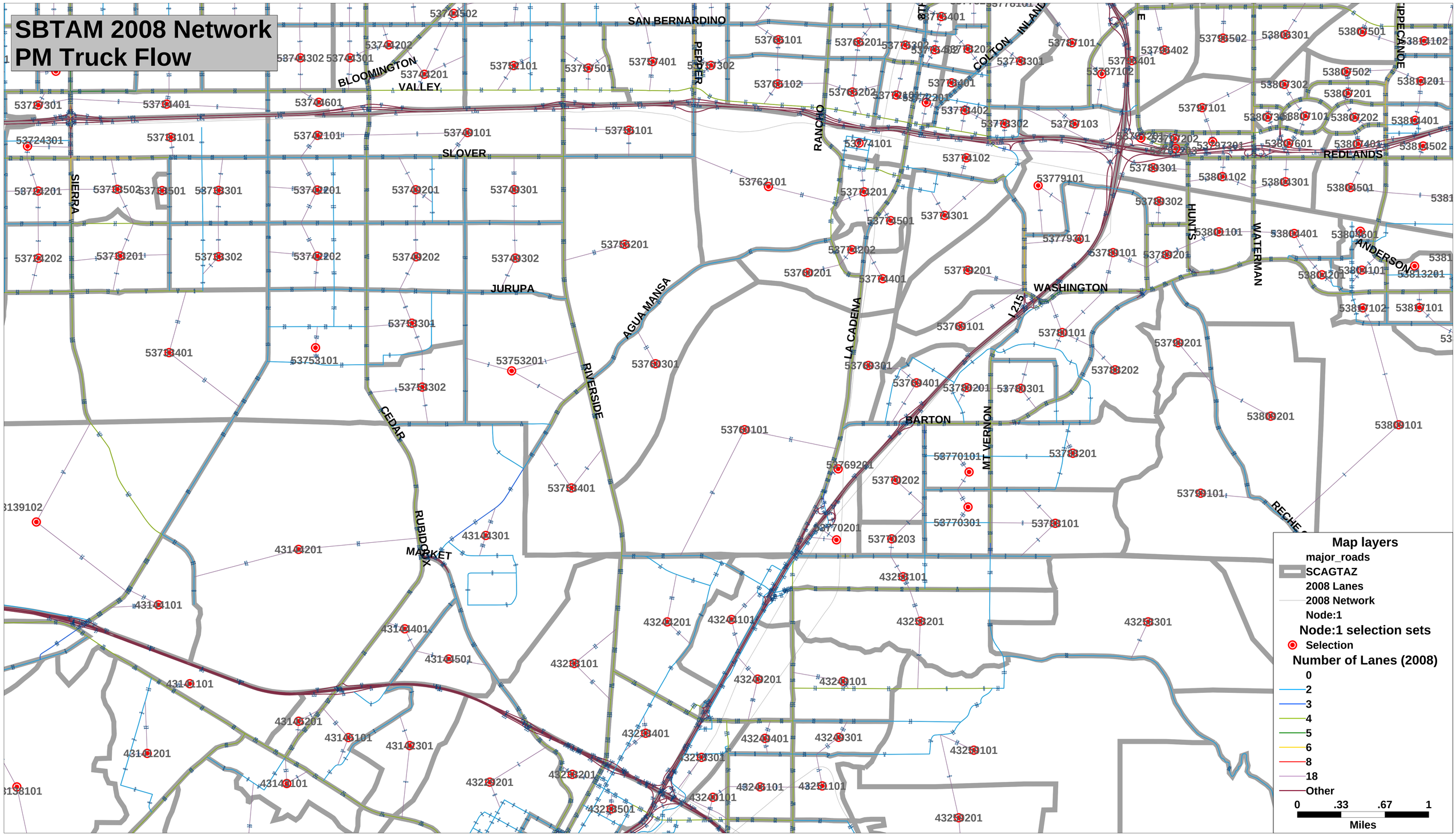
SBTAM 2008 Network
AM Truck Flow



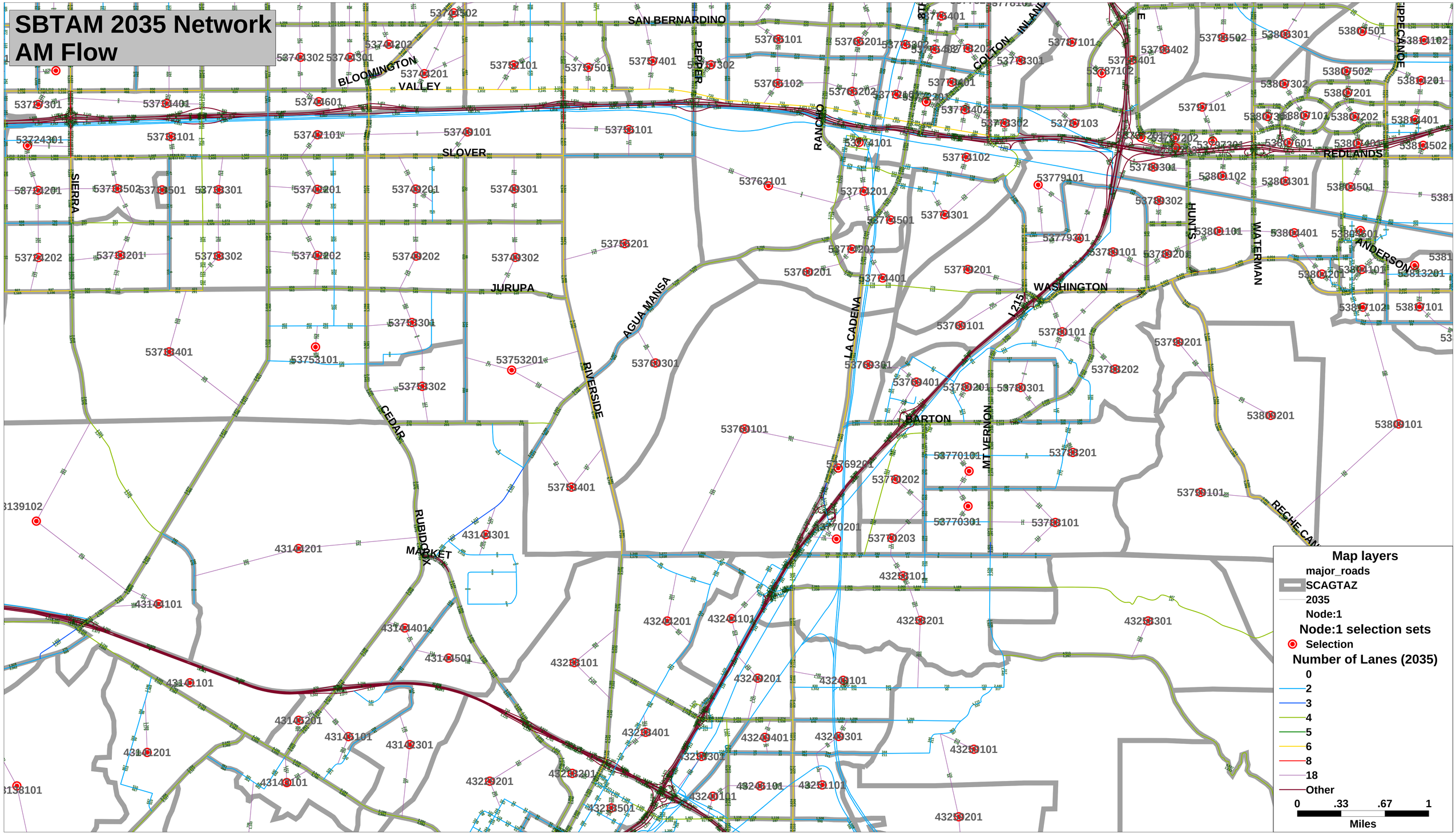
SBTAM 2008 Network
ADT Truck Flow



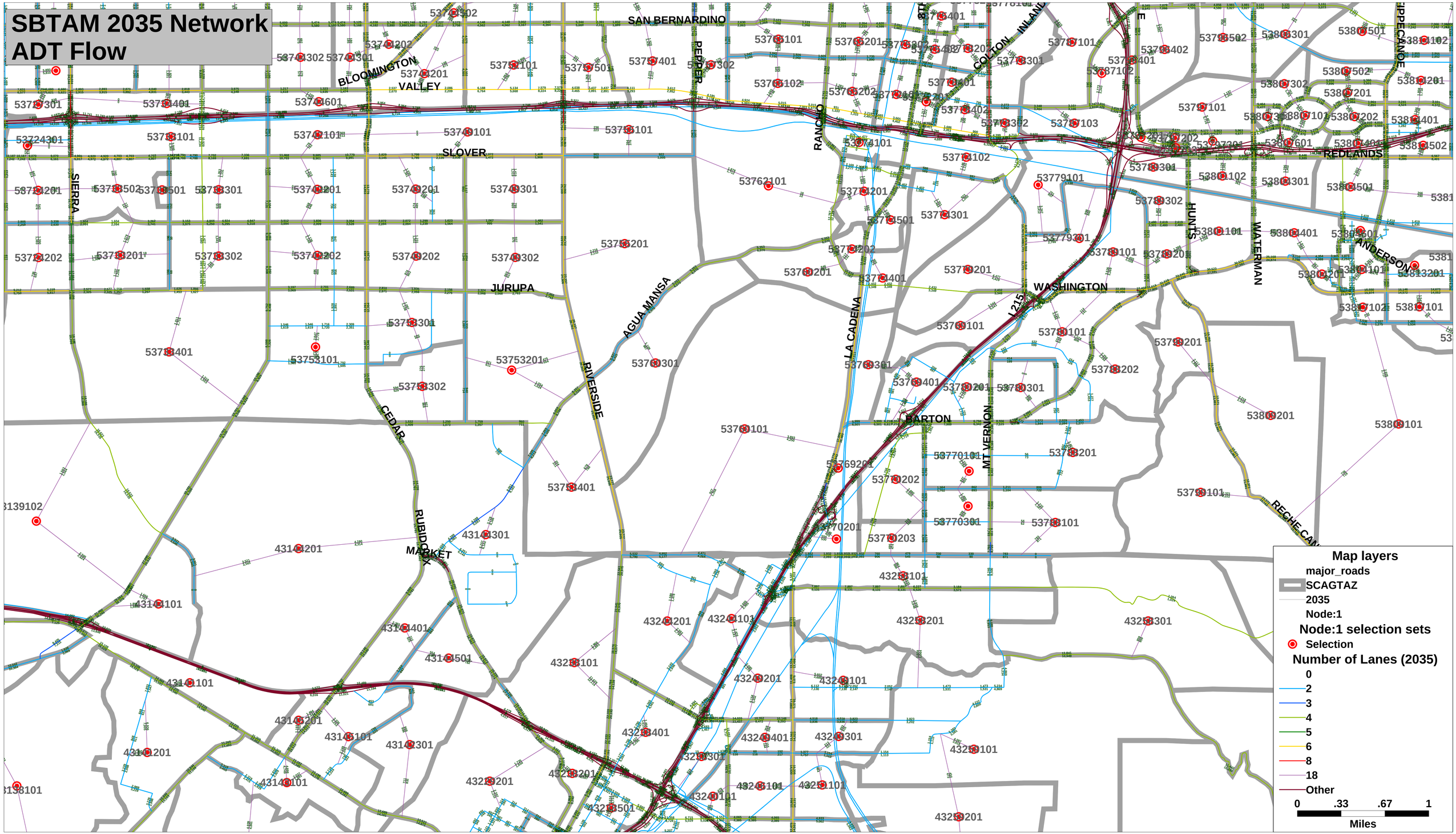
SBTAM 2008 Network
PM Truck Flow



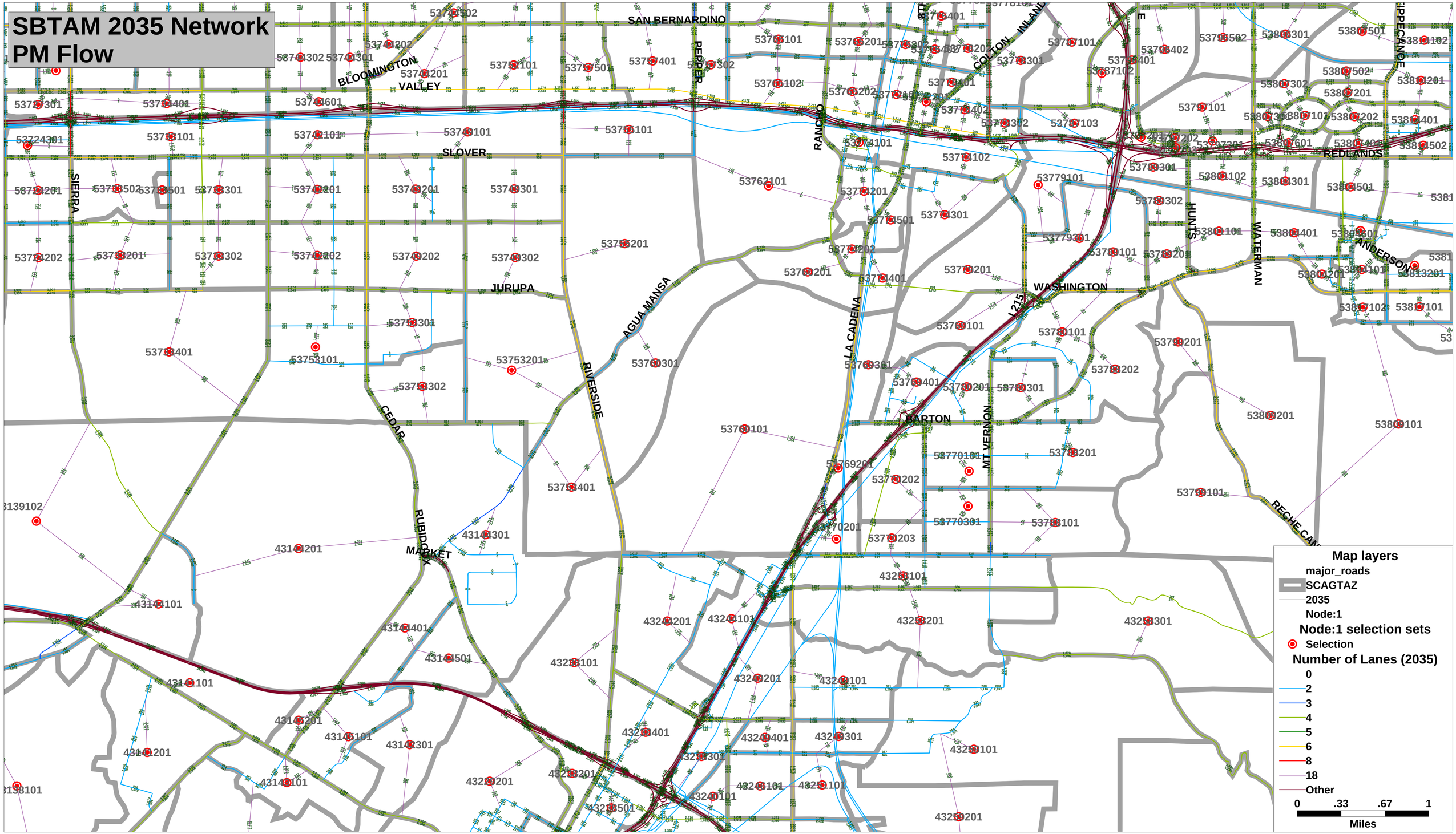
SBTAM 2035 Network
AM Flow



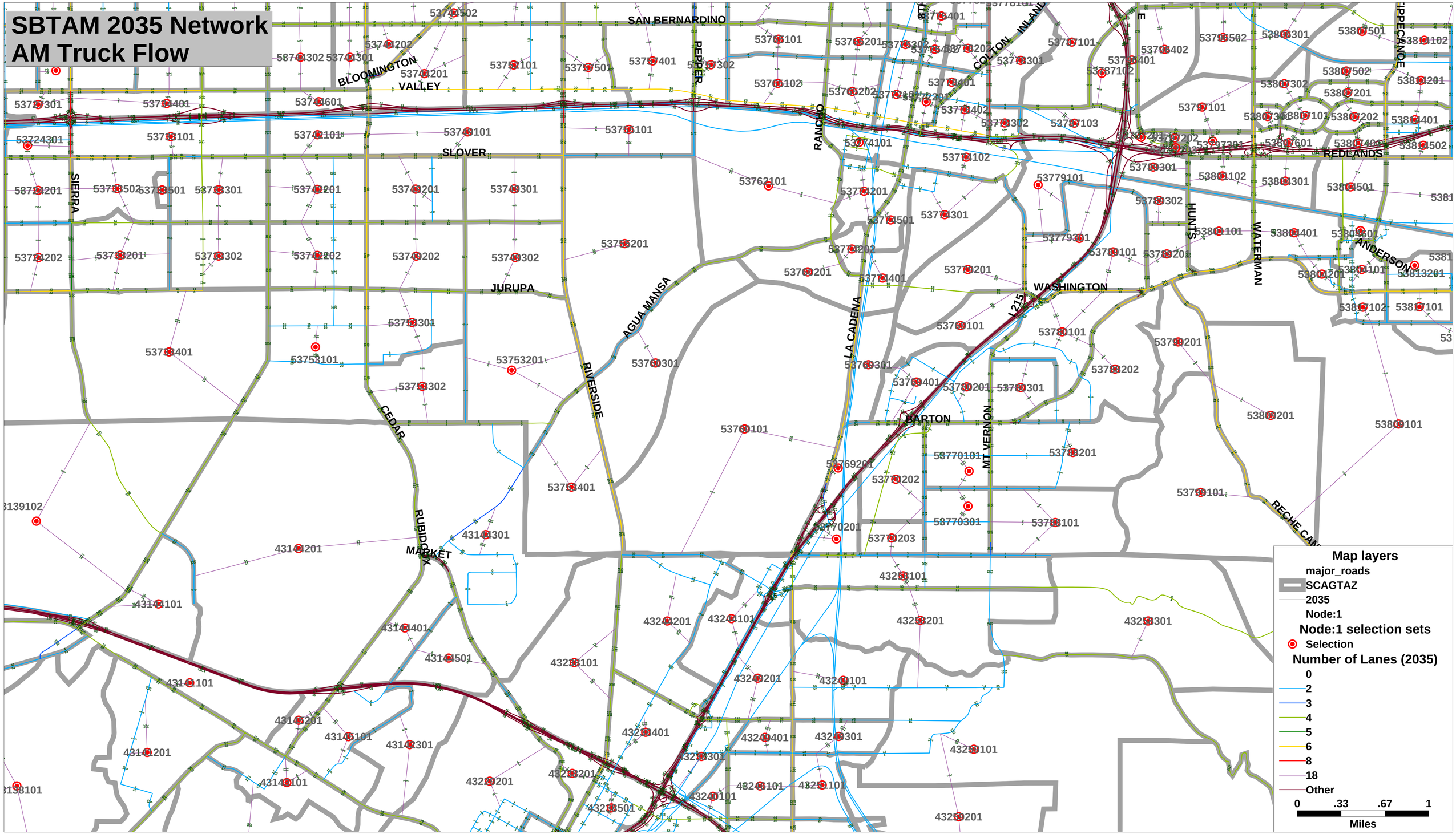
SBTAM 2035 Network
ADT Flow



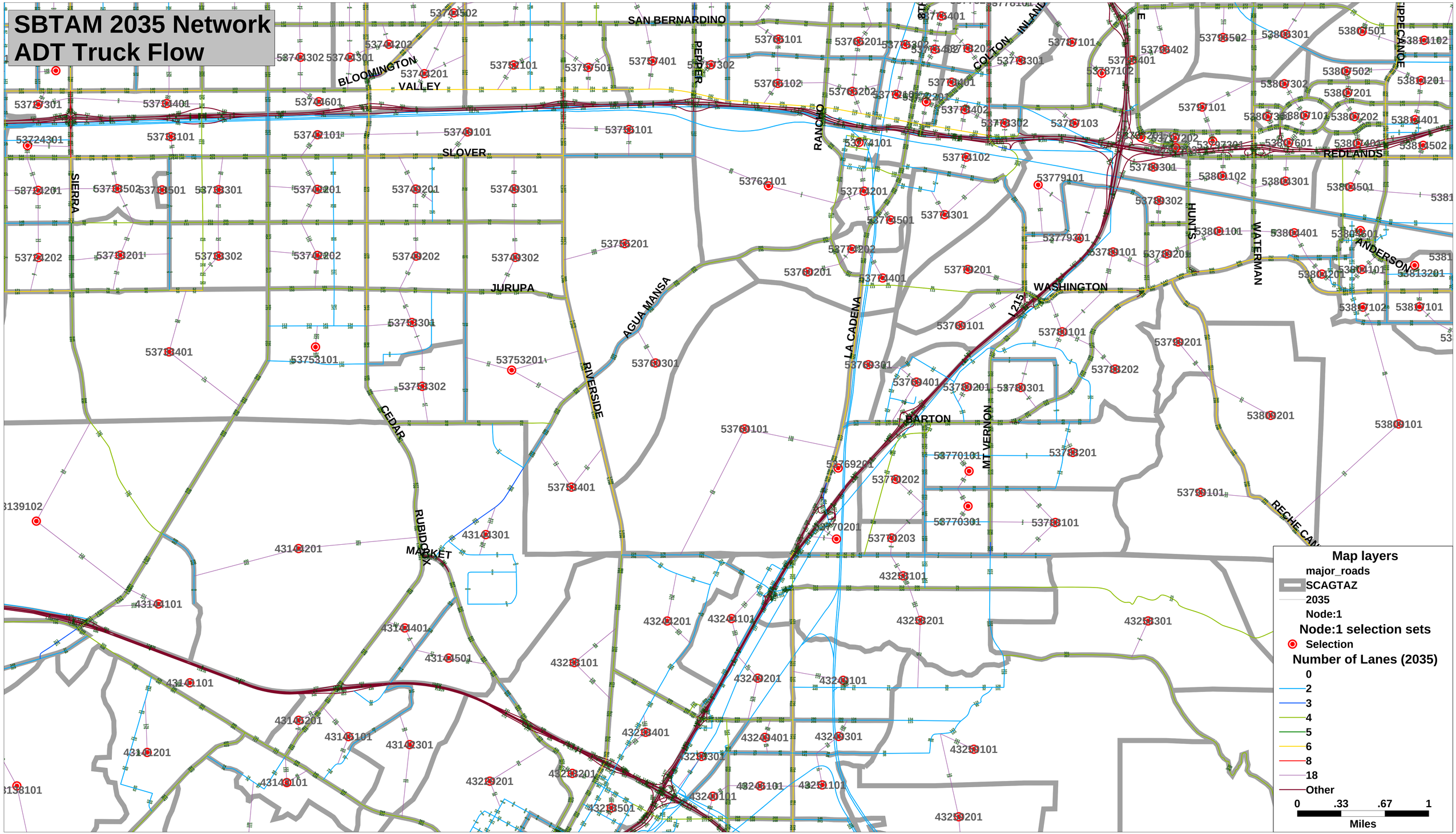
SBTAM 2035 Network
PM Flow



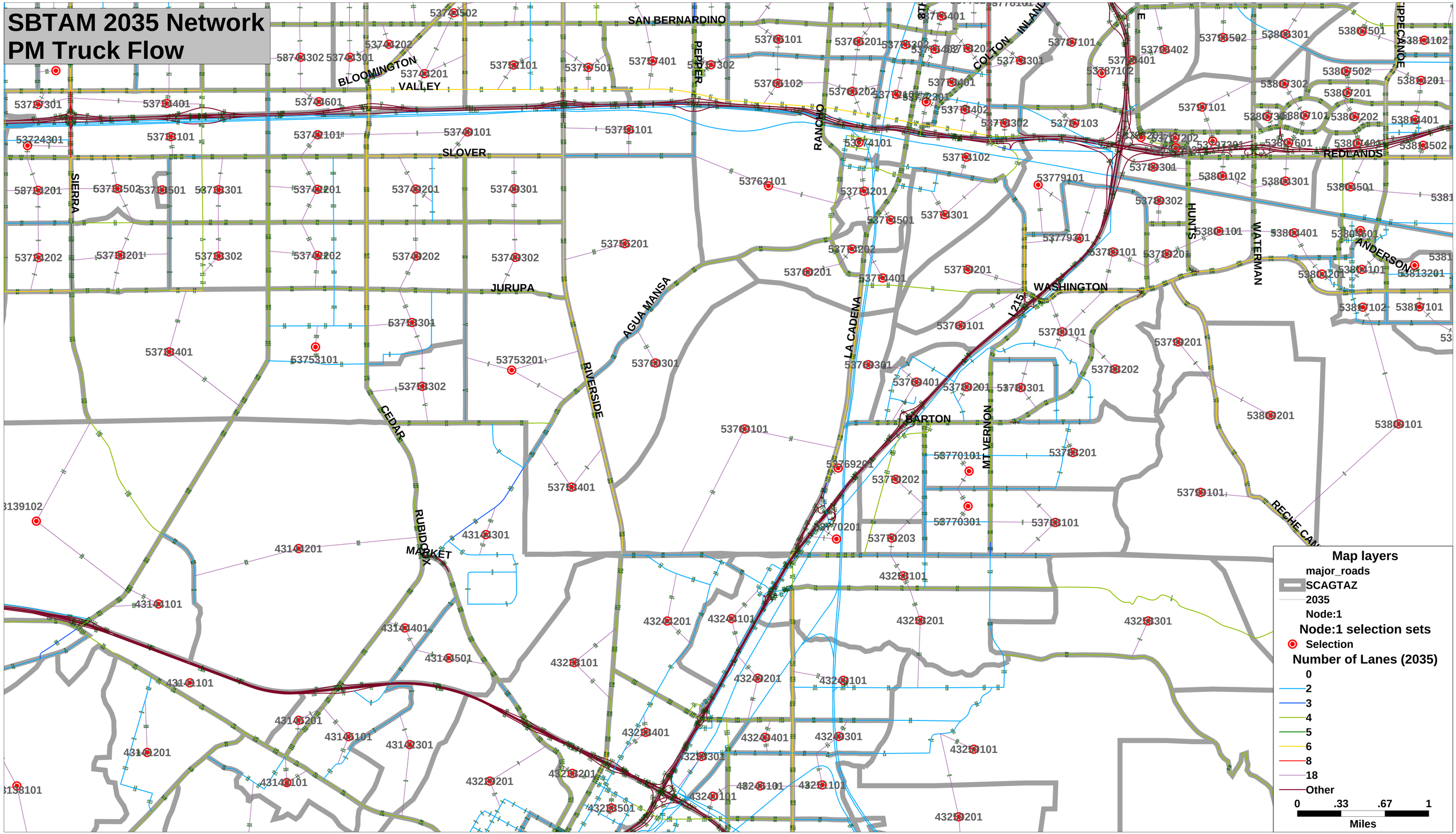
SBTAM 2035 Network
AM Truck Flow



SBTAM 2035 Network
ADT Truck Flow



SBTAM 2035 Network
PM Truck Flow



APPENDIX E

Explanation and Calculation of Intersection Delay

EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY

The levels of service at the unsignalized and signalized intersections are calculated using the delay methodology in the Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane time's 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity

12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length

2. Amount of red time faced by a lane group

3. Amount of yellow time for that lane group

4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is

added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

LEVEL OF SERVICE DESCRIPTION[1]

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

[1] Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

Existing

Agua Mansa Commerce Center Addendum
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 32.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	154	720	56	80	850	191	163	162	85	63	240	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	720	56	80	850	191	163	162	85	63	240	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	720	56	80	850	191	163	162	85	63	240	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	167	783	61	87	924	208	177	176	92	68	261	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	167	783	61	87	924	208	177	176	92	68	261	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	167	783	61	87	924	208	177	176	92	68	261	58
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3340	260	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.23	0.05	0.26	0.12	0.10	0.10	0.05	0.04	0.14	0.03
Crit Moves:	****				****		****				****	
Green/Cycle:	0.13	0.34	0.34	0.11	0.33	0.33	0.13	0.35	0.35	0.11	0.33	0.33
Volume/Cap:	0.78	0.68	0.68	0.46	0.78	0.35	0.78	0.28	0.15	0.36	0.44	0.10
Delay/Veh:	56.7	28.2	28.2	41.3	32.1	24.5	55.5	22.6	21.4	40.2	25.7	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	28.2	28.2	41.3	32.1	24.5	55.5	22.6	21.4	40.2	25.7	22.3
LOS by Move:	E	C	C	D	C	C	E	C	C	D	C	C
HCM2kAvgQ:	7	11	11	3	14	5	7	4	2	2	6	1

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.589
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 33.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	10		31		31		10		31		31		10		31		31		10		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	97		795		71		62		987		137		192		479		119		39		135		39	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	97		795		71		62		987		137		192		479		119		39		135		39	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.96		0.96		0.96		0.96		0.96		0.96		0.96		0.96		0.96		0.96		0.96		0.96	
PHF Volume:	101		826		74		64		1025		142		199		497		124		40		140		40	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	101		826		74		64		1025		142		199		497		124		40		140		40	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	101		826		74		64		1025		142		199		497		124		40		140		40	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.84		0.16		1.00		2.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Sat.:	1700		3305		295		1700		3600		1800		1700		1800		1800		1700		1800		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.06		0.25		0.25		0.04		0.28		0.08		0.12		0.28		0.07		0.02		0.08		0.02	
Crit Moves:	****								****				****								****			
Green/Cycle:	0.11		0.34		0.34		0.11		0.34		0.34		0.14		0.35		0.35		0.11		0.33		0.33	
Volume/Cap:	0.56		0.74		0.74		0.35		0.83		0.23		0.83		0.78		0.19		0.21		0.24		0.07	
Delay/Veh:	44.5		30.1		30.1		40.3		33.5		22.5		60.6		33.7		21.5		38.7		23.6		22.1	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	44.5		30.1		30.1		40.3		33.5		22.5		60.6		33.7		21.5		38.7		23.6		22.1	
LOS by Move:	D		C		C		D		C		C		E		C		C		D		C		C	
HCM2kAvgQ:	4		13		13		2		16		3		9		15		3		1		3		1	

Note: Queue reported is the number of cars per lane.

Agua Mansa Commerce Center Addendum
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0 910	1		3 980	0		0 0 0	1		0 0 1	1	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 910	1		3 980	0		0 0 0	1		0 0	1	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.93 0.93	0.93		0.93 0.93	0.93		0.93 0.93 0.93	0.93		0.93 0.93	0.93	
PHF Volume:	0 982	1		3 1057	0		0 0 0	1		0 0	1	
Reduct Vol:	0 0	0		0 0	0		0 0 0	0		0 0	0	
FinalVolume:	0 982	1		3 1057	0		0 0 0	1		0 0	1	
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			4.1 xxxx xxxxx			xxxxx xxxx xxxxx	6.8	6.5	6.9		
FollowUpTim:	xxxxx xxxx xxxxx			2.2 xxxx xxxxx			xxxxx xxxx xxxxx	3.5	4.0	3.3		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			983 xxxx xxxxx			xxxx xxxx xxxxx	1517	2046	491		
Potent Cap.:	xxxx xxxx xxxxx			711 xxxx xxxxx			xxxx xxxx xxxxx	112	57	528		
Move Cap.:	xxxx xxxx xxxxx			711 xxxx xxxxx			xxxx xxxx xxxxx	112	56	528		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			180 169 xxxxx	235	169	xxxxx		
Volume/Cap:	xxxx xxxx xxxx			0.00 xxxx xxxx			xxxx xxxx xxxx	0.00	0.00	0.00		
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			0.0 xxxx xxxxx			xxxx xxxx xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx xxxx xxxxx			10.1 xxxx xxxxx			xxxxx xxxx xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	* * *			B * *			* * *	*	*	*		
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT	LT - LTR - RT				
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx	xxxx	325	xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx	xxxxx	0.0	xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx	xxxxx	16.2	xxxxx		
Shared LOS:	* * *			* * *			* * *	*	C	*		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx	16.2				
ApproachLOS:	*			*			*	C				

Note: Queue reported is the number of cars per lane.

Agua Mansa Commerce Center Addendum
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[19.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0	962	5	5	1138	0	0	0	0	5	0	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	962	5	5	1138	0	0	0	0	5	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	1000	5	5	1183	0	0	0	0	5	0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1000	5	5	1183	0	0	0	0	5	0	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1005	xxxx	xxxxx	xxxx	xxxx	xxxxx	1604	2196	503
Potent Cap.:	xxxx	xxxx	xxxxx	697	xxxx	xxxxx	xxxx	xxxx	xxxxx	98	46	520
Move Cap.:	xxxx	xxxx	xxxxx	697	xxxx	xxxxx	xxxx	xxxx	xxxxx	98	45	520
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	153	151	xxxxx	221	152	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	265	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			19.0		
ApproachLOS:	*			*			*			C		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.357
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 38.2
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Ignore						Include						Include					
Min. Green:	10		26		26		10		26		26		31		31		31		31		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		0	1	0	0	1		0	1	0	0	1	
Volume Module:																								
Base Vol:	34		858		15		20		942		41		28		1		6		13		2		4	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	34		858		15		20		942		41		28		1		6		13		2		4	
User Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.92		0.92		0.92		0.92		0.92		0.00		0.92		0.92		0.92		0.92		0.92		0.92	
PHF Volume:	37		935		16		22		1026		0		31		1		7		14		2		4	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	37		935		16		22		1026		0		31		1		7		14		2		4	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	37		935		16		22		1026		0		31		1		7		14		2		4	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.97		0.03		1.00		2.00		1.00		0.97		0.03		1.00		0.87		0.13		1.00	
Final Sat.:	1700		3538		62		1700		3600		1800		1645		59		1800		1484		228		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.26		0.26		0.01		0.29		0.00		0.02		0.02		0.00		0.01		0.01		0.00	
Crit Moves:	****								****				****						****					
Green/Cycle:	0.08		0.36		0.36		0.10		0.38		0.00		0.24		0.24		0.24		0.24		0.24		0.24	
Volume/Cap:	0.28		0.74		0.74		0.12		0.74		0.00		0.08		0.08		0.02		0.04		0.04		0.01	
Delay/Veh:	57.8		38.8		38.8		53.2		36.6		0.0		38.5		38.5		37.8		38.1		38.1		37.8	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	57.8		38.8		38.8		53.2		36.6		0.0		38.5		38.5		37.8		38.1		38.1		37.8	
LOS by Move:	E		D		D		D		D		A		D		D		D		D		D		D	
HCM2kAvgQ:	2		18		18		1		19		0		1		1		0		1		1		0	

Note: Queue reported is the number of cars per lane.

Agua Mansa Commerce Center Addendum
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.375
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 40.2
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ignore				Include				Include			
Min. Green:	10	26	26		10	26	26		31	31	31		31	31	31	
Lanes:	1 0	1	1 0		1 0	2	0 1		0 1	0	0 1		0 1	0	0 1	
Volume Module:																
Base Vol:	9	936	18		9	1128	9		26	7	4		6	3	5	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	9	936	18		9	1128	9		26	7	4		6	3	5	
User Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.00		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	9	961	18		9	1158	0		27	7	4		6	3	5	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	9	961	18		9	1158	0		27	7	4		6	3	5	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	9	961	18		9	1158	0		27	7	4		6	3	5	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		0.80	0.20	1.00		0.68	0.32	1.00	
Final Sat.:	1700	3532	68		1700	3600	1800		1355	365	1800		1155	577	1800	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.27	0.27		0.01	0.32	0.00		0.02	0.02	0.00		0.01	0.01	0.00	
Crit Moves:	****					****				****			****			
Green/Cycle:	0.08	0.36	0.36		0.10	0.38	0.00		0.24	0.24	0.24		0.24	0.24	0.24	
Volume/Cap:	0.07	0.76	0.76		0.05	0.84	0.00		0.08	0.08	0.01		0.02	0.02	0.01	
Delay/Veh:	55.9	39.2	39.2		52.9	40.9	0.0		38.5	38.5	37.8		37.9	37.9	37.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	55.9	39.2	39.2		52.9	40.9	0.0		38.5	38.5	37.8		37.9	37.9	37.8	
LOS by Move:	E	D	D		D	D	A		D	D	D		D	D	D	
HCM2kAvgQ:	0	18	18		0	23	0		1	1	0		0	0	0	

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.189
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Permitted				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	31	0	31		0	0	0		0	26	26		10	26	0	
Lanes:	1	0 0	0	1	0	0 0	0	0	0	0	1	0 1	1	0	1	0 0
Volume Module:																
Base Vol:	30	0	22		0	0	0		0	245	59		15	324	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	0	22		0	0	0		0	245	59		15	324	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	33	0	24		0	0	0		0	272	65		17	360	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	33	0	24		0	0	0		0	272	65		17	360	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	33	0	24		0	0	0		0	272	65		17	360	0	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		1.00	1.00	0.00	
Final Sat.:	1700	0	1800		0	0	0		0	1800	1800		1700	1800	0	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.00	0.01		0.00	0.00	0.00		0.00	0.15	0.04		0.01	0.20	0.00	
Crit Moves:	****									****			****			
Green/Cycle:	0.24	0.00	0.24		0.00	0.00	0.00		0.00	0.64	0.64		0.08	0.72	0.00	
Volume/Cap:	0.08	0.00	0.06		0.00	0.00	0.00		0.00	0.24	0.06		0.13	0.28	0.00	
Delay/Veh:	38.5	0.0	38.3		0.0	0.0	0.0		0.0	10.1	8.8		56.4	6.7	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	38.5	0.0	38.3		0.0	0.0	0.0		0.0	10.1	8.8		56.4	6.7	0.0	
LOS by Move:	D	A	D		A	A	A		A	B	A		E	A	A	
HCM2kAvgQ:	1	0	1		0	0	0		0	4	1		1	5	0	

Note: Queue reported is the number of cars per lane.

Agua Mansa Commerce Center Addendum
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.410
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	38	0	50	0	0	0	0	585	28	10	180	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	0	50	0	0	0	0	585	28	10	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	41	0	55	0	0	0	0	639	31	11	197	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	0	55	0	0	0	0	639	31	11	197	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	0	55	0	0	0	0	639	31	11	197	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.35	0.02	0.01	0.11	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.10	0.00	0.13	0.00	0.00	0.00	0.00	0.56	0.03	0.08	0.15	0.00
Delay/Veh:	38.8	0.0	39.0	0.0	0.0	0.0	0.0	13.8	8.7	56.0	6.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.8	0.0	39.0	0.0	0.0	0.0	0.0	13.8	8.7	56.0	6.0	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	1	0	2	0	0	0	0	14	0	0	2	0

Note: Queue reported is the number of cars per lane.

Existing Plus Project

Agua Mansa Commerce Center Addendum
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	32.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	154	720	56	80	850	191	163	162	85	63	240	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	720	56	80	850	191	163	162	85	63	240	53
Added Vol:	2	9	0	0	20	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	729	56	80	870	191	163	162	89	63	240	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	170	792	61	87	946	208	177	176	97	68	261	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	792	61	87	946	208	177	176	97	68	261	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	792	61	87	946	208	177	176	97	68	261	58
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3343	257	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.24	0.24	0.05	0.26	0.12	0.10	0.10	0.05	0.04	0.14	0.03
Crit Moves:	****				****		****				****	
Green/Cycle:	0.13	0.35	0.35	0.11	0.33	0.33	0.13	0.35	0.35	0.11	0.33	0.33
Volume/Cap:	0.79	0.68	0.68	0.46	0.79	0.35	0.79	0.28	0.16	0.36	0.44	0.10
Delay/Veh:	58.2	28.2	28.2	41.3	32.4	24.3	57.2	22.8	21.6	40.2	25.7	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.2	28.2	28.2	41.3	32.4	24.3	57.2	22.8	21.6	40.2	25.7	22.3
LOS by Move:	E	C	C	D	C	C	E	C	C	D	C	C
HCM2kAvgQ:	7	12	12	3	14	5	7	4	2	2	6	1

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.595
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 33.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	97	795	71	62	987	137	192	479	119	39	135	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	795	71	62	987	137	192	479	119	39	135	39
Added Vol:	4	20	0	0	11	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	815	71	62	998	137	192	479	121	39	135	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	105	846	74	64	1036	142	199	497	126	40	140	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	846	74	64	1036	142	199	497	126	40	140	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	846	74	64	1036	142	199	497	126	40	140	40
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3312	288	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.04	0.29	0.08	0.12	0.28	0.07	0.02	0.08	0.02
Crit Moves:	****				****		****				****	
Green/Cycle:	0.11	0.34	0.34	0.11	0.34	0.34	0.14	0.35	0.35	0.11	0.33	0.33
Volume/Cap:	0.59	0.75	0.75	0.35	0.84	0.23	0.84	0.78	0.20	0.21	0.24	0.07
Delay/Veh:	45.5	30.5	30.5	40.3	33.8	22.4	61.8	33.8	21.5	38.8	23.6	22.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.5	30.5	30.5	40.3	33.8	22.4	61.8	33.8	21.5	38.8	23.6	22.1
LOS by Move:	D	C	C	D	C	C	E	C	C	D	C	C
HCM2kAvgQ:	4	13	13	2	17	3	9	15	3	1	3	1

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1 0		1 0 2	0 0		0 0 0	0 0		0 0 0	0 1	
Volume Module:												
Base Vol:	0	910	1	0	983	0	0	0	0	0	0	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	910	1	0	983	0	0	0	0	0	0	2
Added Vol:	0	6	1	0	24	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	916	2	0	1007	0	0	0	0	0	0	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	988	2	0	1086	0	0	0	0	0	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	988	2	0	1086	0	0	0	0	0	0	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	495
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	525
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	525
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	175	166	xxxxx	232	166	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.9		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.3]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	962	5				0	1143	0				0	0	0				0	0	7			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	962	5				0	1143	0				0	0	0				0	0	7			
Added Vol:	0	16	0				0	13	0				0	0	0				0	0	9			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	978	5				0	1156	0				0	0	0				0	0	16			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.96	0.96	0.96				0.96	0.96	0.96				0.96	0.96	0.96				0.96	0.96	0.96			
PHF Volume:	0	1017	5				0	1202	0				0	0	0				0	0	17			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	1017	5				0	1202	0				0	0	0				0	0	17			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	511			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	513			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	513			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				151	150	xxxxx				218	150	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.03			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	0.1			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	12.3			
LOS by Move:	*	*	*				*	*	*				*	*	*				*	*	B			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						12.3					
ApproachLOS:	*						*						*						B					

****

Note: Queue reported is the number of cars per lane.

****

Agua Mansa Commerce Center Addendum
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	900		0			0	992		0			0	0		0			0	0		0		
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	0	900		0			0	992		0			0	0		0			0	0		0		
Added Vol:	0	4		4			0	24		0			0	0		0			0	0		3		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	904		4			0	1016		0			0	0		0			0	0		3		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	0.95	0.95		0.95			0.95	0.95		0.95			0.95	0.95		0.95			0.95	0.95		0.95		
PHF Volume:	0	952		4			0	1069		0			0	0		0			0	0		3		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
FinalVolume:	0	952		4			0	1069		0			0	0		0			0	0		3		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		6.9		
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		478		
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		539		
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		539		
Total Cap:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			181	172		xxxxx			242	172		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		0.01		
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		0.0		
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		11.7		
LOS by Move:	*	*		*			*	*		*			*	*		*			*	*		B		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						11.7					
ApproachLOS:	*						*						*						B					

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	967	0				0	1145	0				0	0	0				0	0	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	967	0				0	1145	0				0	0	0				0	0	0			
Added Vol:	0	9	2				0	13	0				0	0	0				0	0	6			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	976	2				0	1158	0				0	0	0				0	0	6			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	0	1027	2				0	1219	0				0	0	0				0	0	6			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	1027	2				0	1219	0				0	0	0				0	0	6			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	515			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	510			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	510			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				148	147	xxxxx				215	148	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.01			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	0.0			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	12.1			
LOS by Move:	*	*	*				*	*	*				*	*	*				*	*	B			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						12.1					
ApproachLOS:	*						*						*						B					

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.360
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 38.5
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	10	26	26	10	26	26	31	31	31	31	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	34	858	15	20	942	41	28	1	6	13	2	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	858	15	20	942	41	28	1	6	13	2	4
Added Vol:	0	5	7	24	0	0	0	0	0	5	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	863	22	44	942	41	28	1	6	18	2	8
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	37	940	24	48	1026	0	31	1	7	20	2	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	940	24	48	1026	0	31	1	7	20	2	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	940	24	48	1026	0	31	1	7	20	2	9
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	0.97	0.03	1.00	0.91	0.09	1.00
Final Sat.:	1700	3511	89	1700	3600	1800	1645	59	1800	1539	171	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.27	0.03	0.29	0.00	0.02	0.02	0.00	0.01	0.01	0.00
Crit Moves:	****				****		****			****		
Green/Cycle:	0.08	0.36	0.36	0.10	0.38	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.28	0.75	0.75	0.27	0.74	0.00	0.08	0.08	0.02	0.05	0.05	0.02
Delay/Veh:	57.8	39.0	39.0	54.7	36.6	0.0	38.5	38.5	37.8	38.2	38.2	37.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.8	39.0	39.0	54.7	36.6	0.0	38.5	38.5	37.8	38.2	38.2	37.9
LOS by Move:	E	D	D	D	D	A	D	D	D	D	D	D
HCM2kAvgQ:	2	18	18	2	19	0	1	1	0	1	1	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.383
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 40.3
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	10	26	26	10	26	26	31	31	31	31	31	31
Lanes:	1 0 1	1 0		1 0 2	0 1		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	9	936	18	9	1128	9	26	7	4	6	3	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	936	18	9	1128	9	26	7	4	6	3	5
Added Vol:	0	3	4	13	0	0	0	0	0	12	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	939	22	22	1128	9	26	7	4	18	3	14
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.00	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	9	964	23	23	1158	0	27	7	4	18	3	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	964	23	23	1158	0	27	7	4	18	3	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	964	23	23	1158	0	27	7	4	18	3	14
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	0.80	0.20	1.00	0.86	0.14	1.00
Final Sat.:	1700	3518	82	1700	3600	1800	1355	365	1800	1469	245	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.27	0.01	0.32	0.00	0.02	0.02	0.00	0.01	0.01	0.01
Crit Moves:	****				****			****		****		
Green/Cycle:	0.08	0.36	0.36	0.10	0.38	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.07	0.76	0.76	0.13	0.84	0.00	0.08	0.08	0.01	0.05	0.05	0.03
Delay/Veh:	55.9	39.3	39.3	53.6	40.9	0.0	38.5	38.5	37.8	38.2	38.2	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	39.3	39.3	53.6	40.9	0.0	38.5	38.5	37.8	38.2	38.2	38.0
LOS by Move:	E	D	D	D	D	A	D	D	D	D	D	D
HCM2kAvgQ:	0	18	18	1	23	0	1	1	0	1	1	0

Note: Queue reported is the number of cars per lane.

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2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[8.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 1	0	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	36	0	0	19	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	36	0	0	19	0
Added Vol:	0	0	0	1	0	7	26	5	0	0	2	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	7	26	41	0	0	21	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	1	0	7	27	43	0	0	22	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	7	27	43	0	0	22	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	121	121	23	24	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	879	773	1059	1604	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	868	760	1059	1604	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.01	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	1031	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				8.5		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

Note: Queue reported is the number of cars per lane.

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2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

****

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1 0	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	34	0	0	14	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	34	0	0	14	0
Added Vol:	0	0	0	2	0	15	14	3	0	0	6	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	2	0	15	14	37	0	0	20	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	2	0	16	15	39	0	0	21	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	2	0	16	15	39	0	0	21	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	90	90	22	22	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	915	804	1062	1606	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	909	796	1062	1606	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	1041	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.5			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1	0 0 0		0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	36	0	0	19	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	36	0	0	19	0
Added Vol:	0	0	0	3	0	2	5	1	0	0	2	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	2	5	37	0	0	21	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	3	0	2	5	39	0	0	22	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	3	0	2	5	39	0	0	22	7
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	75	75	26	29	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	933	819	1056	1597	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	931	816	1056	1597	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	977	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.7	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

****

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: A[8.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1	0 0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	34	0	0	14	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	34	0	0	14	0
Added Vol:	0	0	0	7	0	6	3	2	0	0	1	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	6	3	36	0	0	15	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	7	0	6	3	38	0	0	16	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	7	0	6	3	38	0	0	16	4
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	62	62	18	20	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	949	833	1067	1609	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	948	831	1067	1609	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	999	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.7	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				8.7		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

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Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.195
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.3
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	30	0	22	0	0	0	0	245	59	15	324	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	22	0	0	0	0	245	59	15	324	0
Added Vol:	0	0	4	0	0	0	0	0	0	9	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	26	0	0	0	0	245	59	24	324	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	33	0	29	0	0	0	0	272	65	27	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	0	29	0	0	0	0	272	65	27	360	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	0	29	0	0	0	0	272	65	27	360	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.15	0.04	0.02	0.20	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.24	0.06	0.20	0.28	0.00
Delay/Veh:	38.5	0.0	38.4	0.0	0.0	0.0	0.0	10.1	8.8	57.0	6.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.5	0.0	38.4	0.0	0.0	0.0	0.0	10.1	8.8	57.0	6.7	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	1	0	1	0	0	0	0	4	1	1	5	0

Note: Queue reported is the number of cars per lane.

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Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.420
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 15.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0 0	0	1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	38	0	50	0	0	0	0	585	28	10	180	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	0	50	0	0	0	0	585	28	10	180	0
Added Vol:	0	0	9	0	0	0	0	0	0	5	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	0	59	0	0	0	0	585	28	15	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	41	0	64	0	0	0	0	639	31	16	197	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	0	64	0	0	0	0	639	31	16	197	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	0	64	0	0	0	0	639	31	16	197	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.00	0.00	0.00	0.00	0.35	0.02	0.01	0.11	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.10	0.00	0.15	0.00	0.00	0.00	0.00	0.56	0.03	0.13	0.15	0.00
Delay/Veh:	38.8	0.0	39.3	0.0	0.0	0.0	0.0	13.8	8.7	56.4	6.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.8	0.0	39.3	0.0	0.0	0.0	0.0	13.8	8.7	56.4	6.0	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	1	0	2	0	0	0	0	14	0	1	2	0

Note: Queue reported is the number of cars per lane.

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Opening Year (2016) Without Project

Agua Mansa Commerce Center Addendum
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Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 36.6
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	163	748	59	85	912	204	165	166	88	70	263	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	748	59	85	912	204	165	166	88	70	263	57
Added Vol:	32	38	13	35	40	11	10	14	13	5	18	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	786	72	120	952	215	175	180	101	75	281	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	212	854	78	130	1035	234	190	196	110	82	305	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	854	78	130	1035	234	190	196	110	82	305	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	854	78	130	1035	234	190	196	110	82	305	79
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3298	302	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.26	0.08	0.29	0.13	0.11	0.11	0.06	0.05	0.17	0.04
Crit Moves:	****				****		****				****	
Green/Cycle:	0.15	0.36	0.36	0.12	0.33	0.33	0.13	0.33	0.33	0.11	0.31	0.31
Volume/Cap:	0.86	0.71	0.71	0.66	0.86	0.39	0.86	0.33	0.18	0.45	0.55	0.14
Delay/Veh:	66.5	29.3	29.3	49.9	37.5	25.9	69.5	25.3	23.8	43.6	29.8	25.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.5	29.3	29.3	49.9	37.5	25.9	69.5	25.3	23.8	43.6	29.8	25.0
LOS by Move:	E	C	C	D	D	C	E	C	C	D	C	C
HCM2kAvgQ:	10	13	13	5	18	6	9	5	2	3	8	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.653
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 37.7
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10		31	31	10		31	31	10		31	31	10		31	31
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	1	0 1	1	0	1	0 1
Volume Module:																
Base Vol:	100		883	78	66		1036	138	202		496	121	43		143	44
Growth Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	100		883	78	66		1036	138	202		496	121	43		143	44
Added Vol:	16		49	7	20		39	9	13		19	33	13		15	36
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	116		932	85	86		1075	147	215		515	154	56		158	80
User Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96
PHF Volume:	120		968	88	89		1116	153	223		535	160	58		164	83
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	120		968	88	89		1116	153	223		535	160	58		164	83
PCE Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	120		968	88	89		1116	153	223		535	160	58		164	83
Saturation Flow Module:																
Sat/Lane:	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800
Adjustment:	0.94		1.00	1.00	0.94		1.00	1.00	0.94		1.00	1.00	0.94		1.00	1.00
Lanes:	1.00		1.83	0.17	1.00		2.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Final Sat.:	1700		3299	301	1700		3600	1800	1700		1800	1800	1700		1800	1800
Capacity Analysis Module:																
Vol/Sat:	0.07		0.29	0.29	0.05		0.31	0.08	0.13		0.30	0.09	0.03		0.09	0.05
Crit Moves:	****						****		****						****	
Green/Cycle:	0.10		0.36	0.36	0.11		0.37	0.37	0.16		0.34	0.34	0.11		0.30	0.30
Volume/Cap:	0.74		0.83	0.83	0.46		0.83	0.23	0.83		0.86	0.26	0.31		0.31	0.16
Delay/Veh:	63.2		35.4	35.4	45.1		34.2	22.6	61.5		44.3	25.0	44.0		29.0	27.5
User DelAdj:	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	63.2		35.4	35.4	45.1		34.2	22.6	61.5		44.3	25.0	44.0		29.0	27.5
LOS by Move:	E		D	D	D		C	C	E		D	C	D		C	C
HCM2kAvgQ:	6		18	18	3		19	3	10		19	4	2		4	2

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Opening Year (2016) Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0	940	1	4	1050	0	0	0	0	1	0	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	1	4	1050	0	0	0	0	1	0	2
Added Vol:	0	83	0	0	58	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1023	1	4	1108	0	0	0	0	1	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	1104	1	4	1195	0	0	0	0	1	0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1104	1	4	1195	0	0	0	0	1	0	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1105	xxxx	xxxxx	xxxx	xxxx	xxxxx	1710	2308	552
Potent Cap.:	xxxx	xxxx	xxxxx	640	xxxx	xxxxx	xxxx	xxxx	xxxxx	83	39	482
Move Cap.:	xxxx	xxxx	xxxxx	640	xxxx	xxxxx	xxxx	xxxx	xxxxx	83	38	482
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	148	141	xxxxx	200	142	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	328	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.1	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			16.1		
ApproachLOS:	*			*			*			C		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[22.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1 0		1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	1057	5	6	1193	0	0	0	0	7	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1057	5	6	1193	0	0	0	0	7	0	3
Added Vol:	0	72	0	0	84	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1129	5	6	1277	0	0	0	0	7	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	1174	5	6	1327	0	0	0	0	7	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1174	5	6	1327	0	0	0	0	7	0	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1179	xxxx	xxxxx	xxxx	xxxx	xxxxx	1852	2516	589
Potent Cap.:	xxxx	xxxx	xxxxx	600	xxxx	xxxxx	xxxx	xxxx	xxxxx	67	29	456
Move Cap.:	xxxx	xxxx	xxxxx	600	xxxx	xxxxx	xxxx	xxxx	xxxxx	67	28	456
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	122	xxxxx	180	123	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	220	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	22.2	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			22.2		
ApproachLOS:	*			*			*			C		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 41.2
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Ignore						Include						Include					
Min. Green:	10		26		26		10		26		26		31		31		31		31		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		0	1	0	0	1		0	1	0	0	1	
Volume Module:																								
Base Vol:	36		884		17		22		1009		42		32		1		7		14		2		4	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	36		884		17		22		1009		42		32		1		7		14		2		4	
Added Vol:	0		73		25		27		31		0		0		0		0		9		0		10	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	36		957		42		49		1040		42		32		1		7		23		2		14	
User Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.92		0.92		0.92		0.92		0.92		0.00		0.92		0.92		0.92		0.92		0.92		0.92	
PHF Volume:	39		1042		46		53		1133		0		35		1		8		25		2		15	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	39		1042		46		53		1133		0		35		1		8		25		2		15	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	39		1042		46		53		1133		0		35		1		8		25		2		15	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.92		0.08		1.00		2.00		1.00		0.97		0.03		1.00		0.92		0.08		1.00	
Final Sat.:	1700		3449		151		1700		3600		1800		1651		52		1800		1571		137		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.30		0.30		0.03		0.31		0.00		0.02		0.02		0.00		0.02		0.02		0.01	
Crit Moves:	****								****						****				****					
Green/Cycle:	0.08		0.37		0.37		0.09		0.38		0.00		0.24		0.24		0.24		0.24		0.24		0.24	
Volume/Cap:	0.30		0.82		0.82		0.34		0.82		0.00		0.09		0.09		0.02		0.07		0.07		0.04	
Delay/Veh:	58.0		41.5		41.5		56.4		39.9		0.0		38.6		38.6		37.9		38.4		38.4		38.1	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	58.0		41.5		41.5		56.4		39.9		0.0		38.6		38.6		37.9		38.4		38.4		38.1	
LOS by Move:	E		D		D		E		D		A		D		D		D		D		D		D	
HCM2kAvgQ:	2		21		21		2		22		0		1		1		0		1		1		0	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.433
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 46.3
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ignore				Include				Include			
Min. Green:	10	26		26	10	26		26	31	31		31	31	31		31
Lanes:	1	0 1	1	0	1	0 2	0	1	0	1 0	0	1	0	1 0	0	1
Volume Module:																
Base Vol:	9	1037		19	10	1181		10	29	8		4	7	4		6
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	9	1037		19	10	1181		10	29	8		4	7	4		6
Added Vol:	0	45		13	14	71		0	0	0		0	25	0		28
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	9	1082		32	24	1252		10	29	8		4	32	4		34
User Adj:	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.97	0.97		0.97	0.97	0.97		0.00	0.97	0.97		0.97	0.97	0.97		0.97
PHF Volume:	9	1111		33	25	1285		0	30	8		4	33	4		35
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	9	1111		33	25	1285		0	30	8		4	33	4		35
PCE Adj:	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	9	1111		33	25	1285		0	30	8		4	33	4		35
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	1.94		0.06	1.00	2.00		1.00	0.79	0.21		1.00	0.89	0.11		1.00
Final Sat.:	1700	3497		103	1700	3600		1800	1349	372		1800	1520	190		1800
Capacity Analysis Module:																
Vol/Sat:	0.01	0.32		0.32	0.01	0.36		0.00	0.02	0.02		0.00	0.02	0.02		0.02
Crit Moves:	****					****				****				****		
Green/Cycle:	0.08	0.37		0.37	0.09	0.38		0.00	0.24	0.24		0.24	0.24	0.24		0.24
Volume/Cap:	0.07	0.86		0.86	0.16	0.93		0.00	0.09	0.09		0.01	0.09	0.09		0.08
Delay/Veh:	55.9	43.2		43.2	55.1	49.4		0.0	38.6	38.6		37.8	38.6	38.6		38.5
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	55.9	43.2		43.2	55.1	49.4		0.0	38.6	38.6		37.8	38.6	38.6		38.5
LOS by Move:	E	D		D	E	D		A	D	D		D	D	D		D
HCM2kAvgQ:	0	23		23	1	29		0	1	1		0	1	1		1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 125 Critical Vol./Cap.(X): 0.243
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Permitted						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	31	0	31				0	0	0				0	26	26				10	26	0			
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module:																								
Base Vol:	31	0	23				0	0	0				0	257	61				16	353	0			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	31	0	23				0	0	0				0	257	61				16	353	0			
Added Vol:	8	0	7				0	0	0				0	40	22				19	31	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	39	0	30				0	0	0				0	297	83				35	384	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90				0.90	0.90	0.90			
PHF Volume:	43	0	33				0	0	0				0	330	92				39	426	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	43	0	33				0	0	0				0	330	92				39	426	0			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	43	0	33				0	0	0				0	330	92				39	426	0			
Saturation Flow Module:																								
Sat/Lane:	1800	1800	1800				1800	1800	1800				1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.00	1.00				0.00	0.00	0.00				0.00	1.00	1.00				1.00	1.00	0.00			
Final Sat.:	1700	0	1800				0	0	0				0	1800	1800				1700	1800	0			
Capacity Analysis Module:																								
Vol/Sat:	0.03	0.00	0.02				0.00	0.00	0.00				0.00	0.18	0.05				0.02	0.24	0.00			
Crit Moves:	****													****					****					
Green/Cycle:	0.25	0.00	0.25				0.00	0.00	0.00				0.00	0.62	0.62				0.08	0.70	0.00			
Volume/Cap:	0.10	0.00	0.07				0.00	0.00	0.00				0.00	0.29	0.08				0.29	0.34	0.00			
Delay/Veh:	36.4	0.0	36.1				0.0	0.0	0.0				0.0	11.0	9.3				55.3	7.3	0.0			
User DelAdj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	36.4	0.0	36.1				0.0	0.0	0.0				0.0	11.0	9.3				55.3	7.3	0.0			
LOS by Move:	D		A	D			A		A			A		A		B		A		E		A		A
HCM2kAvgQ:	1		0	1			0		0			0		0		6		1		2		6		0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.472
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0 0	0	1	0 0	0	0 0	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	40	0	50	0	0	0	0	620	29	11	200	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	50	0	0	0	0	620	29	11	200	0
Added Vol:	22	0	19	0	0	0	0	35	11	10	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	0	69	0	0	0	0	655	40	21	242	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	68	0	75	0	0	0	0	715	44	23	264	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	0	75	0	0	0	0	715	44	23	264	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	0	75	0	0	0	0	715	44	23	264	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.02	0.01	0.15	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.17	0.00	0.18	0.00	0.00	0.00	0.00	0.62	0.04	0.18	0.21	0.00
Delay/Veh:	39.5	0.0	39.5	0.0	0.0	0.0	0.0	15.2	8.7	56.8	6.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.5	0.0	39.5	0.0	0.0	0.0	0.0	15.2	8.7	56.8	6.3	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	2	0	2	0	0	0	0	17	1	1	3	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	37.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	163	748	59	85	912	204	165	166	88	70	263	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	748	59	85	912	204	165	166	88	70	263	57
Added Vol:	33	47	13	35	61	11	10	14	17	5	18	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	795	72	120	973	215	175	180	105	75	281	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	213	864	78	130	1058	234	190	196	114	82	305	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	864	78	130	1058	234	190	196	114	82	305	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	864	78	130	1058	234	190	196	114	82	305	79
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3301	299	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.26	0.26	0.08	0.29	0.13	0.11	0.11	0.06	0.05	0.17	0.04
Crit Moves:	****				****		****				****	
Green/Cycle:	0.15	0.38	0.38	0.12	0.35	0.35	0.13	0.32	0.32	0.10	0.30	0.30
Volume/Cap:	0.84	0.70	0.70	0.63	0.84	0.37	0.84	0.34	0.20	0.46	0.57	0.15
Delay/Veh:	65.7	29.4	29.4	50.3	37.1	26.0	68.8	27.3	25.8	46.1	32.9	27.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.7	29.4	29.4	50.3	37.1	26.0	68.8	27.3	25.8	46.1	32.9	27.4
LOS by Move:	E	C	C	D	D	C	E	C	C	D	C	C
HCM2kAvgQ:	10	14	14	5	18	6	9	5	3	3	9	2

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Opening Year (2016) With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.659
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 38.1
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	100	883	78	66	1036	138	202	496	121	43	143	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	883	78	66	1036	138	202	496	121	43	143	44
Added Vol:	20	70	7	20	49	9	13	19	35	13	15	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	953	85	86	1085	147	215	515	156	56	158	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	125	990	88	89	1127	153	223	535	162	58	164	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	990	88	89	1127	153	223	535	162	58	164	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	990	88	89	1127	153	223	535	162	58	164	83
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3305	295	1700	3600	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.30	0.05	0.31	0.08	0.13	0.30	0.09	0.03	0.09	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.10	0.36	0.36	0.11	0.38	0.38	0.16	0.34	0.34	0.11	0.30	0.30
Volume/Cap:	0.77	0.84	0.84	0.46	0.83	0.23	0.83	0.87	0.26	0.31	0.31	0.16
Delay/Veh:	66.2	36.0	36.0	45.3	34.4	22.5	62.4	44.6	25.1	44.0	29.0	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.2	36.0	36.0	45.3	34.4	22.5	62.4	44.6	25.1	44.0	29.0	27.5
LOS by Move:	E	D	D	D	C	C	E	D	C	D	C	C
HCM2kAvgQ:	6	18	18	3	19	3	10	19	4	2	4	2

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Opening Year (2016) With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 940	1		0 1054	0		0 0 0	0		0 0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 940	1		0 1054	0		0 0 0	0		0 0	0	
Added Vol:	0 89	1		0 83	0		0 0 0	0		0 0	4	
PasserByVol:	0 0	0		0 0	0		0 0 0	0		0 0	0	
Initial Fut:	0 1029	2		0 1137	0		0 0 0	0		0 0	7	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.93 0.93	0.93		0.93 0.93	0.93		0.93 0.93 0.93	0.93		0.93 0.93	0.93	
PHF Volume:	0 1110	2		0 1227	0		0 0 0	0		0 0	8	
Reduct Vol:	0 0	0		0 0	0		0 0 0	0		0 0	0	
FinalVolume:	0 1110	2		0 1227	0		0 0 0	0		0 0	8	
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	6.9
FollowUpTim:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	556
Potent Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	480
Move Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	480
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		144 140 xxxxx	198		140 xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	0.02	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	0.0	
Control Del:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	12.6	
LOS by Move:	* *	*		* *	*		* * *	*		* *	B	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxxx		xxxx xxxx	xxxxx	
Shared LOS:	* *	*		* *	*		* * *	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.6		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1057	5		0 1199	0		0 0 0	0		0 0 0	0	10
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	1.00
Initial Bse:	0 1057	5		0 1199	0		0 0 0	0		0 0	0	10
Added Vol:	0 88	0		0 97	0		0 0 0	0		0 0	0	9
PasserByVol:	0 0	0		0 0	0		0 0 0	0		0 0	0	0
Initial Fut:	0 1145	5		0 1296	0		0 0 0	0		0 0	0	19
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00 1.00	1.00		1.00 1.00	1.00	1.00
PHF Adj:	0.96 0.96	0.96		0.96 0.96	0.96		0.96 0.96 0.96	0.96		0.96 0.96	0.96	0.96
PHF Volume:	0 1190	5		0 1347	0		0 0 0	0		0 0	0	20
Reduct Vol:	0 0	0		0 0	0		0 0 0	0		0 0	0	0
FinalVolume:	0 1190	5		0 1347	0		0 0 0	0		0 0	0	20
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	6.9
FollowUpTim:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	598
Potent Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	451
Move Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	451
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		121 122	xxxxx		178 122	xxxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	0.04	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	0.1
Control Del:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	13.4
LOS by Move:	* *	*		* *	*		* * *	*		* *	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx xxxxx	xxxx		xxxx xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx xxxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Shared LOS:	* *	*		* *	*		* * *	*		* *	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.4		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 930	0		0 1062	0		0 0 0	0		0 0 0	0	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 930	0		0 1062	0		0 0 0	0		0 0 0	0	
Added Vol:	0 87	4		0 83	0		0 0 0	0		0 0 0	3	
PasserByVol:	0 0	0		0 0	0		0 0 0	0		0 0 0	0	
Initial Fut:	0 1017	4		0 1145	0		0 0 0	0		0 0 0	3	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	0 1071	4		0 1205	0		0 0 0	0		0 0 0	3	
Reduct Vol:	0 0	0		0 0	0		0 0 0	0		0 0 0	0	
FinalVolume:	0 1071	4		0 1205	0		0 0 0	0		0 0 0	3	
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	6.9	
FollowUpTim:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	3.3	
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	537	
Potent Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	493	
Move Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	493	
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		149 145	xxxxx		207 145	xxxxx	
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	0.01	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	0.0	
Control Del:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	12.3	
LOS by Move:	* *	*		* *	*		* *	*		* *	B	
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	* *	*		* *	*		* *	*		* *	*	
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.3		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1067		0	0 1200		0	0 0		0	0 0		0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1067		0	0 1200		0	0 0		0	0 0		0
Added Vol:	0 82		2	0 97		0	0 0		0	0 0		6
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1149		2	0 1297		0	0 0		0	0 0		6
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.95 0.95		0.95	0.95 0.95		0.95	0.95 0.95		0.95	0.95 0.95		0.95
PHF Volume:	0 1209		2	0 1365		0	0 0		0	0 0		6
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1209		2	0 1365		0	0 0		0	0 0		6
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		606
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		445
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		445
Total Cap:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	119 119		xxxxx	174 119		xxxxx
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.01
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.0
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		13.2
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.2		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.419
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 41.8
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	10	26	26	10	26	26	31	31	31	31	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	36	884	17	22	1009	42	32	1	7	14	2	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	884	17	22	1009	42	32	1	7	14	2	4
Added Vol:	0	78	32	51	31	0	0	0	0	14	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	962	49	73	1040	42	32	1	7	28	2	18
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	39	1048	53	80	1133	0	35	1	8	31	2	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1048	53	80	1133	0	35	1	8	31	2	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	1048	53	80	1133	0	35	1	8	31	2	20
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.00	1.00	0.97	0.03	1.00	0.94	0.06	1.00
Final Sat.:	1700	3426	174	1700	3600	1800	1651	52	1800	1593	114	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.31	0.05	0.31	0.00	0.02	0.02	0.00	0.02	0.02	0.01
Crit Moves:		****		****				****			****	
Green/Cycle:	0.09	0.38	0.38	0.08	0.37	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.25	0.80	0.80	0.61	0.85	0.00	0.09	0.09	0.02	0.08	0.08	0.05
Delay/Veh:	55.9	38.8	38.8	66.1	42.8	0.0	38.6	38.6	37.9	38.5	38.5	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	38.8	38.8	66.1	42.8	0.0	38.6	38.6	37.9	38.5	38.5	38.2
LOS by Move:	E	D	D	E	D	A	D	D	D	D	D	D
HCM2kAvgQ:	2	21	21	4	23	0	1	1	0	1	1	1

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.441
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 46.3
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Ignore						Include						Include					
Min. Green:	10		26		26		10		26		26		31		31		31		31		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		0	1	0	0	1		0	1	0	0	1	
Volume Module:																								
Base Vol:	9		1037		19		10		1181		10		29		8		4		7		4		6	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	9		1037		19		10		1181		10		29		8		4		7		4		6	
Added Vol:	0		47		17		26		71		0		0		0		0		38		0		37	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	9		1084		36		36		1252		10		29		8		4		45		4		43	
User Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.97		0.97		0.97		0.97		0.97		0.00		0.97		0.97		0.97		0.97		0.97		0.97	
PHF Volume:	9		1113		37		37		1285		0		30		8		4		46		4		44	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	9		1113		37		37		1285		0		30		8		4		46		4		44	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	9		1113		37		37		1285		0		30		8		4		46		4		44	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		1.94		0.06		1.00		2.00		1.00		0.79		0.21		1.00		0.92		0.08		1.00	
Final Sat.:	1700		3484		116		1700		3600		1800		1349		372		1800		1568		139		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.32		0.32		0.02		0.36		0.00		0.02		0.02		0.00		0.03		0.03		0.02	
Crit Moves:	****								****						****				****					
Green/Cycle:	0.08		0.37		0.37		0.09		0.38		0.00		0.24		0.24		0.24		0.24		0.24		0.24	
Volume/Cap:	0.07		0.86		0.86		0.24		0.93		0.00		0.09		0.09		0.01		0.12		0.12		0.10	
Delay/Veh:	55.9		43.5		43.5		55.9		49.4		0.0		38.6		38.6		37.8		39.0		39.0		38.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	55.9		43.5		43.5		55.9		49.4		0.0		38.6		38.6		37.8		39.0		39.0		38.7	
LOS by Move:	E		D		D		E		D		A		D		D		D		D		D		D	
HCM2kAvgQ:	0		24		24		2		29		0		1		1		0		2		2		1	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	40	0	0	20	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	40	0	0	20	0
Added Vol:	0	0	0	1	0	7	26	57	0	0	21	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	7	26	97	0	0	41	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	1	0	7	27	102	0	0	43	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	7	27	102	0	0	43	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	201	201	44	45	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	792	699	1032	1576	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	781	686	1032	1576	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.01	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	992	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.7	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0	1 0	0 0	0	0 0	1 0
Volume Module:												
Base Vol:	0 0	0	0	0 0	0	0	0	37	0	0	17	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 0	0	0	0 0	0	0	0	37	0	0	17	0
Added Vol:	0 0	0	0	2 0	15	14	29	0	0	59	1	
PasserByVol:	0 0	0	0	0 0	0	0	0	0	0	0	0	
Initial Fut:	0 0	0	0	2 0	15	14	66	0	0	76	1	
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0 0	0	0	2 0	16	15	69	0	0	80	1	
Reduct Vol:	0 0	0	0	0 0	0	0	0	0	0	0	0	
FinalVolume:	0 0	0	0	2 0	16	15	69	0	0	80	1	
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx		3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		179	179	81	81	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx		815	718	985	1529	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx		809	711	985	1529	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx		0.00	0.00	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *	*		*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	960	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	8.8	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*		*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				8.8		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

Note: Queue reported is the number of cars per lane.

Agua Mansa Commerce Center Addendum
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

****

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A[9.0]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1 0	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	40	0	0	20	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	40	0	0	20	0
Added Vol:	0	0	0	3	0	2	5	53	0	0	21	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	2	5	93	0	0	41	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	3	0	2	5	98	0	0	43	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	3	0	2	5	98	0	0	43	7
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	155	155	47	51	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	841	740	1028	1569	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	839	738	1028	1569	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	905	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.0	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

****

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

****

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: A[8.8]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	0	0	7	0	6	3	29	0	0	54	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	6	3	29	0	0	54	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	7	0	6	3	31	0	0	57	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	7	0	6	3	31	0	0	57	4
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	96	96	59	61	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	909	798	1012	1555	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	907	796	1012	1555	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	953	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				8.8		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

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Note: Queue reported is the number of cars per lane.

****

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.252
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 13.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	31	0	23	0	0	0	0	257	61	16	353	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	23	0	0	0	0	257	61	16	353	0
Added Vol:	8	0	11	0	0	0	0	40	22	29	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	0	34	0	0	0	0	297	83	45	384	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	43	0	38	0	0	0	0	330	92	50	426	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	0	38	0	0	0	0	330	92	50	426	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	0	38	0	0	0	0	330	92	50	426	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.18	0.05	0.03	0.24	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.28	0.00	0.28	0.00	0.00	0.00	0.00	0.57	0.57	0.09	0.66	0.00
Volume/Cap:	0.09	0.00	0.07	0.00	0.00	0.00	0.00	0.32	0.09	0.32	0.36	0.00
Delay/Veh:	29.2	0.0	29.0	0.0	0.0	0.0	0.0	12.5	10.7	47.9	8.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	0.0	29.0	0.0	0.0	0.0	0.0	12.5	10.7	47.9	8.3	0.0
LOS by Move:	C	A	C	A	A	A	A	B	B	D	A	A
HCM2kAvgQ:	1	0	1	0	0	0	0	6	1	2	6	0

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.484
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 17.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0 0	0	1	0 0	0	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	40	0	50	0	0	0	0	620	29	11	200	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	50	0	0	0	0	620	29	11	200	0
Added Vol:	22	0	29	0	0	0	0	35	11	15	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	0	79	0	0	0	0	655	40	26	242	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	68	0	86	0	0	0	0	715	44	28	264	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	0	86	0	0	0	0	715	44	28	264	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	0	86	0	0	0	0	715	44	28	264	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1700	0	1800	0	0	0	0	1800	1800	1700	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.40	0.02	0.02	0.15	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.17	0.00	0.20	0.00	0.00	0.00	0.00	0.62	0.04	0.22	0.21	0.00
Delay/Veh:	39.5	0.0	39.8	0.0	0.0	0.0	0.0	15.2	8.7	57.2	6.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.5	0.0	39.8	0.0	0.0	0.0	0.0	15.2	8.7	57.2	6.3	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	2	0	3	0	0	0	0	17	1	1	3	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.947
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 46.2
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	222	974	83	136	1460	316	176	192	102	118	432	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	974	83	136	1460	316	176	192	102	118	432	90
Added Vol:	1	9	0	18	23	0	0	4	4	0	1	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	223	983	83	154	1483	316	176	196	106	118	433	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	235	1035	87	162	1561	333	185	206	112	124	456	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	1035	87	162	1561	333	185	206	112	124	456	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	235	1035	87	162	1561	333	185	206	112	124	456	102
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3504	296	1800	3800	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.13	0.30	0.30	0.09	0.41	0.18	0.10	0.11	0.06	0.07	0.24	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.14	0.43	0.43	0.13	0.43	0.43	0.11	0.28	0.28	0.09	0.26	0.26
Volume/Cap:	0.95	0.68	0.68	0.68	0.95	0.41	0.95	0.39	0.21	0.77	0.93	0.21
Delay/Veh:	98.1	25.6	25.6	64.1	42.2	21.8	106.9	37.4	34.3	83.0	69.7	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	98.1	25.6	25.6	64.1	42.2	21.8	106.9	37.4	34.3	83.0	69.7	35.8
LOS by Move:	F	C	C	E	D	C	F	D	C	F	E	D
HCM2kAvgQ:	13	15	15	7	32	7	11	6	3	7	20	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 1.097
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 85.9
Optimal Cycle: OPTIMIZED Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1 1	0	1 0	2 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	150	1708	157	106	1486	164	275	707	155	79	216	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1708	157	106	1486	164	275	707	155	79	216	87
Added Vol:	4	24	0	9	12	0	0	2	2	0	4	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	1732	157	115	1498	164	275	709	157	79	220	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	162	1823	165	121	1577	173	289	746	165	83	232	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1823	165	121	1577	173	289	746	165	83	232	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1823	165	121	1577	173	289	746	165	83	232	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3484	316	1800	3800	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.52	0.52	0.07	0.41	0.09	0.16	0.39	0.09	0.05	0.12	0.06
Crit Moves:		****		****				****		****		
Green/Cycle:	0.09	0.45	0.45	0.08	0.43	0.43	0.17	0.34	0.34	0.08	0.25	0.25
Volume/Cap:	0.96	1.17	1.17	0.87	0.96	0.21	0.97	1.17	0.26	0.60	0.49	0.24
Delay/Veh:	118.6	112	112.2	108.0	45.7	20.4	97.8	133	30.9	75.9	45.7	40.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.6	112	112.2	108.0	45.7	20.4	97.8	133	30.9	75.9	45.7	40.3
LOS by Move:	F	F	F	F	D	C	F	F	C	E	D	D
HCM2kAvgQ:	10	59	59	8	35	3	16	45	4	4	8	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.884
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 52.2
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	150	1708	157	106	1486	164	275	707	155	79	216	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1708	157	106	1486	164	275	707	155	79	216	87
Added Vol:	4	24	0	9	12	0	0	2	2	0	4	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	1732	157	115	1498	164	275	709	157	79	220	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	162	1823	165	121	1577	173	289	746	165	83	232	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1823	165	121	1577	173	289	746	165	83	232	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1823	165	121	1577	173	289	746	165	83	232	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.48	0.09	0.07	0.41	0.09	0.16	0.20	0.09	0.05	0.12	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.47	0.47	0.08	0.45	0.45	0.16	0.30	0.30	0.10	0.24	0.24
Volume/Cap:	0.93	1.03	0.19	0.87	0.93	0.20	1.03	0.66	0.29	0.48	0.51	0.24
Delay/Veh:	109.9	57.1	17.0	108.0	39.1	18.9	115.9	42.3	35.9	64.9	47.0	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	109.9	57.1	17.0	108.0	39.1	18.9	115.9	42.3	35.9	64.9	47.0	41.3
LOS by Move:	F	E	B	F	D	B	F	D	D	E	D	D
HCM2kAvgQ:	10	45	3	8	33	3	18	13	4	4	8	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.947
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 45.7
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	31	31		10	31	31		10	31	31		10	31	31	
Lanes:	1 0	2	0	1	1 0	2	0	1	1 0	2	0	1	1 0	1	0	1
Volume Module:																
Base Vol:	222	974		83	136	1460		316	176	192		102	118	432		90
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	222	974		83	136	1460		316	176	192		102	118	432		90
Added Vol:	1	9		0	18	23		0	0	4		4	0	1		7
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	223	983		83	154	1483		316	176	196		106	118	433		97
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95
PHF Volume:	235	1035		87	162	1561		333	185	206		112	124	456		102
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	235	1035		87	162	1561		333	185	206		112	124	456		102
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	235	1035		87	162	1561		333	185	206		112	124	456		102
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	1.00		1.00	0.95	1.00		1.00	0.95	1.00		1.00	0.95	1.00		1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00	2.00		1.00	1.00	1.00		1.00
Final Sat.:	1800	3800		1900	1800	3800		1900	1800	3800		1900	1800	1900		1900
Capacity Analysis Module:																
Vol/Sat:	0.13	0.27		0.05	0.09	0.41		0.18	0.10	0.05		0.06	0.07	0.24		0.05
Crit Moves:	****					****			****					****		
Green/Cycle:	0.14	0.43		0.43	0.14	0.43		0.43	0.11	0.28		0.28	0.09	0.26		0.26
Volume/Cap:	0.95	0.64		0.11	0.64	0.95		0.41	0.95	0.20		0.21	0.77	0.93		0.21
Delay/Veh:	98.1	25.4		18.2	60.4	42.2		21.8	106.9	33.6		34.3	83.0	69.7		35.8
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	98.1	25.4		18.2	60.4	42.2		21.8	106.9	33.6		34.3	83.0	69.7		35.8
LOS by Move:	F	C		B	E	D		C	F	C		C	F	E		D
HCM2kAvgQ:	13	13		1	7	32		7	11	3		3	7	20		3

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 Without Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[19.8]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1	1 0	1	0	2	0 0	0	0	0	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	1260		1	4	1660		0	0	0		0	1	0		2
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	1260		1	4	1660		0	0	0		0	1	0		2
Added Vol:	0	10		0	0	27		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	0	1270		1	4	1687		0	0	0		0	1	0		2
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95
PHF Volume:	0	1337		1	4	1776		0	0	0		0	1	0		2
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
FinalVolume:	0	1337		1	4	1776		0	0	0		0	1	0		2
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx	6.8	6.5		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx	3.5	4.0		3.3
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	1338	xxxx		xxxxx	xxxx	xxxx		xxxxx	2234	3122		669
Potent Cap.:	xxxx	xxxx		xxxxx	522	xxxx		xxxxx	xxxx	xxxx		xxxxx	37	11		405
Move Cap.:	xxxx	xxxx		xxxxx	522	xxxx		xxxxx	xxxx	xxxx		xxxxx	37	11		405
Total Cap:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	69	81		xxxxx	138	82		xxxxx
Volume/Cap:	xxxx	xxxx		xxxx	0.01	xxxx		xxxx	xxxx	xxxx		xxxx	0.01	0.00		0.01
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx		xxxxx	0.0	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx	12.0	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	B	*		*	*	*		*	*	*		*
Movement:	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT	LT -	LTR -		RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	246		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	0.0		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	19.8		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	C		*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				19.8			
ApproachLOS:	*				*				*				C			

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 Without Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: F[58.3]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1	0	1 0 2	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0 1997	6		6 1703	0		0 0	0		7	0	3
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00		1.00
Initial Bse:	0 1997	6		6 1703	0		0 0	0		7	0	3
Added Vol:	0 28	0		0 14	0		0 0	0		0	0	0
PasserByVol:	0 0	0		0 0	0		0 0	0		0	0	0
Initial Fut:	0 2025	6		6 1717	0		0 0	0		7	0	3
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00		1.00
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95		0.95
PHF Volume:	0 2132	6		6 1807	0		0 0	0		7	0	3
Reduct Vol:	0 0	0		0 0	0		0 0	0		0	0	0
FinalVolume:	0 2132	6		6 1807	0		0 0	0		7	0	3
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1		xxxx xxxxx xxxxx xxxx xxxxx						6.8	6.5	6.9
FollowUpTim:	xxxxx xxxx xxxxx	2.2		xxxx xxxxx xxxxx xxxx xxxxx						3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	2138		xxxx xxxxx xxxx xxxx xxxxx						3051	3955	1069
Potent Cap.:	xxxx xxxx xxxxx	257		xxxx xxxxx xxxx xxxx xxxxx						10	3	221
Move Cap.:	xxxx xxxx xxxxx	257		xxxx xxxxx xxxx xxxx xxxxx						10	3	221
Total Cap:	xxxx xxxx xxxxx	xxxx		xxxx xxxxx 57 47 xxxxx						61	50	xxxxx
Volume/Cap:	xxxx xxxx xxxx	0.02		xxxx xxxx xxxx xxxx xxxx						0.12	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	0.1		xxxx xxxxx xxxx xxxx xxxxx						xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx	19.4		xxxx xxxxx xxxxx xxxx xxxxx						xxxxx	xxxx	xxxxx
LOS by Move:	* * *	C		* * * * * *						*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT						LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx	xxxx		xxxx xxxxx xxxx xxxx xxxxx						xxxx	78	xxxxx
SharedQueue:	xxxxx xxxx xxxxx	xxxxx		xxxx xxxxx xxxxx xxxx xxxxx						xxxxx	0.4	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx		xxxx xxxxx xxxxx xxxx xxxxx						xxxxx	58.3	xxxxx
Shared LOS:	* * *	*		* * * * * *						*	F	*
ApproachDel:	xxxxxx	xxxxxx		xxxxxx						58.3		
ApproachLOS:	*	*		*						F		

****

Note: Queue reported is the number of cars per lane.

****

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Agua Mansa Commerce Center Addendum
Year 2035 Without Project - With Improvements
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[14.0]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1260		1			0	1664		0			0	0		0			0	0		0		3
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		1.00
Initial Bse:	0	1260		1			0	1664		0			0	0		0			0	0		0		3
Added Vol:	0	10		0			0	27		0			0	0		0			0	0		0		0
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		0
Initial Fut:	0	1270		1			0	1691		0			0	0		0			0	0		0		3
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95			0.95	0.95		0.95			0.95	0.95		0.95			0.95	0.95		0.95		0.95
PHF Volume:	0	1337		1			0	1780		0			0	0		0			0	0		0		3
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		0
FinalVolume:	0	1337		1			0	1780		0			0	0		0			0	0		0		3
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		3.3
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		669
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		405
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		405
Total Cap:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			70	82		xxxxx			139	82		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx		0.01
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		0.0
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		14.0
LOS by Move:	*	*		*			*	*		*			*	*		*			*	*		*		B
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxx		xxxxx
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						14.0					
ApproachLOS:	*						*						*						B					

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Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 Without Project - With Improvements
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[22.1]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1997	6				0	1709	0				0	0	0				0	0	10			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	1997	6				0	1709	0				0	0	0				0	0	10			
Added Vol:	0	28	0				0	14	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	2025	6				0	1723	0				0	0	0				0	0	10			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	0	2132	6				0	1814	0				0	0	0				0	0	11			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	2132	6				0	1814	0				0	0	0				0	0	11			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	1069			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	221			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	221			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				58	50	xxxxx				61	50	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.05			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	0.1			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	22.1			
LOS by Move:	*	*	*				*	*	*				*	*	*				*	*	C			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						22.1					
ApproachLOS:	*						*						*						C					

****

Note: Queue reported is the number of cars per lane.

****

Year 2035 With Project

Agua Mansa Commerce Center Addendum
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	46.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	222	974	83	136	1460	316	176	192	102	118	432	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	974	83	136	1460	316	176	192	102	118	432	90
Added Vol:	3	17	0	18	44	0	0	4	7	0	1	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	225	991	83	154	1504	316	176	196	109	118	433	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	237	1043	87	162	1583	333	185	206	115	124	456	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	1043	87	162	1583	333	185	206	115	124	456	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	1043	87	162	1583	333	185	206	115	124	456	102
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3506	294	1800	3800	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.13	0.30	0.30	0.09	0.42	0.18	0.10	0.11	0.06	0.07	0.24	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.14	0.44	0.44	0.13	0.43	0.43	0.11	0.28	0.28	0.09	0.26	0.26
Volume/Cap:	0.96	0.68	0.68	0.68	0.96	0.41	0.96	0.39	0.22	0.78	0.93	0.21
Delay/Veh:	100.5	25.5	25.5	64.4	43.8	21.6	109.7	37.5	34.4	83.4	69.7	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	100.5	25.5	25.5	64.4	43.8	21.6	109.7	37.5	34.4	83.4	69.7	35.8
LOS by Move:	F	C	C	E	D	C	F	D	C	F	E	D
HCM2kAvgQ:	13	15	15	7	33	7	11	6	3	7	20	3

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 1.103
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 87.7
Optimal Cycle: OPTIMIZED Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	150	1708	157	106	1486	164	275	707	155	79	216	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1708	157	106	1486	164	275	707	155	79	216	87
Added Vol:	7	45	0	9	23	0	0	2	4	0	4	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	157	1753	157	115	1509	164	275	709	159	79	220	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	165	1845	165	121	1588	173	289	746	167	83	232	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	1845	165	121	1588	173	289	746	167	83	232	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	1845	165	121	1588	173	289	746	167	83	232	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3488	312	1800	3800	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.53	0.53	0.07	0.42	0.09	0.16	0.39	0.09	0.05	0.12	0.06
Crit Moves:		****		****				****		****		
Green/Cycle:	0.09	0.45	0.45	0.08	0.43	0.43	0.17	0.33	0.33	0.08	0.25	0.25
Volume/Cap:	0.97	1.17	1.17	0.87	0.97	0.21	0.97	1.17	0.26	0.60	0.50	0.24
Delay/Veh:	119.3	115	115.1	108.0	46.5	20.4	99.2	136	31.3	75.9	45.9	40.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	119.3	115	115.1	108.0	46.5	20.4	99.2	136	31.3	75.9	45.9	40.5
LOS by Move:	F	F	F	F	D	C	F	F	C	E	D	D
HCM2kAvgQ:	11	60	60	8	36	3	17	46	4	4	8	3

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project - With Improvements
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.955
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 46.4
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1
Volume Module:												
Base Vol:	222	974	83	136	1460	316	176	192	102	118	432	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	974	83	136	1460	316	176	192	102	118	432	90
Added Vol:	3	17	0	18	44	0	0	4	7	0	1	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	225	991	83	154	1504	316	176	196	109	118	433	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	237	1043	87	162	1583	333	185	206	115	124	456	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	1043	87	162	1583	333	185	206	115	124	456	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	1043	87	162	1583	333	185	206	115	124	456	102
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.05	0.09	0.42	0.18	0.10	0.05	0.06	0.07	0.24	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.14	0.43	0.43	0.14	0.43	0.43	0.11	0.28	0.28	0.09	0.26	0.26
Volume/Cap:	0.96	0.64	0.11	0.64	0.96	0.41	0.96	0.20	0.22	0.78	0.93	0.21
Delay/Veh:	100.5	25.3	18.0	60.6	43.8	21.6	109.7	33.7	34.4	83.4	69.7	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	100.5	25.3	18.0	60.6	43.8	21.6	109.7	33.7	34.4	83.4	69.7	35.8
LOS by Move:	F	C	B	E	D	C	F	C	C	F	E	D
HCM2kAvgQ:	13	13	1	7	33	7	11	3	3	7	20	3

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project - With Improvements
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Riverside Avenue (NS) at Agua Mansa Road (EW)

Cycle (sec):	130	Critical Vol./Cap.(X):	0.890
Loss Time (sec):	8 (Y+R=3.0 sec)	Average Delay (sec/veh):	53.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	31	31	10	31	31	10	31	31	10	31	31
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1
Volume Module:												
Base Vol:	150	1708	157	106	1486	164	275	707	155	79	216	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1708	157	106	1486	164	275	707	155	79	216	87
Added Vol:	7	45	0	9	23	0	0	2	4	0	4	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	157	1753	157	115	1509	164	275	709	159	79	220	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	165	1845	165	121	1588	173	289	746	167	83	232	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	1845	165	121	1588	173	289	746	167	83	232	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	1845	165	121	1588	173	289	746	167	83	232	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	3800	1900	1800	3800	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.49	0.09	0.07	0.42	0.09	0.16	0.20	0.09	0.05	0.12	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.47	0.47	0.08	0.45	0.45	0.16	0.30	0.30	0.10	0.24	0.24
Volume/Cap:	0.94	1.04	0.19	0.87	0.94	0.20	1.04	0.66	0.30	0.48	0.51	0.24
Delay/Veh:	110.8	59.8	16.8	108.0	39.8	18.9	118.9	42.5	36.1	65.0	47.0	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	110.8	59.8	16.8	108.0	39.8	18.9	118.9	42.5	36.1	65.0	47.0	41.3
LOS by Move:	F	E	B	F	D	B	F	D	D	E	D	D
HCM2kAvgQ:	10	46	3	8	33	3	18	13	5	4	8	3

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[14.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1 0		1 0	2 0	0	0 0	0 0	0	0 0	0 1	
Volume Module:												
Base Vol:	0	1260	1	0	1664	0	0	0	0	0	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	1	0	1664	0	0	0	0	0	0	3
Added Vol:	0	16	1	0	51	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1276	2	0	1715	0	0	0	0	0	0	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1343	2	0	1805	0	0	0	0	0	0	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1343	2	0	1805	0	0	0	0	0	0	7
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	673
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	403
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	403
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	67	80	xxxxx	137	80	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			14.1		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Riverside Avenue (NS) at Project North Access (EW)

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[23.2]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	1	0		1	0	2	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1997		6			0	1709		0			0		0		0		0		0		10	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	1997		6			0	1709		0			0		0		0		0		0		10	
Added Vol:	0	43		0			0	26		0			0		0		0		0		0		9	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	0	2040		6			0	1735		0			0		0		0		0		0		19	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.95	0.95		0.95			0.95	0.95		0.95			0.95		0.95		0.95		0.95		0.95		0.95	
PHF Volume:	0	2147		6			0	1826		0			0		0		0		0		0		20	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	0	2147		6			0	1826		0			0		0		0		0		0		20	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		xxxx		xxxxx		xxxxx		xxxx		6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		xxxx		xxxxx		xxxxx		xxxx		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		1077	
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		218	
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		218	
Total Cap:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			56		49		xxxxx		60		49		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx		xxxx		xxxx		xxxx		xxxx		0.09	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		0.3	
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		xxxx		xxxxx		xxxxx		xxxx		23.2	
LOS by Move:	*	*		*			*	*		*			*		*		*		*		*		C	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*	*		*			*	*		*			*		*		*		*		*		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						23.2					
ApproachLOS:	*						*						*						C					

****

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1 0	0	1 0 2	0 0		0 0 0	0 0		0 0 0	0 1	
Volume Module:												
Base Vol:	0	1250	0	0	1676	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1250	0	0	1676	0	0	0	0	0	0	0
Added Vol:	0	14	4	0	51	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1264	4	0	1727	0	0	0	0	0	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1331	4	0	1818	0	0	0	0	0	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1331	4	0	1818	0	0	0	0	0	0	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	667
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	406
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	406
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	66	80	xxxxx	138	80	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.9		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

****

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Riverside Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[22.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1	1	0	1	0 2	0	0	0	0 0	0	0	0	0 0	0	1
Volume Module:																
Base Vol:	0	2007	0		0	1715	0		0	0	0		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	2007	0		0	1715	0		0	0	0		0	0	0	
Added Vol:	0	37	2		0	26	0		0	0	0		0	0	6	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2044	2		0	1741	0		0	0	0		0	0	6	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0	2152	2		0	1833	0		0	0	0		0	0	6	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	2152	2		0	1833	0		0	0	0		0	0	6	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.9	
FollowUpTim:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	1077	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	218	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	218	
Total Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		57	49	xxxxx		60	49	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.03	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	0.1	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	22.0	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	C	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				22.0			
ApproachLOS:	*				*				*				C			

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.542
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 85.0
Optimal Cycle: OPTIMIZED Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	10	26	26	10	26	26	31	31	31	31	31	31
Lanes:	1 0	1 1	0	1 0	2 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	38	1204	16	23	1618	51	32	2	7	14	3	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1204	16	23	1618	51	32	2	7	14	3	4
Added Vol:	0	5	32	51	0	0	0	0	0	14	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	1209	48	74	1618	51	32	2	7	28	3	18
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	40	1273	51	78	1703	0	34	2	7	29	3	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1273	51	78	1703	0	34	2	7	29	3	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	1273	51	78	1703	0	34	2	7	29	3	19
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	2.00	1.00	0.94	0.06	1.00	0.91	0.09	1.00
Final Sat.:	1800	3655	145	1800	3800	1900	1699	106	1900	1634	175	1900
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.35	0.04	0.45	0.00	0.02	0.02	0.00	0.02	0.02	0.01
Crit Moves:	****				****		****			****		
Green/Cycle:	0.08	0.38	0.38	0.08	0.38	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.29	0.92	0.92	0.52	1.17	0.00	0.08	0.08	0.02	0.08	0.08	0.04
Delay/Veh:	61.8	46.5	46.5	69.3	119	0.0	38.8	38.8	37.9	38.7	38.7	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.8	46.5	46.5	69.3	119	0.0	38.8	38.8	37.9	38.7	38.7	38.2
LOS by Move:	E	D	D	E	F	A	D	D	D	D	D	D
HCM2kAvgQ:	2	28	28	4	51	0	1	1	0	1	1	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 8 (Y+R=3.0 sec) Average Delay (sec/veh): 190.5
Optimal Cycle: OPTIMIZED Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	10	26	26	10	26	26	31	31	31	31	31	31
Lanes:	1 0	1 1	0	1 0	2 0	1	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	11	1975	19	10	1701	10	31	8	5	7	4	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	1975	19	10	1701	10	31	8	5	7	4	6
Added Vol:	0	3	17	26	0	0	0	0	0	38	0	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1978	36	36	1701	10	31	8	5	45	4	43
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	12	2082	38	38	1791	0	33	8	5	47	4	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	2082	38	38	1791	0	33	8	5	47	4	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	2082	38	38	1791	0	33	8	5	47	4	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	0.80	0.20	1.00	0.92	0.08	1.00
Final Sat.:	1800	3732	68	1800	3800	1900	1446	373	1900	1660	148	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.56	0.56	0.02	0.47	0.00	0.02	0.02	0.00	0.03	0.03	0.02
Crit Moves:		****		****			****			****		
Green/Cycle:	0.08	0.38	0.38	0.08	0.38	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.08	1.45	1.45	0.27	1.23	0.00	0.09	0.09	0.01	0.12	0.12	0.10
Delay/Veh:	56.9	243	243.0	61.4	144	0.0	39.0	39.0	37.8	39.4	39.4	39.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.9	243	243.0	61.4	144	0.0	39.0	39.0	37.8	39.4	39.4	39.1
LOS by Move:	E	F	F	E	F	A	D	D	D	D	D	D
HCM2kAvgQ:	0	82	82	2	57	0	1	1	0	2	2	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.513
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Ignore						Include						Include					
Min. Green:	10		26		26		10		26		26		31		31		31		31		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	38		1204		16		23		1618		51		32		2		7		14		3		4	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	38		1204		16		23		1618		51		32		2		7		14		3		4	
Added Vol:	0		5		32		51		0		0		0		0		0		14		0		14	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	38		1209		48		74		1618		51		32		2		7		28		3		18	
User Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.95		0.95		0.95		0.95		0.95		0.00		0.95		0.95		0.95		0.95		0.95		0.95	
PHF Volume:	40		1273		51		78		1703		0		34		2		7		29		3		19	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	40		1273		51		78		1703		0		34		2		7		29		3		19	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		0.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	40		1273		51		78		1703		0		34		2		7		29		3		19	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		1.00		1.00		0.95		1.00		1.00		0.95		1.00		1.00		0.95		1.00		1.00	
Lanes:	1.00		1.92		0.08		1.00		2.00		1.00		1.00		0.22		0.78		1.00		0.14		0.86	
Final Sat.:	1800		3655		145		1800		3800		1900		1800		422		1478		1800		271		1629	
Capacity Analysis Module:																								
Vol/Sat:	0.02		0.35		0.35		0.04		0.45		0.00		0.02		0.00		0.00		0.02		0.01		0.01	
Crit Moves:	****								****				****											
Green/Cycle:	0.08		0.59		0.59		0.13		0.64		0.00		0.24		0.24		0.24		0.24		0.24		0.24	
Volume/Cap:	0.29		0.59		0.59		0.33		0.70		0.00		0.08		0.02		0.02		0.07		0.05		0.05	
Delay/Veh:	61.8		11.6		11.6		55.3		9.0		0.0		38.8		38.0		38.0		38.6		38.3		38.3	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	61.8		11.6		11.6		55.3		9.0		0.0		38.8		38.0		38.0		38.6		38.3		38.3	
LOS by Move:	E		B		B		E		A		A		D		D		D		D		D		D	
HCM2kAvgQ:	2		11		11		3		14		0		1		0		0		1		1		1	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Riverside Avenue (NS) at Miguel Bustamante Parkway (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.634
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Ignore						Include						Include					
Min. Green:	10		26		26		10		26		26		31		31		31		31		31		31	
Lanes:	1	0	1	1	0		1	0	2	0	1		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	11	1975		19			10	1701		10			31		8		5		7		4		6	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	11	1975		19			10	1701		10			31		8		5		7		4		6	
Added Vol:	0	3		17			26	0		0			0		0		0		38		0		37	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	11	1978		36			36	1701		10			31		8		5		45		4		43	
User Adj:	1.00	1.00		1.00			1.00	1.00		0.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.95	0.95		0.95			0.95	0.95		0.00			0.95		0.95		0.95		0.95		0.95		0.95	
PHF Volume:	12	2082		38			38	1791		0			33		8		5		47		4		45	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
Reduced Vol:	12	2082		38			38	1791		0			33		8		5		47		4		45	
PCE Adj:	1.00	1.00		1.00			1.00	1.00		0.00			1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00	1.00		1.00			1.00	1.00		0.00			1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	12	2082		38			38	1791		0			33		8		5		47		4		45	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900		1900		1900		1900		1900		1900	
Adjustment:	0.95	1.00		1.00			0.95	1.00		1.00			0.95		1.00		1.00		0.95		1.00		1.00	
Lanes:	1.00	1.96		0.04			1.00	2.00		1.00			1.00		0.62		0.38		1.00		0.09		0.91	
Final Sat.:	1800	3732		68			1800	3800		1900			1800		1169		731		1800		162		1738	
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.56		0.56			0.02	0.47		0.00			0.02		0.01		0.01		0.03		0.03		0.03	
Crit Moves:		****					****														****			
Green/Cycle:	0.10	0.64		0.64			0.08	0.61		0.00			0.24		0.24		0.24		0.24		0.24		0.24	
Volume/Cap:	0.06	0.87		0.87			0.27	0.77		0.00			0.08		0.03		0.03		0.11		0.11		0.11	
Delay/Veh:	53.6	13.8		13.8			61.4	12.3		0.0			38.7		38.1		38.1		39.2		39.2		39.2	
User DelAdj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	53.6	13.8		13.8			61.4	12.3		0.0			38.7		38.1		38.1		39.2		39.2		39.2	
LOS by Move:	D		B		B		E		B		A		D		D		D		D		D		D	
HCM2kAvgQ:	0		28		28		2		19		0		1		0		0		1		1		1	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 1	0	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	94	0	0	21	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	94	0	0	21	0
Added Vol:	0	0	0	1	0	7	26	57	0	0	21	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	7	26	151	0	0	42	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	1	0	7	27	159	0	0	44	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	7	27	159	0	0	44	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	259	259	45	46	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	734	649	1030	1574	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	724	637	1030	1574	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.01	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	979	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.7	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Project West Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	37	0	0	17	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	37	0	0	17	0
Added Vol:	0	0	0	2	0	15	14	29	0	0	59	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	2	0	15	14	66	0	0	76	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	2	0	15	14	66	0	0	76	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	2	0	15	14	66	0	0	76	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	171	171	77	77	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	824	726	990	1535	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	819	719	990	1535	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	966	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				8.8		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[9.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	94	0	0	21	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	94	0	0	21	0
Added Vol:	0	0	0	3	0	2	5	53	0	0	21	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	2	5	147	0	0	42	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	3	0	2	5	155	0	0	44	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	3	0	2	5	155	0	0	44	7
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	213	213	48	52	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	780	688	1027	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	778	686	1027	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	861	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				9.2		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project East Access (NS) at Miguel Bustamante Parkway (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[9.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	37	0	0	17	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	37	0	0	17	0
Added Vol:	0	0	0	7	0	6	3	29	0	0	54	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	6	3	66	0	0	71	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	7	0	6	3	66	0	0	71	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	7	0	6	3	66	0	0	71	4
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	145	145	73	75	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	852	750	995	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	851	749	995	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	912	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.0	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				9.0		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.267
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	33	0	23	0	0	0	0	357	65	22	602	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	0	23	0	0	0	0	357	65	22	602	0
Added Vol:	8	0	11	0	0	0	0	0	22	29	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	34	0	0	0	0	357	87	51	602	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	43	0	36	0	0	0	0	376	92	54	634	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	0	36	0	0	0	0	376	92	54	634	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	0	36	0	0	0	0	376	92	54	634	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1900	0	0	0	0	1900	1900	1800	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.20	0.05	0.03	0.33	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.30	0.00	0.30	0.00	0.00	0.00	0.00	0.55	0.55	0.10	0.65	0.00
Volume/Cap:	0.08	0.00	0.06	0.00	0.00	0.00	0.00	0.36	0.09	0.31	0.51	0.00
Delay/Veh:	26.7	0.0	26.5	0.0	0.0	0.0	0.0	9.8	7.6	49.0	5.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.7	0.0	26.5	0.0	0.0	0.0	0.0	9.8	7.6	49.0	5.9	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	D	A	A
HCM2kAvgQ:	1	0	1	0	0	0	0	4	1	2	6	0

Note: Queue reported is the number of cars per lane.

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Agua Mansa Commerce Center Addendum
Year 2035 With Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Miguel Bustamante Parkway (NS) at Agua Mansa Road (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.614
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 14.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	31	0	31	0	0	0	0	26	26	10	26	0
Lanes:	1 0 0	0	1	0 0 0	0	0	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	43	0	57	0	0	0	0	943	31	12	347	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	0	57	0	0	0	0	943	31	12	347	0
Added Vol:	22	0	29	0	0	0	0	0	11	15	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	0	86	0	0	0	0	943	42	27	347	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	68	0	91	0	0	0	0	993	44	28	365	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	0	91	0	0	0	0	993	44	28	365	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	0	91	0	0	0	0	993	44	28	365	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1900	0	0	0	0	1900	1900	1800	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.52	0.02	0.02	0.19	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.16	0.00	0.20	0.00	0.00	0.00	0.00	0.82	0.04	0.21	0.27	0.00
Delay/Veh:	40.0	0.0	40.6	0.0	0.0	0.0	0.0	14.6	4.2	59.6	1.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.0	0.0	40.6	0.0	0.0	0.0	0.0	14.6	4.2	59.6	1.7	0.0
LOS by Move:	D	A	D	A	A	A	A	B	A	E	A	A
HCM2kAvgQ:	2	0	3	0	0	0	0	22	0	1	1	0

Note: Queue reported is the number of cars per lane.

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APPENDIX F

Preliminary Construction Cost Estimates for Congestion Management Program

PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN

Add One Lane Each Direction on Freeway	
Asphalt Concrete Pavement	$2,300,000 Per Mile
Portland Cement Concrete Pavement	$2,800,000 Per Mile
Includes: Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls

Widen Existing UC Structures	
Total Cost =	$160 Per Square Foot
Includes: Structure Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls

Diamond Interchanges			
$10,000,000	EACH	NEW IC	Minimal Row/Environmental
$15,000,000	EACH	NEW IC	Includes Row/Environmental
$20,000,000	EACH	EXISTING	Minimal Row/Environmental
$25,000,000	EACH	EXISTING	Includes Row/ Environmental
Includes: Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%		**Excludes:** As listed	

Retaining Walls

Height Feet	Structure Cost $/LF	Mobilization Design Constr. Mgt. $/LF	Total $/LF
4	$190	$70	$260
6	$260	$90	$350
8	$380	$140	$520
10	$430	$150	$580
12	$480	$170	$650
14	$590	$210	$800
16	$660	$240	$900

Excludes: Environmental Costs
Right of Way

12' High Sound Walls (Masonry Block on Footing)

Structure Cost $/Mile	Mobilization Design Constr. Mgt. $/Mile	Total $/Mile
$800,000	$300,000	$1,100,000

Widen Conventional Highway

1. Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section.	
Asphalt Concrete Pavement	$1,000,000/Mile
2. Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section)	
Asphalt Concrete Pavement	$2,000,000/Mile
With Median Concrete Barrier	$2,200,000/Mile
With Median Double Thrie Beam Barrier	$2,300,000/Mile

Local Interchange Improvements

1. New Interchange	
Urban Interchange	$10,000,000 to $17,000,000
Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal)	$6,000,000
Diamond Interchange (Work includes new OC structure, earthwork, signal)	$5,000,000

Local Interchange Improvements CONT...		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	$350,000/Each Ramp
	Widen existing OC structure	$110/Sq. Ft.
	Signalize ramp intersection	$90,000/Location
	Upgrade existing signal at ramp terminal	$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	$25,000/Each
4.	Ramp Metering System	$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	$250,000
2.	Upgrade existing intersection signalization	$75,000
3.	Upgrade existing Traffic Controller/Assembles	$40,000/Each
4.	Install new signal	$90,000/location
5.	Add signal heads	$25,000/Intersection
6.	Construct left – turn lane (240' long)	$50,000/Each Location
7.	Street widening (12' wide) (Pavement only)	$180,000/Mile
8.	Curb and gutter (Type A2-8)	$15/LF

Other Improvements		
1.	Construct new OC structure (Does not include roadway work)	$100/Sq. Ft.
2.	Construct Retaining Walls (Type 1)	$285/LF (H=8') $360/LF (H=10') $460/LF (H=12') $560/LF (H=14')
3.	Construct Soundwall	$1,000,000/Mile (H=12')
4.	Traffic Management Plan	10% of total construction costs

NOTE: This cost estimate does not include the following items:

1. R/W engineering, appraisal, acquisition and utilities relocation costs.
2. Minor items and supplemental work (10%).
3. Mobilization (10%).
4. Contingencies (25%).
5. Landscaping costs.

General Note: **When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.**

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