4.12 TRAFFIC

The information provided in this section is summarized from a traffic impact analysis prepared by Linscott, Law & Greenspan Engineers (LLG) in March 2009, which describes existing traffic and circulation conditions and assesses potential impacts expected to result from implementation of the proposed Forrester Creek Industrial Park project. The LLG traffic report is provided as Appendix F of this EIR.

4.12.1 EXISTING CONDITIONS

4.12.1.1 ROADWAYS SERVING THE PROJECT SITE

The project site is located on the northwest corner of Weld Boulevard and Cuyamaca Street. Site access would be provided via one public street to Weld Boulevard opposite Gillespie Way. As shown in Figure 4.12-1, the following locally and regionally important roads serve the site. Figure 4.12-1 also shows the intersections evaluated in the traffic report.

Weld Boulevard. Weld Boulevard extends from Fanita Drive to Cuyamaca Street. At Cuyamaca Street, Weld Boulevard becomes Marshall Avenue. Weld Boulevard is a four-lane roadway that has a two-way left-turn median between Nielsen Street and Fanita Drive. The speed limit along Weld Boulevard in the vicinity of the project is 40 miles per hour (mph).

Cuyamaca Street. Cuyamaca Street is classified as a Major Arterial within the City of Santee. It extends from Fletcher Parkway in El Cajon to just north of El Nopal in Santee. Cuyamaca Street varies as a four- to six-lane roadway between Mission Gorge Road and Fletcher Parkway. The posted speed limit is 35 mph north of Prospect Avenue and 45 mph south of Prospect Avenue.

Mission Gorge Road. Mission Gorge Road is classified as a Major Arterial from the western Santee city limits to State Route 125 (SR-125) and a Prime Arterial from SR-125 to Magnolia Avenue. Eight lanes are planned between SR-125 and Fanita Drive. This roadway extends from Magnolia Avenue in the City of Santee to Interstate 8 (I-8) in the City of San Diego. It generally provides six travel lanes. The posted speed limit is 35-40 mph east of Mesa Road and 50-55 mph west of Mesa Road.

Prospect Avenue. Prospect Avenue is classified as a Collector from Mesa Road to Cuyamaca Street and as a Major Arterial east of Cuyamaca Street. It is generally constructed as a two-lane roadway between Graves Avenue and Mesa Road. Portions of the roadway have been widened to Major Arterial standards as property has redeveloped along this roadway. Eventually, this roadway will be constructed as a four-lane major arterial. Existing uses along the roadway are predominantly industrial, and access is provided to adjacent properties. The posted speed limit is 35 mph.

Fanita Drive. Fanita Drive extends from Mission Gorge road to Grossmont College Drive in El Cajon. It is currently constructed as a three-lane (two-lanes northbound) undivided roadway. It is a two-lane roadway between Gibbons Street and Grossmont College Drive. This roadway primarily provides access to residential and small commercial land uses. The posted speed limit is 45 mph.

Marshall Avenue. Marshall Avenue extends from Cuyamaca Street to south of Fletcher Parkway in El Cajon. It is generally a four-lane undivided roadway with a center two-way-left-turn lane. The posted speed limit is 40 mph.

Bradley Avenue. Bradley Avenue extends from Cuyamaca Street to east of SR-67 in El Cajon. It is currently constructed as a four-lane undivided roadway with a two-way left-turn lane. The posted speed limit is 45 mph.

Fletcher Parkway. Fletcher Parkway is currently constructed as a six-lane divided roadway west of Cuyamaca Street and an eight-lane divided roadway between Cuyamaca Street and Marshall Avenue. The posted speed limit is 40 mph in the study area.

Grossmont College Drive. Grossmont College Drive extends from east of Fanita Drive to west of SR-125. It is currently constructed as a two-lane undivided roadway. There is no posted speed limit on this roadway. .

SR-67. SR-67 extends generally north-south from I-8 to the south to SR-78 in the community of Ramona to the north. It is generally a four-lane freeway north of Prospect Avenue, and a six-lane freeway south of Prospect Avenue.

SR-52. SR-52 is a four to six-lane freeway, which currently terminates at SR-125. SR-52 is currently being extended eastward to SR-67, with a half interchange at Fanita Drive and a full interchange at Cuyamaca Street and SR-67. This work is expected to be completed by the end of 2010.

SR-125. SR-125 is a four to six-lane freeway, which extends from I-8 to SR-52. The terminus of SR-125 is signalized at Mission Gorge Road. There is no funding or a timetable for the extension of SR-125 northerly to the City of Poway.

Metropolitan Transit System (MTS) Gillespie Field Trolley Station. The Gillespie Field MTS Trolley Station is located near the project site, at 1900 ½ North Cuyamaca Street, near the Cuyamaca Street/Weld Boulevard/North Marshall Avenue intersection.

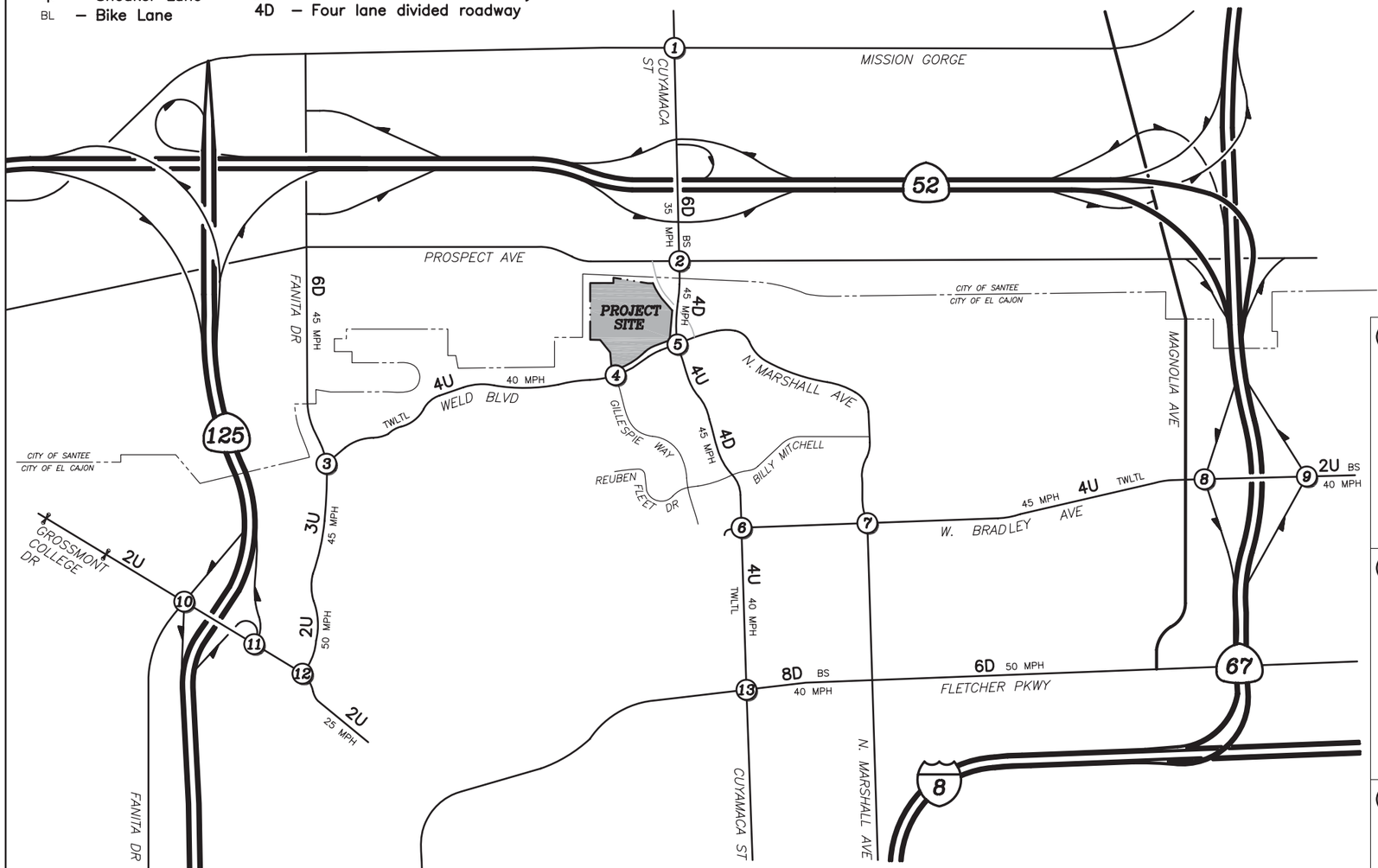
4.12.1.2 EXISTING INTERSECTION LEVELS OF SERVICE

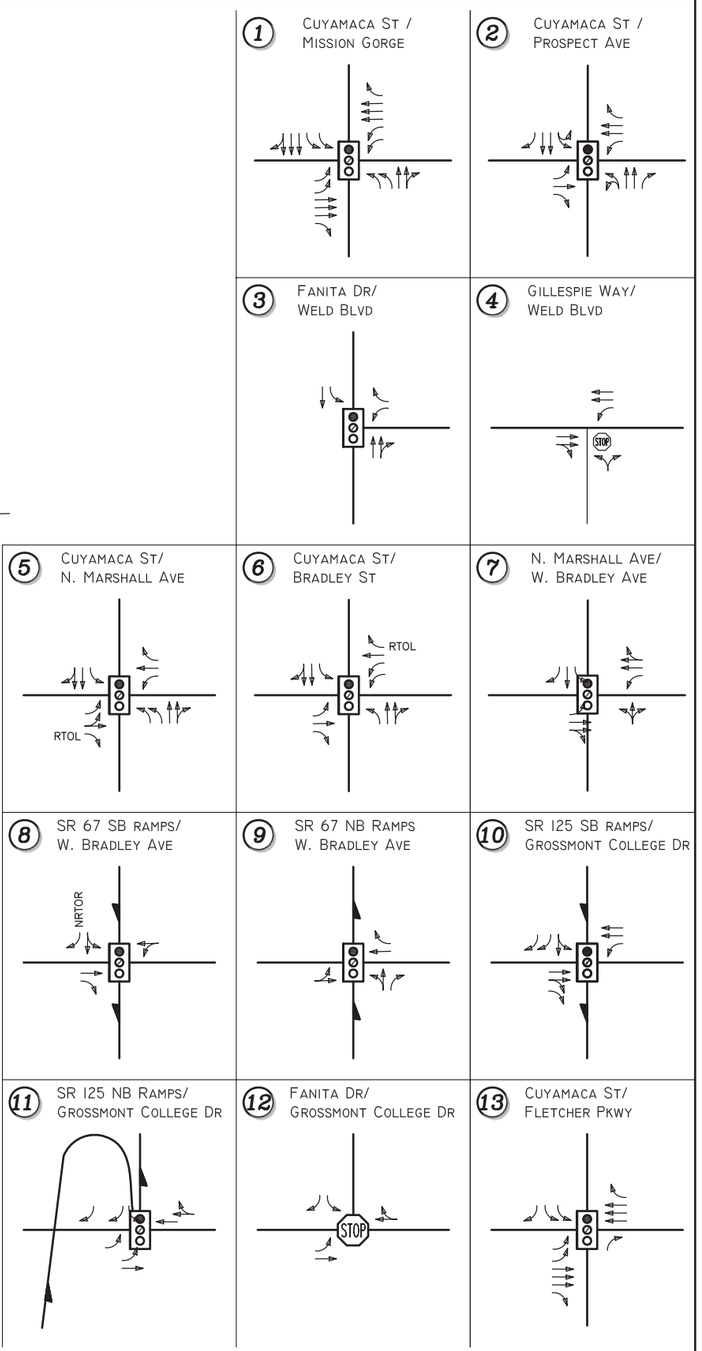
Roadway system operating conditions are typically described in terms of "Level of Service" (LOS). LOS is a measure of a roadway or intersection operating performance and the motorists' perception of roadway performance. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for signalized and unsignalized intersections. The definitions are generally based on delays experienced by motorists. A LOS designation of E or F is considered unacceptable by the City of El Cajon. LOS designations A-D are considered acceptable. Definitions of signalized intersection LOS are shown in Table 4.12-1 and unsignalized intersection LOS is shown in Table 4.12-2.

Table 4.12-3 shows the existing intersection operations and LOS for the 11 signalized and two unsignalized intersections serving the project area. As identified in this table, all of the signalized intersections are currently operating at an acceptable LOS of D or better for both the AM and PM peak hours. One of the unsignalized intersections (Weld Boulevard/Gillespie Way) in the project area would operate at an acceptable LOS D or better for both the AM and PM peak hours. However, the Fanita Drive/Grossmont College Drive unsignalized intersection would operate at LOS F during PM peak hour.

LEGEND

- Traffic Signal
- All–Way Stop
- Two–Way Stop
- Sneaker Lane
- BL – Bike Lane
- BS – Bus Stop
- NP – No Parking
- RTOL – Right Turn Overlap
- TWLTL – Two–Way Left–Turn Lane
- NRTOR – No Right–turn on Red
- 2U – Two lane undivided roadway
- 4D – Four lane divided roadway





SOURCE: Linscott, Law & Greenspan Engineers, 2009

No Scale

EXISTING CONDITION OF LOCAL ROADWAY NETWORK

FIGURE 4.12-1

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Table 4.12-1. Signalized Intersection Levels of Service

Average Stopped Delay per Vehicle (Seconds)	Level of Service Characteristics
<10.0	LOS A describes operations with very little delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
10.0—20.0	LOS B describes operations with generally good progression and/or short cycle lengths. More vehicles stop than in LOS A, causing higher levels of average delay.
20.0—35.0	LOS C describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
35.1—55.0	LOS D describes operations with high delay, resulting from some combination of unfavorable progression, long cycle lengths, or high volumes. The congestion becomes more noticeable, and individual cycle failures are noticeable.
55.1—80.0	LOS E is considered the limit of acceptable delay. Individual cycle failures are frequent occurrences.
>80.1	LOS F describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when flow rates exceed the LOS D capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.

Source: Highway Capacity Manual, 2000; TRB Special Report 209

Table 4.12-2. Unsignalized Intersection Levels of Service

Average Control Delay (Seconds/Vehicle)	Level of Service
$\leq$10	A
>10 and $\leq$15	B
>15 and $\leq$25	C
>25 and $\leq$35	D
>35 and $\leq$50	E
>50	F

Source: Highway Capacity Manual, 2000.

Table 4.12-3. Area Intersections, Existing Conditions

Intersection	Control Type	Peak Hour	Existing	
			Delay[1]	LOS[2]
Cuyamaca Street/ Mission Gorge Road	Signal	AM	24.8	C
		PM	30.5	C
Cuyamaca Street/ Prospect Avenue	Signal	AM	21.7	C
		PM	31.1	C
Cuyamaca Street/ Weld Boulevard	Signal	AM	16.1	B
		PM	20.3	C
Fanita Drive/ Weld Boulevard	Signal	AM	8.6	A
		PM	9.7	A
Cuyamaca Street/ W. Bradley Avenue	Signal	AM	18.7	B
		PM	17.8	B
W. Bradley Avenue/ Marshall Avenue	Signal	AM	14.8	B
		PM	17.0	B
W. Bradley Avenue/ SR-67 SB Ramps	Signal	AM	43.1	D
		PM	29.7	C
W. Bradley Avenue/ SR-67 NB Ramps	Signal	AM	23.6	C
		PM	30.8	C
Grossmont College Drive/ SR-125 SB Ramps	Signal	AM	19.2	B
		PM	19.2	B
Grossmont College Drive/ SR-125 NB Ramps	Signal	AM	27.0	C
		PM	22.8	C
Fanita Drive/ Grossmont College Drive	AWSC[3]	AM	17.7	C
		PM	**66.1**	**F**
Cuyamaca Street/ Fletcher Parkway	Signal	AM	10.4	B
		PM	9.8	A
Weld Boulevard/ Gillespie Way	TWSC[4]	AM	13.0	B
		PM	11.8	B

[1] Average delay expressed in seconds per vehicle
[2] Level of Service
[3] AWSC – All-Way Stop Controlled intersection
[4] TWSC – Two-Way Stop Controlled intersection. Minor street left turn delay is reported.
Source: LLG, 2009

It should be noted that past analyses of the SR-67/Bradley Avenue interchange have indicated that the interchange operates at LOS E or F. However, the traffic impact analysis prepared by LLG (March 2009) identified the SR-67 southbound ramps/Bradley Avenue intersection to operate at LOS D during the AM peak hour and LOS C during the PM peak hour and the SR-67 northbound ramps/Bradley Avenue intersection to operate at LOS C during the AM and PM peak hours. To verify these intersection operations, LLG made field observations for a period of 45 minutes during the AM and PM peak hours at the two intersections. Though long queues were observed on some movements at both intersections, the stopped traffic was observed to clear the intersection at the end of each cycle, which is not indicative of LOS E or F operations.

4.12.2 REGULATORY FRAMEWORK

4.12.2.1 FEDERAL

Highway Capacity Manual

The Highway Capacity Manual 2000 (HCM 2000), prepared by the federal Transportation Research Board (TRB), is the result of a collaborative multiagency effort between the TRB, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO). The HCM 2000 contains concepts, guidelines, and computational procedures for computing the capacity and quality of service of various highway facilities, including freeways, signalized and unsignalized intersections, rural highways, and the effects of transit, pedestrians, and bicycles on the performance of these systems.

4.12.2.2 REGIONAL

Regional Transportation Plans and Programs

SANDAG serves as the forum for decision-making on regional issues such as growth, transportation, land use, the economy, the environment, and criminal justice. SANDAG builds consensus, makes strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life. SANDAG is governed by a Board of Directors composed of mayors, council members, and supervisors from each of the San Diego region's 19 local governments.

SANDAG has produced the following documents that identify transportation plans and policies in the San Diego Area:

2030 Regional Transportation Plan (RTP). The RTP, also known as MOBILITY 2030, serves as a blueprint to address the mobility challenges created by the San Diego region's growing population and employment. It contains an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system in the region. The 2030 RTP was approved on March 28, 2003. Changes in anticipated cost and revenue have resulted in an update of the RTP that was approved by the SANDAG Board of Directors early in 2006.

2002 State Transportation Improvement Program (STIP). The STIP is a multiyear program of state and federally funded transportation projects developed locally and approved by the California Transportation Commission (CTC). Every 2 years the CTC provides an estimate of revenues available to each metropolitan area for use in developing a program of projects based upon local priorities. Upon approval by the CTC, the STIP program of projects is incorporated into the Regional Transportation Improvement Program, which also includes other locally funded transportation projects.

2002 Regional Transportation Improvement Program (RTIP). The RTIP is a multiyear program of proposed major highway, arterial, transit, and non-motorized projects. Improvements to nearly all of the major highways in the San Diego region are included in the RTIP. The 2002 RTIP covers Fiscal Years 2003 to 2007. The 2002 RTIP, including an air quality emissions analysis, was adopted on June 28, 2002.

Congestion Management Program (CMP). The purpose of the state-mandated CMP is to monitor roadway congestion and assess the overall performance of the region's transportation system. Based upon this assessment, the CMP contains specific strategies and improvements to reduce traffic congestion and improve the performance of a multimodal transportation system. Examples of strategies include increased

emphasis on public transportation and rideshare programs, mitigating the impacts of new development, and better coordinating land use and transportation planning decisions. The CMP requires that SANDAG develop an enhanced CEQA review process, which includes evaluating and mitigating the impacts of new development on the CMP system. This enhanced CEQA review process was established in 2002 for use by local jurisdictions and/or project sponsors to conduct traffic impact studies and provide mitigation for new large project impacts on the CMP transportation system. The 2006 update to the CMP for the San Diego region was adopted in July 2006.

Regional Growth Management Strategy (RGMS). Originally adopted in 1993 by the SANDAG Board of Directors, the RGMS provides a comprehensive framework for effectively dealing with the impacts of growth in the region. The actions contained in the RGMS are intended to preserve or improve the region's quality of life. The strategy addresses 14 quality of life factors including Transportation and Congestion Management. The strategy was further refined in July 1999, with the launch of the new growth management strategy, REGION2020. Preparation of REGION2020 is still in progress.

4.12.3 IMPACT SIGNIFICANCE CRITERIA

Implementation of the proposed project would result in a significant direct impact on traffic or circulation if the proposed project would:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- Exceed, either individually or cumulatively, a level of service standard established for designated roadways;
- Substantially increase hazards due to a design feature or incompatible uses;
- Result in inadequate emergency access; and/or
- Result in inadequate parking capacity.

The first two impacts listed above shall be assessed using the following criteria:

A. The addition of project traffic would result in a Level of Service dropping from LOS D or better to LOS E or F. Under this condition, the project applicant would be responsible for direct project impact mitigation necessary to restore the intersection Level of Service to LOS D conditions or better.

B. The addition of project traffic would add more than an additional two seconds of average vehicle delay if an intersection is operating at LOS E or F under the no-project scenario. Under this condition, the project applicant would be responsible for direct project impact mitigation necessary to restore the intersection LOS to pre-development conditions or better.

C. In the longer-range cumulative condition (2030), the addition of project traffic would result in an LOS dropping from LOS D or better to LOS E or F, or the addition of project traffic would contribute to the average vehicle delay at an intersection operating at LOS E or F. Under this condition, the project would have a cumulatively significant impact, and the project applicant would be responsible for mitigating the intersection LOS to pre-development conditions or better.

4.12.4 ISSUES 1 AND 2 – INCREASES IN TRAFFIC AND EXCEEDANCE OF LOS STANDARDS

Would the proposed project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?

Would the proposed project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

4.12.4.1 IMPACT ANALYSIS

Construction Impacts

Project construction would generate worker-related vehicle trips and heavy-truck trips from the delivery of construction materials. These trips are an expected result of project development and would be temporary in nature. As discussed in Chapter 3.0, Project Description, the proposed industrial park would be constructed in three phases. Phase 1 would include the mass grading of the entire site and construction of Buildings A and B from approximately March 2010 to July 2011. Phase 2 building construction (Building C) would last from July 2011 to April 2012 (immediately following Phase 1) and Phase 3 building construction (Building D) would occur from April 2012 to February 2013 (immediately following Phase 2). The phasing would allow for the staggered delivery of construction materials throughout project construction, and is not likely to cause a significant increase in traffic because it would spread out the number of heavy-truck trips occurring on local roadways at any one period of time. In addition, grading would be balanced on site. Therefore, the project would not result in additional truck trips associated with hauling of excavated materials to an off-site location. Therefore, traffic impacts associated with construction activities would not be significant.

Operational Traffic Impacts

The following six scenarios were analyzed to determine the effects of the proposed project. All operational traffic scenarios have been calculated using the existing roadway network plus the extension of SR-52 from SR-125 to SR-67. This extension is currently under construction and is expected to be completed in late 2010 prior to the operation of the Phase 1 of the proposed project. Therefore, the project traffic distribution assumes that the extension of SR-52 is in place.

Existing Conditions. Used to establish the baseline of traffic operations within the study area.

Existing Plus Project Conditions. Represents existing traffic conditions with the addition of the proposed Forrester Creek Industrial Park project traffic.

Existing Plus Project Conditions Plus Cumulative Projects. Represents existing traffic conditions with the addition of the proposed Forrester Creek Industrial Park project traffic (Phases 1-3) and projects nearby that would potentially add traffic to the roadway and intersections in the study area.

Existing Plus Cumulative Projects Plus Phase 1 Project. Represents existing traffic conditions plus cumulative projects with the addition of Phase 1 of the proposed Forrester Creek Industrial Park project traffic.

Existing Plus Cumulative Projects Plus Phase 1 and Phase 2 Project. Represents existing traffic conditions plus cumulative projects with the addition of Phase 1 and Phase 2 of the proposed Forrester Creek Industrial Park project traffic.

Future (2030) Base Plus Project Conditions. Represents long-term, non-project, cumulative base traffic conditions in 2030 with the addition of traffic generated by the proposed Forrester Creek Industrial Park project. Volumes for 2030 were obtained by using the SANDAG 2030 Series 10 Forecast Model.

Project Traffic Generation and Distribution

The trip generation rate for the proposed project is based on the publication SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*. The document has several categories for industrial land uses. Based on information provided specifically for the Forrester Creek Industrial Park project, the land use that most closely matches the land use for the project is "Industrial Park (no commercial)." Traffic volumes expected to be generated by the development are based upon rates of 8 trips per 1,000 square feet of building space. In order to conduct a worst case analysis, any possible reductions in trip generation rates resulting from the project's proximity to public transportation were not included.

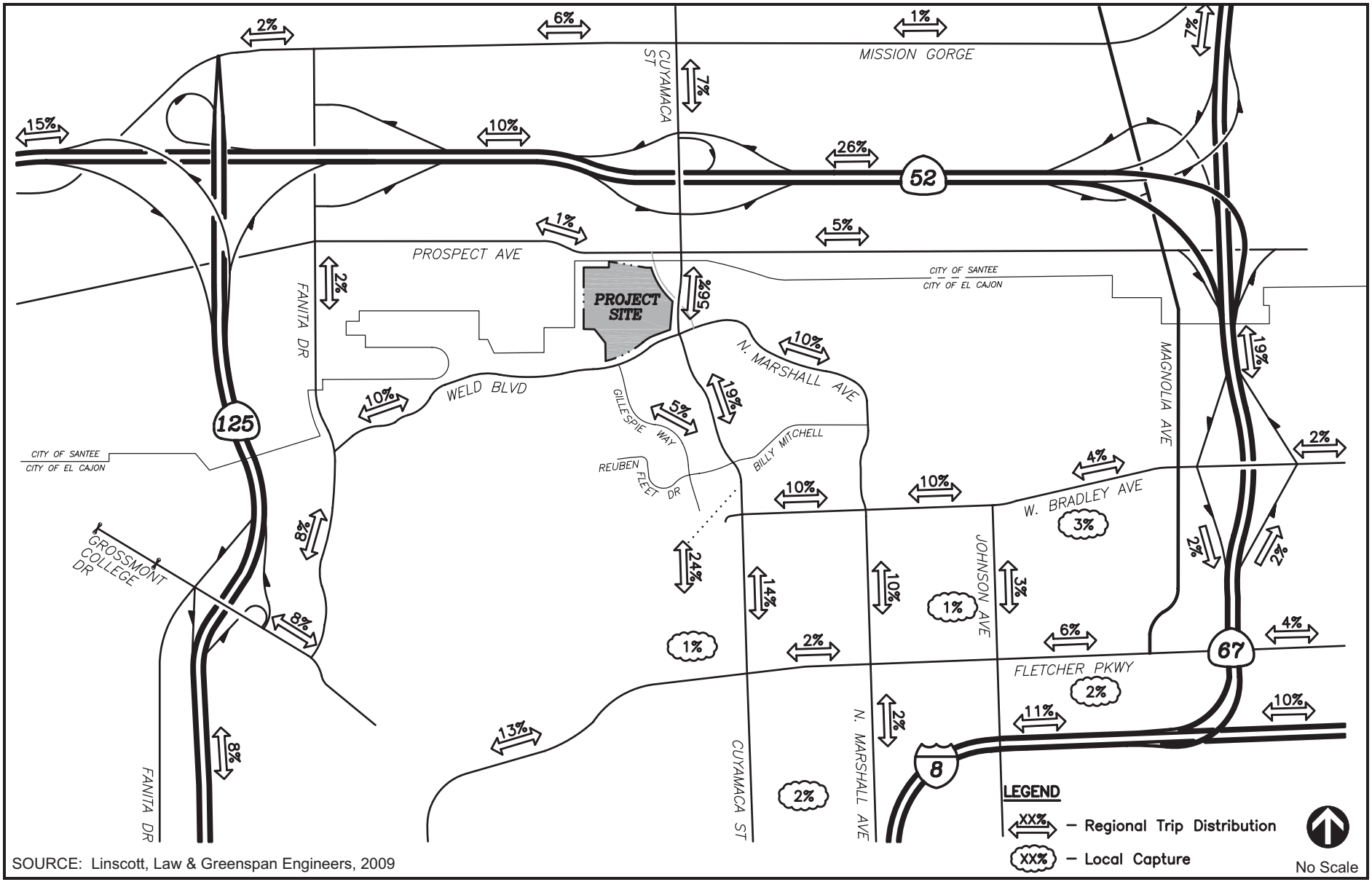
Table 4.12-4 identifies the project trip generation for Forrester Creek Industrial Park. The project is calculated to generate approximately 3,704 ADT with 366 inbound/40 outbound trips during the AM peak hour and 89 inbound/355 outbound trips during the PM peak hour, without considering truck traffic.

Truck traffic must be considered when analyzing an industrial park land use. The project trip generation rate above does not include project trips resulting from trucks. A 10 percent passenger car equivalent (PCE) rate was used to calculate the number of truck trips generated by the proposed project. Using this rate, an additional 556 truck trips would be generated by the proposed project, based on the trip generation of 3,704 listed above. Therefore, the total project trip generation, with the PCE factor, is calculated to generate approximately 3,890 ADT with 386 inbound/44 outbound trips during the AM peak hour and 94 inbound/375 outbound trips during the PM peak hour. Table 4.12-4 tabulates the project trip generation adding the passenger car equivalent (PCE) factor for the 10 percent truck traffic.

Using the project traffic generation shown in Table 4.12-4, project trip distribution on the surrounding street system is shown in Figures 4.12-2 and 4.12-3. Figure 4.12-2 shows project trip distribution for passenger vehicles and small trucks, while Figure 4.12-3 identifies trip distribution for trucks greater than 7 tons.

Existing Plus Cumulative Projects Conditions

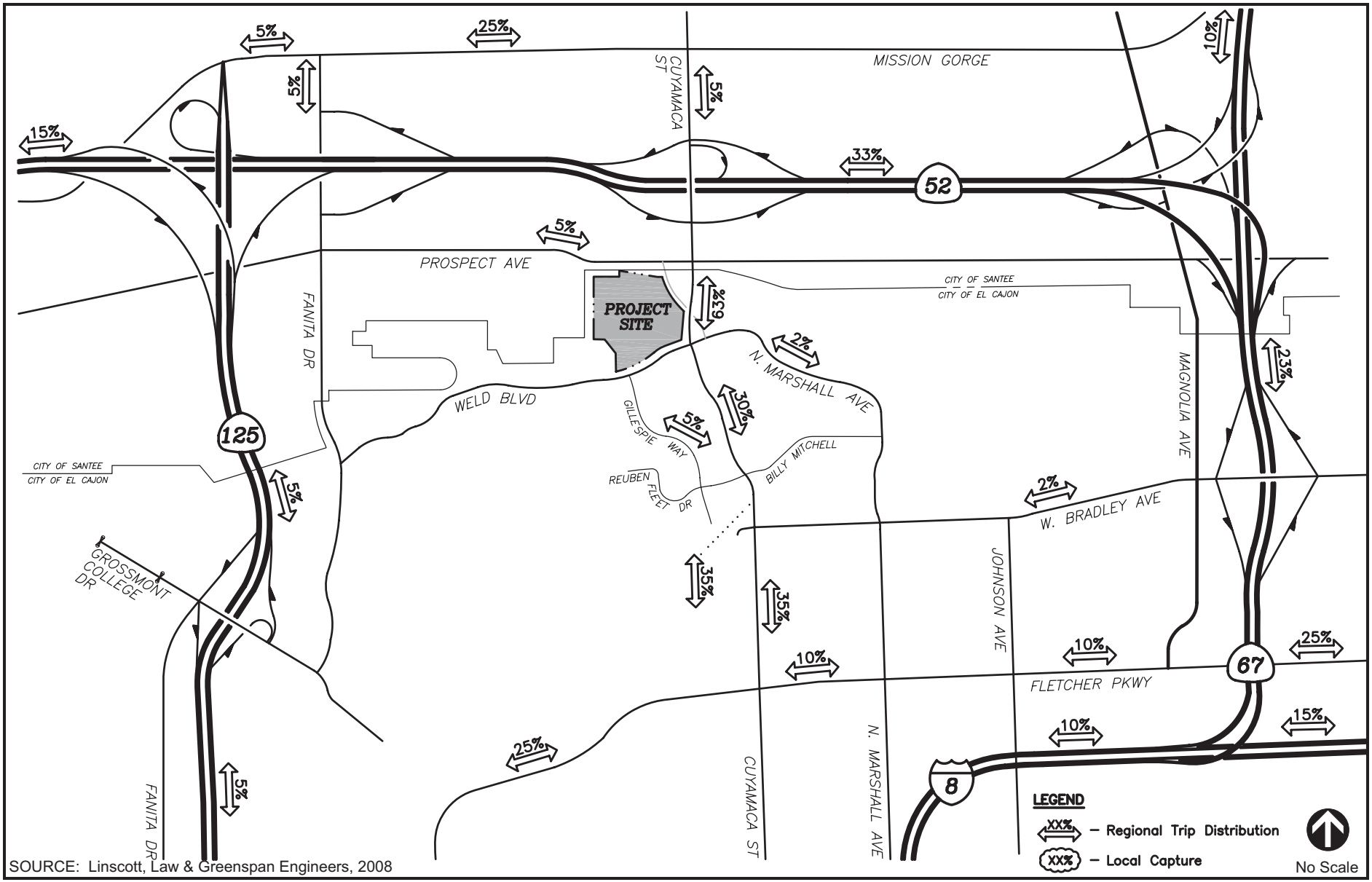
LOS is calculated for existing plus cumulative projects condition and the existing plus project plus cumulative projects condition (discussed below) using a list of cumulative projects that are anticipated to be developed in the project vicinity that would potentially add traffic to the roadway and intersections in the study area. A total of nine cumulative projects were identified in the traffic study. The cumulative projects are listed in Table 5-1, Cumulative Projects Summary, provided in Chapter 5.0 of this EIR. These cumulative projects are included to provide an accurate background for comparing traffic impacts associated with the proposed project.



SOURCE: Linscott, Law & Greenspan Engineers, 2009

PROPOSED PROJECT TRIP DISTRIBUTION FOR PASSENGER VEHICLES AND SMALL TRUCKS

FIGURE 4.12-2



SOURCE: Linscott, Law & Greenspan Engineers, 2008

PROPOSED PROJECT TRIP DISTRIBUTION FOR TRUCK TRAFFIC OVER 7 TONS

FIGURE 4.12-3

Table 4.12-4. Project Trip Generation

Land Use	Size	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
		Rate[1]	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Phase 1 (Buildings A & B)													
Industrial Park	196,500 SF	8 / K SF	1,572	11%	90 : 10	156	17	173	12%	20 : 80	38	151	189
Number of Trucks			157			16	2	18			4	15	19
Truck PCE[2]			236			24	3	27			6	23	29
Passenger Cars			1,415			140	15	155			34	136	170
Total Phase 1			**1,651**			**164**	**18**	**182**			**40**	**159**	**199**
Phase 2 (Building C)													
Industrial Park	191,473 SF	8 / K SF	1,532	11%	90 : 10	152	17	169	12%	20 : 80	37	147	184
Number of Trucks			153			15	2	17			4	15	19
Truck PCE[2]			230			23	3	26			6	23	29
Passenger Cars			1,379			137	15	152			33	132	165
Total Phase 2			**1,609**			**160**	**18**	**178**			**39**	**154**	**194**
Phase 3 (Building D)													
Industrial Park	75,000 SF	8 / K SF	600	11%	90 : 10	59	7	66	12%	20 : 80	14	58	72
Number of Trucks			60			6	1	7			4	6	7
Truck PCE[2]			90			9	2	11			2	9	11
Passenger Cars			540			53	6	59			13	52	65
Total Phase 3			**630**			**62**	**8**	**70**			**15**	**61**	**76**
Entire Project													
Industrial Park	463,973 SF	8 / K SF	3,704	11%	90 : 10	366	40	407	12%	20 : 80	89	355	444
Number of Trucks			370			37	5	42			9	36	45
Truck PCE[2]			556			56	8	64			14	55	69
Passenger Cars			3,334			330	36	366			80	320	400
Total Trips			**3,890**			**386**	**44**	**430**			**94**	**375**	**469**

[1] Rate is based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.
[2] PCE = Passenger car equivalent
Source: LLG, 2009

Under the existing condition plus cumulative project scenario, project area intersections would operate as shown in Table 4.12-5. As identified in this table, all study area intersections would operate at LOS D or better during the AM and PM peak hours except the following:

- Fanita Drive/Grossmont College Drive intersection would operate at LOS F during the PM peak hour
- SR-67 SB Ramps/Bradley Avenue would operate at LOS E during the AM peak hour

Table 4.12-5. Near-Term Intersection Operations – Entire Project (Phases 1, 2 and 3)

Intersection	Control Type	Peak Hour	Existing		Existing + Cumulative Project		Δ	Existing + Project + Cumulative Projects		Δ Delay[3]	Impact Type
			Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		
Cuyamaca Street/ Mission Gorge Road	Signal	AM	24.8	C	25.4	C	.05	25.9	C	0.5	None
		PM	30.5	C	36.1	D	.05	36.6	D	0.5	None
Cuyamaca Street/ Prospect Ave	Signal	AM	21.7	C	22.5	C	3.3	25.8	C	3.3	None
		PM	31.1	C	32.7	C	2.5	35.2	D	2.5	None
Cuyamaca Street/ Weld Blvd	Signal	AM	16.1	B	16.6	B	3.5	20.1	C	3.5	None
		PM	20.3	C	20.9	B	3.9	24.8	C	3.9	None
Fanita Dr/ Weld Blvd	Signal	AM	8.6	A	8.7	A	0.1	8.8	A	0.1	None
		PM	9.7	A	9.7	A	0.3	10.0	B	0.3	None
Cuyamaca Street/ W. Bradley Ave	Signal	AM	18.7	B	19.9	B	0.9	20.8	C	0.9	None
		PM	17.8	B	19.3	B	0.6	19.9	B	0.6	None
W. Bradley Ave/ Marshall Ave	Signal	AM	14.8	B	15.4	B	1.0	16.4	B	1.0	None
		PM	17.0	B	17.8	B	0.6	18.4	B	0.6	None
W. Bradley Ave/ SR-67 SB Ramps	Signal	AM	43.1	D	56.4	E	1.7	58.1	E	1.7	None
		PM	29.7	C	36.5	D	0.6	37.1	D	0.6	None
W. Bradley Ave/ SR-67 NB Ramps	Signal	AM	23.6	C	26.0	C	0.8	26.8	C	0.8	None
		PM	30.8	C	35.4	C	1.0	36.4	D	1.0	None
Grossmont College Dr/ SR-125 SB Ramps	Signal	AM	19.2	B	19.3	B	0.5	19.8	B	0.5	None
		PM	19.2	B	19.2	B	1.6	20.8	B	1.6	None
Grossmont College Dr/ SR-125 NB Ramps	Signal	AM	27.0	C	29.7	C	0.4	30.1	C	0.4	None
		PM	22.8	C	23.1	C	1.1	24.2	C	1.1	None
Fanita Dr/ Grossmont College Dr	AWSC[4]	AM	17.7	C	17.7	C	1.9	19.6	C	1.9	None
		PM	**66.1**	**F**	**66.4**	**F**	**9.6**	**76.0**	**F**	**9.6**	**Cumulative**
Cuyamaca Street/ Fletcher Pkwy	Signal	AM	10.4	B	12.0	B	1.8	13.8	B	1.8	None
		PM	9.8	B	11.1	B	3.3	14.4	B	3.3	None
Weld Blvd/ Gillespie Way/ Project Driveway	TWSC[5]	AM	13.0	B	13.5	B	16.2	29.7	D	16.2	None
		PM	11.8	B	12.3	B	**>10.0**	**>100.0**	**F**	**>10.0**	**Direct**

(1) Average delay expressed in seconds per vehicle.
(2) Level of Service.
(3) Increase in delay due to additional traffic.
(4) AWSC – All-Way Stop Controlled intersection.
(5) TWSC – Two-Way Stop Controlled intersection. Minor street left turn delay is reported.
Source: LLG, 2009

Existing Plus Project Plus Cumulative Projects Condition (Near-term Scenario – Phases 1, 2 and 3)

Under the existing plus project (all phases) plus cumulative projects condition, project area intersections would operate as shown in Table 4.12-5. As identified in this table, all intersections are calculated to operate at LOS D or better during the AM and PM peak hours except the following:

- Weld Boulevard/Gillespie Way intersection would operate at LOS F during the PM peak hour (direct project impact)
- W. Bradley Avenue/SR-67 SB ramps would operate at LOS E during the AM peak hour (no project impact)
- Fanita Drive/Grossmont College Drive intersection would operate at LOS F during the PM peak hour (cumulative project impact)

Based on the significance criteria identified in Section 4.12.3, the Forrester Creek Industrial Park project would result in significant traffic impacts to two unsignalized intersections (Weld Boulevard/Gillespie Way and Fanita Drive/Grossmont College Drive) in the study area under the existing plus project plus cumulative projects condition. The project would have a direct impact to the Weld Boulevard/Gillespie Way intersection because project-generated trips would cause the LOS at this intersection to degrade from LOS B to LOS F. The project would have a cumulative impact to the Fanita Drive/Grossmont College Drive intersection because project-generated trips would cause a 9.6 second delay at the intersection which would have an LOS F without the project. The project's contribution of 9.6 seconds is above the significance threshold of 2 seconds for an LOS F intersection. However, the proposed project would not result in a significant direct or cumulative impact to the intersection of W. Bradley Avenue/SR-67 SB ramps because the proposed project's contribution to traffic delay at this intersection would be 1.7 seconds, which is below the significance threshold of 2 seconds.

Project Phasing (Near-term Scenario)

As previously discussed, the proposed project would be constructed in three phases. In order to determine when mitigation for the project-related impacts to Weld Boulevard/Gillespie Way and Fanita Drive/Grossmont College Drive would need to be implemented, an analysis was conducted to determine the incremental impacts of Phases 1 and 2 to the existing plus cumulative projects roadway network.

As identified in Table 4.12-6, with the contribution of Phase 1 project traffic, the Fanita Drive/Grossmont College Drive intersection would operate at an acceptable LOS F under the existing plus Phase 1 plus cumulative projects scenario. Since the project's contribution to this intersection delay is 3.9 seconds, which is greater than the significance threshold of 2 seconds, the project would have a significant cumulative impact with the contribution of Phase 1 project traffic. Therefore, mitigation for this impact would be required to occur prior to operation of Phase 1 of the proposed project.

As identified in Table 4.12-6, with the contribution of Phase 1 project traffic, the Weld Boulevard/Gillespie Way intersection would operate at an acceptable LOS D under the existing plus Phase 1 plus cumulative projects scenario. However, with the contribution of Phases 1 and 2 project traffic, this intersection would operate at an unacceptable LOS F. Therefore, mitigation for this project impact would be required to occur prior to operation of Phase 2 of the proposed project.

Table 4.12-6. Near-Term Intersection Operations – Phases 1 and 2

Intersection	Control Type	Peak Hour	Existing		Existing + Cumulative Project		Existing + Cumulative Project + Project Phase 1		Δ Delay[3]	Impact Type	Existing + Cumulative Project + Project Phases 1 & 2		Δ Delay[3]	Impact Type
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]			Delay[1]	LOS[2]		
Cuyamaca Street/ Mission Gorge Road	Signal	AM	24.8	C	25.4	C	25.6	C	0.2	None	25.8	C	0.4	None
		PM	30.5	C	36.1	D	36.2	D	0.1	None	36.5	D	0.4	None
Cuyamaca Street/ Prospect Ave	Signal	AM	21.7	C	22.5	C	23.9	C	1.4	None	24.3	C	1.8	None
		PM	31.1	C	32.7	C	34.1	C	1.4	None	34.7	C	2.0	None
Cuyamaca Street/ Weld Blvd	Signal	AM	16.1	B	16.6	B	18.6	B	2.0	None	19.4	B	2.8	None
		PM	20.3	C	20.9	B	21.9	C	1.0	None	24.0	C	3.1	None
Fanita Dr/ Weld Blvd	Signal	AM	8.6	A	8.7	A	8.7	A	0.0	None	8.8	A	0.1	None
		PM	9.7	A	9.7	A	9.9	A	0.2	None	10.0	B	0.3	None
Cuyamaca Street/ W. Bradley Ave	Signal	AM	18.7	B	19.9	B	20.2	C	0.3	None	20.6	C	0.7	None
		PM	17.8	B	19.3	B	19.5	B	0.2	None	19.9	B	0.6	None
W. Bradley Ave/ Marshall Ave	Signal	AM	14.8	B	15.4	B	15.8	B	0.4	None	16.1	B	0.7	None
		PM	17.0	B	17.8	B	18.1	B	0.3	None	18.3	B	0.5	None
W. Bradley Ave/ SR-67 SB Ramps	Signal	AM	43.1	D	56.4	E	56.8	E	0.4	None	57.9	E	1.5	None
		PM	29.7	C	36.5	D	36.7	D	0.2	None	37.0	D	0.5	None
W. Bradley Ave/ SR-67 NB Ramps	Signal	AM	23.6	C	26.0	C	26.3	C	0.3	None	26.7	C	0.7	None
		PM	30.8	C	35.4	C	35.8	D	0.4	None	36.2	D	0.8	None
Grossmont College Dr/ SR-125 SB Ramps	Signal	AM	19.2	B	19.3	B	19.5	B	0.2	None	19.8	B	0.5	None
		PM	19.2	B	18.6	B	19.4	B	0.2	None	19.6	B	0.4	None
Grossmont College Dr/ SR-125 NB Ramps	Signal	AM	27.0	C	29.7	C	29.9	C	0.2	None	30.0	C	0.3	None
		PM	22.8	C	23.1	C	23.1	C	0.0	None	23.1	C	0.0	None
Fanita Dr/ Grossmont College Dr	AWSC[4]	AM	17.7	C	17.7	C	18.4	C	0.7	None	20.2	C	2.5	None
		PM	**66.1**	**F**	**66.4**	**F**	**70.3**	**F**	**3.9**	**Cumulative**	**74.5**	**F**	**8.1**	**Cumulative**
Cuyamaca Street/ Fletcher Pkwy	Signal	AM	10.4	B	12.0	B	12.8	B	0.8	None	13.6	B	1.6	None
		PM	9.8	B	11.1	B	11.8	B	0.7	None	12.8	B	1.7	None
Weld Blvd/ Gillespie Way/ Project Driveway	TWSC[5]	AM	13.0	B	13.5	B	18.6	C	5.1	None	25.6	C	12.1	None
		PM	11.8	B	12.3	B	33.1	D	20.8	None	**>100.0**	**F**	**>10.0**	**Direct**

(1) Average delay expressed in seconds per vehicle.
(2) Level of Service.
(3) Increase in delay due to additional traffic.
(4) AWSC – All-Way Stop Controlled intersection.
(5) TWSC - Two-Way Stop Controlled intersection. Minor street left turn delay is reported.
Source: LLG, 2009

Long-Term (2030) Condition

Year 2030 ADTs for the roadway segments in the vicinity of the project site were obtained from the SANDAG model. A 2030 analysis of the roadways adjacent to the project site was conducted. Proposed project traffic volumes were added to year 2030 volumes to obtain the year 2030 with project traffic volumes. Table 4.12-7 shows that all street segments within the study area are calculated to operate at LOS D or better with the addition of project traffic. Therefore, the proposed project traffic would not result in a significant impact on any roadway segment under long-term conditions.

Congestion Management Program Compliance

The Congestion Management Program (CMP) was first adopted on November 22, 1991, and is intended to directly link land use, transportation and air quality through LOS performance. Local agencies are required by statute to conform to the CMP. The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. The Caltrans Impact Study Manual contains criteria which establishes that a project impact is considered significant if the travel speed along an arterial segment, operating at LOS E or lower with the project, decreases by more than one mile per hour or the V/C ratio increases by more than 2 percent.

The following two freeways in the study area are in the CMP system:

- SR-67
- SR-125

Freeway operations were analyzed under all future scenarios.

Near-term CMP Analysis

Under existing freeway operations, all freeway segments would operate at LOS D or better except the SR-67 segment between Prospect Avenue and Woodside Avenue, which would operate at LOS F(2) in the northbound direction during the AM peak hour and LOS F(1) in the southbound direction during the PM peak hour.

Under both the existing plus cumulative projects scenario and the existing plus cumulative projects plus proposed project (all phases) scenario, freeway operations would remain the same: all freeway segments would operate at LOS D or better except the SR-67 segment between Prospect Avenue and Woodside Avenue, which would operate at LOS F(2) in the northbound direction during the AM peak hour and LOS F(1) in the southbound direction during the PM peak hour.

Long-term (2030) CMP Analysis

Two scenarios, year 2030 without project freeway operations and year 2030 with project freeway operations, were evaluated as part of the long-term 2030 CMP analysis. Under both scenarios, all freeway segments analyzed would operate at LOS D or better except the following:

- SR-67 between Prospect Avenue and Woodside Avenue, which would operate at LOS F(0) in the southbound direction during the AM peak hour and LOS F(2) in the northbound direction during the PM peak hour.
- SR-67 between Bradley Avenue and I-8, which is calculated to operate at LOS F(0) in the northbound direction during the AM and PM peak hours.

- SR-125 between Grossmont College Drive and Navajo Drive, which is calculated to operate at LOS F(0) in the southbound direction during the PM peak hour.

Table 4.12-7. Year 2030 Street Segment Operations

Segment	Roadway Classification	LOS E Capacity[1]	Year 2030 Without Project			Year 2030 With Project			Δ V/C[5]	Type of Impact
			Volume[2]	LOS[3]	V/C[4]	Volume[2]	LOS[3]	V/C[4]		
Fanita Dr										
Mission Gorge Rd to Prospect Ave	3-Ln Collector	25,650	11,000	A	0.429	11,070	A	0.432	0.003	None
Prospect Ave to Weld Dr.	2-Ln Collector	16,200	7,000	C	0.432	7,070	C	0.436	0.004	None
Weld Blvd to Gibbons Dr	3-Ln Collector	25,650	10,000	A	0.390	10,270	A	0.400	0.011	None
Gibbons Dr to Grossmont College Dr	Town Collector	19,000	10,000	D	0.526	10,270	D	0.541	0.014	None
Cuyamaca Street										
Mission Gorge Rd to Prospect Ave	6-Ln Prime Arterial	57,000	35,000	B	0.614	35,260	B	0.619	0.005	None
Prospect Ave to Weld Blvd	4-Ln Major Rd	37,000	24,000	B	0.649	26,220	C	0.709	0.060	None
Weld Blvd to Bradley Ave	4-Ln Major Rd	37,000	25,000	C	0.676	25,990	C	0.702	0.027	None
Bradley Ave to Fletcher Pkwy	4-Ln Major Rd	37,000	20,000	B	0.541	20,660	B	0.558	0.018	None
N. Marshall Avenue										
Cuyamaca St to W. Bradley Ave	4-Ln Major Rd	37,000	16,000	B	0.432	16,340	B	0.442	0.009	None
Weld Boulevard										
Fanita Dr to Gillespie Wy	4-Ln Major Rd	37,000	9,000	A	0.243	9,330	A	0.252	0.009	None
Gillespie Way to Cuyamaca Street	4-Ln Major Rd	37,000	9,000	A	0.243	12,360	A	0.334	0.091	None
W. Bradley Avenue										
Cuyamaca St to N. Marshall Ave	4-Ln Major Rd	37,000	5,000	A	0.135	5,340	A	0.144	0.009	None
N. Marshall Ave to SR-67	4-Ln Major Rd	37,000	17,000	B	0.459	17,340	B	0.469	0.009	None

[1] Capacity based on roadway classification operating at LOS E.
[2] Average Daily Traffic.
[3] Level of Service.
[4] Volume to Capacity.
[5] Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.
Source: LLG, 2009

Conclusion

Based on the CMP guidelines stated above, the project would not decrease travel speed by more than one mile per hour or increase the V/C ratio by more than 2 percent on any CMP arterials or on any CMP freeway or highway. Therefore, the proposed project would not significantly impact the travel speed of the freeways, highways or arterials within the study area.

4.12.4.2 SIGNIFICANCE OF IMPACT

The proposed project would result in direct and cumulative significant impacts to roadway intersections in the project area due to an unacceptable LOS E or F. The impacted roadway intersections are listed below.

Direct Impact

- Weld Boulevard/Gillespie Way/project driveway intersection

Cumulative Impact

- Fanita Drive/Grossmont College Drive intersection

4.12.4.3 MITIGATION, MONITORING AND REPORTING

The following mitigation measures would reduce identified project-related significant direct and cumulative intersection impacts to below a level of significance.

Tra-1 Prior to operation of Phase 1 of the proposed project, the project applicant shall contribute a fair share towards the future signalization of the Fanita Drive/Grossmont College Drive intersection into a fund set up specifically for the improvement of this intersection. The project contributes 35 trips at this intersection which has a total trip count of 1,189 trips during the PM peak hour. Therefore, the project's fair share percentage is 3 percent. The fair share amount will be $6,000 assuming that the cost of installing the signal is approximately $200,000.

Tra-2 Prior to operation of Phase 2 of the proposed project, the project applicant shall install a traffic signal at the Weld Boulevard/Gillespie Way intersection and implement the following lane configuration.

- Southbound – two left-turn lanes with storage of 125 feet and one shared 20-foot wide through/right-turn lane.
- Northbound – one left-turn lane and one shared through/right-turn lane.
- Eastbound – one left-turn lane, one through lane, and one shared through/right-turn lane.
- Westbound – one left-turn lane, one through lane, and one shared 20-foot wide through/right-turn lane.

Tra-3 A certificate of occupancy permit shall not be issued for any phase of the proposed project until the extension of SR-52 from SR-125 to SR-67 has been completed and is operational.

4.12.5 ISSUE 3 – INCREASE IN HAZARDS

Would the proposed project substantially increase hazards due to a design feature or incompatible uses?

4.12.5.1 IMPACT ANALYSIS

The proposed project is the construction and operation of an industrial park. The project would include the northern extension of Gillespie Way from the existing intersection of Weld Boulevard/Gillespie Way on the south to a proposed cul-de-sac in the middle of the proposed project site on the north. The intersection of Weld Boulevard/Gillespie Way would be improved to a two-way stop on Gillespie Way. Adequate vehicle storage space would be provided north and south of Weld Boulevard on Gillespie Way so that waiting vehicles would not extend into Weld Boulevard and cause a traffic hazard.

Implementation of mitigation measure ***Tra-2*** above would ensure that a potential intersection hazard would be avoided by requiring the project applicant to install a traffic signal at this intersection prior to the operation of Phase 2 of the proposed project.

The project would construct an industrial park on a site surrounded by industrial and residential land uses. As discussed in Section 4.9, Land Use, the project would not result in a significant impact associated with incompatibilities with surrounding land uses. Therefore, the project would not result in a hazard due to incompatible uses.

4.12.5.2 SIGNIFICANCE OF IMPACT

With implementation of mitigation measure ***Tra-2*** above, the proposed project would not result in an increase in hazards due to a design feature or incompatible uses. Impacts would be less than significant.

4.12.5.3 MITIGATION, MONITORING AND REPORTING

No significant impacts were identified. Therefore, no mitigation is necessary.

4.12.6 ISSUE 4 –EMERGENCY ACCESS

Would the proposed project result in inadequate emergency access?

4.12.6.1 IMPACT ANALYSIS

Access During Construction

Access to businesses and industrial facilities along roadways in the project area would be maintained at all times during construction. Construction would not require the closure of any street segments, including Weld Boulevard or Gillespie Way. New utilities connections to the project site would have the potential to temporarily result in lane closures along Weld Boulevard and Cuyamaca Street; however, the City would not allow both vehicle lanes to be closed at the same time. In addition, utilities improvements would be temporary in nature. Because one lane would remain open at all times to allow vehicles to access adjacent areas, the proposed project would not result in inadequate emergency access during construction. Impacts would be less than significant.

Access Following Construction

Emergency access would be provided to the project site via Weld Boulevard and Gillespie Way. Emergency vehicles would access the project site through the only entrance at the northern extension of Gillespie Way. Operation of the proposed project would not alter existing emergency access routes to off-site neighboring land uses. Therefore, operation of the proposed project would not result in inadequate emergency access to the project site or adjacent off-site residences. Impacts would be less than significant.

4.12.6.2 SIGNIFICANCE OF IMPACT

The proposed project would not result in inadequate emergency access during construction or operation of the proposed project. No significant impact would occur.

4.12.6.3 MITIGATION, MONITORING AND REPORTING

Because no significant impacts were identified, no mitigation is necessary.

4.12.7 ISSUE 5 – PARKING CAPACITY

Would the proposed project result in inadequate parking capacity?

4.12.7.1 IMPACT ANALYSIS

The proposed project would meet the City's parking requirements for the various types of uses proposed on the project site. The number of parking spaces is based on the amount of building square footage. For manufacturing uses, a parking ratio of 1 space per 600 square feet (SF) of building space is required. For warehouse uses, a parking ratio of one space per 1,000 SF of building space is required. Finally, for office and mezzanine uses, a parking ratio of one space per 300 SF of building space is required. Based on these parking requirements, the total number of parking spaces required for the proposed project is 647 spaces. The proposed project would provide 793 spaces, an excess of approximately 146 spaces. Therefore, the proposed project would be designed to exceed the City's parking requirements would not result in inadequate parking capacity.

4.12.7.2 SIGNIFICANCE OF IMPACT

The proposed project would not result in inadequate parking capacity. No significant impact would occur.

4.12.7.3 MITIGATION, MONITORING AND REPORTING

Because no significant impacts were identified, no mitigation is necessary.

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