

2.4 TRANSPORTATION

This section is based on the *Multimodal Transportation Impact Study* (TIS; 2016) prepared by Omni-Means, Ltd. (as updated in April 2018) and the supplemental Transportation Impact Analysis Memorandum prepared by Central Coast Transportation Consulting (CCTC) dated April 12, 2018. The supplemental Transportation Impact Analysis Memorandum considers what differences in the level of impact and required mitigation would arise from the elimination of fixed sequential phasing and potential development stops associated with the timing of the Prado Road Interchange as envisioned under the revised project. The Revised TIS is included as **Appendix B** to the SEIR. The CCTC memorandum of April 2018 forms the basis of the SEIR analysis that follows, and it is included in its entirety in **Appendix C** of this SEIR.

2.4.1 Setting

The setting with respect to transportation issues remains unchanged from that included in the certified Final EIR. Please refer to that document for setting information related to analyzing project impacts.

2.4.2 Impact Analysis

This discussion summarizes the Omni-Means Traffic Impact Study of near term (2025) impacts and mitigation measures for the San Luis Ranch project as included in the Transportation section of the May 2017 certified Final EIR and CCTC's supplemental Traffic Impact Analysis memorandum specific to the proposed revised project description.

The applicant proposes to adjust the phasing plan such that phases can develop in any order and can be developed concurrently, and to revise the mitigation monitoring program to allow occupancy of any phase irrespective of the timing of the Prado Road overpass and northbound ramps construction. The purpose of this supplemental analysis is to determine what impacts would occur if the development project is able to buildout prior to completion of the Prado Overpass & NB Ramps and to establish mitigation measures, if any, that would adequately mitigate those impacts. This analysis focuses on eleven intersections, seven roadway segments, eleven Highway 101 locations and where transportation operations could be impacted by the proposed new project description.

a. Methodology and Significance Thresholds.

Methodology. The analysis prepared by CCTC uses the Synchro analysis files provided by Omni-Means, who prepared the *San Luis Ranch Specific Plan Multimodal Transportation Impact Analysis Report* (TIA). No changes were made to the traffic volumes or the land use assumptions used to develop the volumes. Intersection level of service (LOS) was determined using Synchro 10 and queue lengths were determined using the companion SimTraffic microsimulation software by taking the average of five runs. Note that the TIA used the Synchro 9 software package, which has now been replaced by the Synchro 10 package. The TIA evaluated segment impacts using an in-house spreadsheet that was not available for use.

Freeway impacts had been previously evaluated using analysis results from HCS 2010. For weaving segments, the Leisch Method had additionally been used to evaluate impacts. In this

document, only weaving segment results using the Leisch Method are presented, since its LOS results were generally worse compared to HCS 2010.

Thresholds of Significance. The thresholds of significance remain unchanged from what were used in the certified Final EIR. Please refer to that document for all thresholds of significance. In summary, these are based on Appendix G of the *State CEQA Guidelines*. Impacts related to transportation and circulation from the proposed project would be significant if the project would:

1. *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;*
2. *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;*
3. *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;*
4. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*
5. *Result in inadequate emergency access; and/or*
6. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

b. Project Impacts and Mitigation Measures. This section describes impacts and mitigation measures of the revised project. However, to provide context for this analysis, it is first useful to summarize the impacts that related to the approved project, as described in the July 2017 certified Final EIR. In summary, the certified Final EIR described ten impacts (T-1 through T-10), six of which were Class I, significant and unavoidable. These are listed below as follows:

Impact T-1 Under Existing and Near-Term Plus Project conditions nine study area intersections would operate at unacceptable automobile, bicycle, or pedestrian LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at seven of these intersections to an acceptable level. However, impacts at the Madonna Road & Dalidio Drive and Los Osos Valley Road & Froom Ranch Way intersections would be Class I, significant and unavoidable.

Impact T-2 Under Existing and Near-Term Plus Project conditions the volume of traffic at 19 study area intersections would exceed lane capacities. Mitigation would reduce impacts at 18 of these intersections to an acceptable level. However, impacts at the Los Osos Valley Road & Froom Ranch Way intersection would be Class I, significant and unavoidable.

Impact T-3 Under Existing and Near-Term conditions four study area segment groups would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal level of service standards during AM and

- PM peak hours. Mitigation would reduce impacts at three of these segment groups to an acceptable level. However, impacts at Higuera Street roadway segment would be Class I, significant and unavoidable.*
- Impact T-4 Project construction activities would create traffic impacts due to construction vehicles causing congestion and deteriorating pavement conditions. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.*
- Impact T-5 Construction of the proposed Froom Ranch Way bridge during phase 3 of the Specific Plan buildout would result in significant level of service and queuing impacts at study area intersections and roadway segments. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.*
- Impact T-6 The project site plan would result in and contribute to increased access conflicts. Proposed access controls are not consistent with General Plan policy. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.*
- Impact T-7 The project site plan would result in on-site traffic volumes and speeds that may exceed General Plan policy thresholds, resulting potential traffic hazards within the project site. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.*
- Impact T-8 Under Cumulative Plus Project conditions nine study area intersections would operate at unacceptable automobile, bicycle, or pedestrian LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at seven of these intersections to an acceptable level. However, impacts at the Madonna Road & Dalidio Drive and Los Osos Valley Road & Froom Ranch Way intersections would be Class I, significant and unavoidable.*
- Impact T-9 Under Cumulative Plus Project conditions, the volume of traffic at 18 study area intersections would exceed lane capacities. Mitigation would reduce impacts at 18 of these intersections to an acceptable level. Mitigation would reduce impacts at 17 of these intersections to an acceptable level. However, impacts at the Madonna Road & Dalidio Drive and Los Osos Valley Road & Froom Ranch Way intersections would be Class I, significant and unavoidable.*
- Impact T-10 Under Cumulative Plus Project conditions five study area segment groups, as well as mainline segments of U.S. 101, would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at each of the five study area segment groups to an acceptable level. However, impacts at the mainline segments of U.S. 101 at Los Osos Valley Road and Madonna Road would be Class I, significant and unavoidable.*

Because buildout and long-term cumulative impacts under the revised project are identical to what was anticipated under the certified Final EIR, impacts with respect to transportation issues remain generally unchanged from those included in the certified Final EIR, except as noted in the analysis that follows.

The following analysis focuses on the need for and timing of mitigation measures required under the certified Final EIR, based on the revised project, which assumes that phasing is compressed in such a way that all development could occur within the first year of project approval without the Prado Road Overpass & Northbound Ramps prior to construction of such improvements in approximately 2021.

Intersection Analysis. Table 2.4-1 summarizes intersection LOS under the near term, near term plus project, and mitigated near term plus project scenarios. Mitigation measures are identified for each intersection where project impacts to LOS are expected. Queue impacts are discussed in the next section. Some locations have queue impacts but not LOS impacts; in these cases, the queue mitigation is also shown in Table 2.4-1 for consistency with Table 2.4-2. Synchro output sheets are provided in Appendix C of this SEIR.

Table 2.4-2 summarizes queue lengths under each scenario. Mitigation measures are identified for each intersection where project impacts to queue lengths are expected. Some locations have LOS impacts but not queue impacts; in these cases the LOS mitigation is also shown in Table 2.4-2 for consistency with Table 2.4-1. SimTraffic output sheets are provided in Appendix C of this SEIR. Note that due to the stochastic (random) nature of microsimulation each run produces different results.

Roadway and Freeway Segment Analysis. Table 2.4-3 below summarizes roadway segment impacts.

The TIA consultant used a proprietary in-house spreadsheet to calculate roadway segment service levels. Because all of the auto and transit segment impacts were related to roadway speeds, it would be necessary to increase capacity by adding travel lanes or by improving corridor signal timing. Adding travel lanes is considered infeasible and potentially against current General Plan policies along these segments of Madonna Road and Los Osos Valley Road. Adjusting corridor signal timings would reduce the severity of, but not entirely eliminate, the impact. The transit impacts could also be mitigated by reducing service headways by five minutes or increasing on-time performance by at least one percent.

Constructing parallel Class I multiuse paths would reduce the severity of, but may not eliminate, the pedestrian and bicycle impacts. Note that portions of the paths would cross Caltrans right-of-way, and would require Caltrans review and approval. It is unknown if Caltrans would approve the intersection configuration changes necessary to accommodate the paths, so the feasibility of this improvement is also uncertain.

Table 2.4-1. Intersection Level of Service Analysis

ID	Intersection	Peak Hour	Near Term			Near Term+Project			Mitigated Near Term+Project			Mitigation
			V/C ¹	Delay ²	LOS	V/C ¹	Delay ²	LOS	V/C ¹	Delay ²	LOS	
1	Madonna/LOVR	AM		25.9	C		27.9	C		27.9	C	Adjust corridor signal timing as needed for optimum operations. This will reduce but may not eliminate the impact.
		PM		51.8	D	1.05	56.3	E	1.05	56.3	E	
2	Madonna/Occanaire	AM		21.1	C		21.3	C		21.3	C	Extend WBR turn pocket to 200'. This would require widening the bridge structure which is not a currently programmed project and may result in secondary environmental impacts. Therefore this improvement is considered infeasible now.
		PM		17.7	B		19.0	B		19.0	B	
3	Madonna/Dalidio	AM		9.7	A		47.0	D		19.1	B	Install second WBL turn pocket and extend both to 310'. Remove third WBT lane and third receiving lane on west leg; Install 100' EBR turn pocket; Provide split phase for NB and SB; Provide NBR overlap phase. This eliminates the impact but may be infeasible due to right-of-way needs.
		PM		42.0	D	2.78	153.7	F		31.5	C	
5	Madonna/US 101 SB Ramps	AM	1.22	44.0	D	1.26	44.0	D	1.26	43.6	D	Install 100' EBR turn pocket; Extend EBL turn pocket to 150'. Installing the EBR would require review and evaluation by Caltrans. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		PM		25.0	C		24.9	C		23.9	C	
6	Madonna/US 101 NB Ramps	AM		18.3	B		19.4	B		19.5	B	Extend NBL turn pocket to 275'. This would require review and evaluation by Caltrans. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		PM		21.0	C		22.2	C		22.8	C	
7	Madonna/Higuera	AM		32.7	C		33.3	C		35.7	D	Convert one NB through lane to left turn "trap" lane; Extend EBR turn pocket to 275'. Extending the EBR would require expansion into the Caltrans maintenance headquarters right-of-way. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		PM		38.5	D		43.6	D		44.1	D	
10	LOVR/Auto Park	AM		0.6 (19.9)	-(C)		0.6 (20.8)	-(C)		3.1	A	Signalize intersection.
		PM	0.57	1.6 (59.2)	-(F)	0.60	1.8 (65.6)	-(F)		3.7	A	
11	LOVR/Calle Joaquin	AM		14.9	B		15.2	B		15.2	B	Extend SBR turn pocket to 200'. This is considered infeasible due to likely secondary impacts to sensitive wetland areas.
		PM		12.2	B		12.5	B		12.5	B	
13	LOVR/US 101 NB Ramps	AM		23.8	C		25.1	C		25.1	C	Extend SBR turn pocket to 325'. This would require bridge widening over US 101. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		PM		24.2	C		23.6	C		23.6	C	
15	Higuera/Suburban	AM		8.3	A		8.4	A		8.0	A	Convert WBR turn pocket to shared WBL/R. This improvement was required as part of the Avila Ranch EIR.
		PM		19.9	B		20.2	C		15.0	B	
16	Higuera/Tank Farm	AM		37.5	D		37.8	D		37.8	D	Extend NBR turn pocket to 200'; Extend SBL turn pocket to 250'. Extending the NBR may be infeasible due to right-of-way needs.
		PM		24.7	C		25.0	C		25.0	C	

1. Volume to capacity ratio reported for worst movement, for unacceptable LOS only.
2. HCM 2010 average control delay in seconds per vehicle (HCM 2000 used for Intersections 2 and 13). For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay.
Note: Unacceptable operations shown in bold text.

Table 2.4-2. Queue Analysis

ID	Intersection	Movement	Storage Length (ft)	Peak Hour	95th Percentile Queues (ft) ¹			Mitigation
					Near Term	Near Term +Project	Mitigated Near Term +Project	
1	Madonna/LOVR	NBR	175	AM PM	105 246	106 264	124 269	Adjust corridor signal timing as needed for optimum operations. This will reduce but may not eliminate the impact.
2	Madonna/Oceanaire	WBR	100	AM PM	45 163	62 122	45 163	Extend WBR turn pocket to 200'. This would require widening the bridge structure which is not a currently programmed project and may result in secondary environmental impacts. Therefore this improvement is considered infeasible now.
3	Madonna/Dalidio	WBL	275	AM PM	51 127	177 335	110 213	Install second WBL turn pocket and extend both to 310'; Remove third WBT lane and third receiving lane on west leg; Install 100' EBR turn pocket; Provide split phase for NB and SB; Provide NBR overlap phase. This eliminates the impact but may be infeasible due to right-of-way needs.
		WBT/R	570	AM PM	74 309	132 602	126 317	
5	Madonna/US 101 SB Ramps	EBL	100	AM PM	80 96	84 123	120 120	Install 100' EBR turn pocket; Extend EBL turn pocket to 150'. Installing the EBR would require review and evaluation by Caltrans. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		WBL	260	AM PM	164 389	173 546	176 232	
6	Madonna/US 101 NB Ramps	NBL	185	AM PM	147 164	150 265	158 174	Extend NBL turn pocket to 275'. This would require review and evaluation by Caltrans. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
7	Madonna/Higuera	EBR	150	AM PM	221 186	247 265	158 246	Convert one NB through lane to left turn "trap" lane; Extend EBR turn pocket to 275'. Extending the EBR would require expansion into the Caltrans maintenance headquarters right-of-way. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
		NBL	160	AM PM	155 349	167 372	98 192	
		SBT/L	250	AM PM	163 221	162 414	159 262	
		SBR	340	AM PM	- 46	- 585	- 114	
10	LOVR/Auto Park	WBR	175	AM PM	25 42	26 45	23 50	Signalize intersection.
11	LOVR/Calle Joaquin	SBR	115	AM PM	39 134	89 133	91 183	Extend SBR turn pocket to 200'. This is considered infeasible due to likely secondary impacts to sensitive wetland areas.
13	LOVR/US 101 NB Ramps	SBR	135	AM PM	181 179	204 173	317 142	Extend SBR turn pocket to 325'. This would require bridge widening over US 101. Therefore this impact is considered unavoidable due to the uncertainties associated with the Caltrans project development process.
15	Higuera/Suburban	WBR	170	AM PM	68 274	83 286	134 244	Convert WBR turn pocket to shared WBL/R. This improvement was required as part of the Avila Ranch EIR.
		SBL	200	AM PM	141 288	229 261	158 262	
16	Higuera/Tank Farm	NBR	100	AM PM	192 173	186 155	215 160	Extend NBR turn pocket to 200'; Extend SBL turn pocket to 250'. Extending the NBR may be infeasible due to right-of-way needs.
		SBL	165	AM PM	197 231	201 224	223 264	

¹. Queue length that would not be exceeded 95 percent of the time.
 Note: Bold indicates queue length longer than storage length.

Table 2.4-3. Roadway Segment Analysis

ID	Segment	Direction	Near Term								Near Term + Project								Mitigation
			AM Peak				PM Peak				AM Peak				PM Peak				
			Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS	LOS	Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS	LOS	Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS	LOS	Travel Speed (mph)	BFFS (mph)	Travel Speed/BFFS	LOS	
Auto																			
1	Madonna Road - Oceanaire to Los Osos Valley	WB	22.1	42.1	52%	C	11.8	42.1	28%	F	21.7	42.1	51%	C	10.2	42.1	24%	F	Adjust corridor signal timing as needed for optimum operations. This will reduce but may not eliminate the impact.
13	Los Osos Valley - Madonna to Froom Ranch	SB	24.0	41.9	57%	C	16.9	41.8	41%	D	22.7	41.9	54%	C	15.2	41.8	36%	E	
17	Los Osos Valley - US 101 NB Ramps to S. Higuera	EB	17.5	39.4	45%	D	15.8	39.4	40%	D	16.9	39.4	43%	D	15.6	39.4	39%	E	
			Score			LOS			Score			LOS			Score			LOS	
Transit																			
13	Los Osos Valley - Madonna to Froom Ranch (Route 4)	SB	4.51		E		4.56		E		4.53		E		4.56		E		
13	Los Osos Valley - Madonna to Froom Ranch (Route 5)	SB	4.60		E		4.38		E		4.61		E		4.38		E		
			Score			LOS			Score			LOS			Score			LOS	
Pedestrian																			
4	Madonna Road - US 101 SB Ramps to El Mercado	WB	3.62		D		3.79		D		3.68		D		3.87		D		Construct parallel Class I multiuse paths. This will reduce but may not eliminate the impact. Path construction may occur within Caltrans right-of-way and is subject to Caltrans approval and permitting, which is uncertain at this time.
		EB	3.70		D		3.77		D		3.77		D		3.87		D		
13	Los Osos Valley - Madonna to Froom Ranch	SB	3.86		D		3.99		D		3.86		D		3.99		D		
		NB	3.74		F		4.19		F		3.75		F		4.19		F		
14	Los Osos Valley - Froom Ranch to Calle Joaquin	SB	3.84		D		4.05		D		3.87		D		4.08		D		
		NB	3.75		D		4.09		D		3.75		D		4.11		D		
15	Los Osos Valley - Calle Joaquin to US 101 SB Ramps	SB	3.69		D		3.70		D		3.71		D		3.72		D		
		NB	3.66		D		4.01		D		3.68		D		4.03		D		
16	Los Osos Valley - US 101 SB Ramps to US 101 NB Ramps	SB	3.93		D		3.91		D		3.94		D		3.92		D		
		NB	3.82		D		3.27		C		3.83		D		3.29		C		
17	Los Osos Valley - US 101 NB Ramps to S. Higuera	EB	3.94		D		3.78		D		3.95		D		3.79		D		
		WB	3.88		D		4.27		E		3.89		D		4.29		E		
			Score			LOS			Score			LOS			Score			LOS	
Bicycle																			
4	Madonna Road - US 101 SB Ramps to El Mercado	WB	3.96		D		4.35		E		3.98		D		4.38		E		
		EB	3.61		D		3.62		D		3.64		D		3.65		D		

Note: Unacceptable operations shown in bold text.

Table 2.4-4. Freeway Analysis

				Near Term+Project with Overcrossing				Near Term+Project without Overcrossing				
Direction	Location	Segment Type	Peak Hour	No. of Lanes	Volume	Density (pc/mi/ln)	LOS	No. of Lanes	Volume	Density (pc/mi/ln)	LOS	Finding
Freeway, Merge, and Diverge Segments¹												
US 101 NB	South of LOVR	Freeway	AM	2	3,186	29.1	D	2	3,186	29.1	D	The Overcrossing does not change the unacceptable density.
			PM		2,538	22.3	C		2,538	22.3	C	
	LOVR Off Ramp	Diverge	AM	1	629	33.5	D	1	643	33.5	D	
			PM		630	27.1	C		620	27.1	C	
	Prado Off Ramp	Diverge	AM	1	371	29.6	D	1	311	29.9	D	Eliminating the Overcrossing would worsen unacceptable operations.
			PM		191	26.3	C	1	145	26.4	C	
US 101 SB	Madonna On Ramp	Merge	AM	1	232	16.5	B	1	232	16.5	B	The Overcrossing does not change the unacceptable density.
			PM		409	28.6	D		409	28.6	D	
	South of Madonna	Freeway	AM	2	1,881	16.5	B	2	1,881	16.5	B	The Overcrossing does not change the unacceptable density.
			PM		3,261	30.0	D		3,261	30.0	D	
	LOVR Off Ramp	Diverge	AM	1	655	17.9	B	1	676	17.9	B	The Overcrossing does not change the unacceptable density.
		PM		573	31.5	D		573	31.5	D		
	LOVR On Ramp	Merge	AM	1	413	17.3	B	1	413	17.1	B	The Overcrossing does not change the unacceptable density.
			PM		829	33.8	D		829	33.8	D	
	South of LOVR	Freeway	AM	2	1,639	14.4	B	2	1,618	14.2	B	The Overcrossing does not change the unacceptable density.
			PM		3,517	33.6	D		3,517	33.6	D	
				No. of Lanes	Length (ft)	Total Volume	LOS	No. of Lanes	Length (ft)	Total Volume	LOS	
Weave Segments²												
US 101 NB	North of Prado	Weave	AM	3	940	3,317	C	2	2,140	3,112	E	Eliminating the Overcrossing would result in unacceptable operations.
			PM		940	3,137	C		2,140	2,146	E	
	North of Madonna	Weave	AM	3	1,330	3,421	C/D	3	1,330	3,523	D	Eliminating the Overcrossing would result in unacceptable operations.
			PM		1,330	3,795	D		1,330	3,754	D	
US 101 SB	South of Marsh	Weave	AM	3	2,065	2,804	C	3	2,065	2,804	C	The Overcrossing does not change the unacceptable operations.
			PM		2,065	4,184	E		2,065	4,184	E	

1. HCS 2010 Analysis
2. Leisch Method Analysis
Note: Unacceptable operations shown in bold text.

Impacts of the Revised Project. As a result of this updated analysis, the original impact discussion in the certified Final EIR has been updated to reflect the new project description and operations analysis. The original 10 impact statements from the certified Final EIR would still apply, although the discussion of Impacts T-1, T-2, T-3 (which reflect near-term plus project conditions) and T-5 are modified. A new impact (T-11) has been identified. The remaining impacts (Impacts T-4, T-6, T-7, T-8, T-9, and T-10) remain unchanged from the certified Final EIR. Seven of the 11 impacts (T-1, T-2, T-3, T-8, T-9, T-10, and T-11) are Class I, significant and unavoidable. The remaining 4 impacts (T-4, T-5, T-6 and T-7) are Class II, significant but mitigable.

Note that all impacts previously identified in the certified Final EIR would still be observed with the revised project, as would the classification of such impacts. That is, all impacts previously identified as Class I would still be Class I, and all impacts identified a Class II would still be Class II. Impact T-11 is a new impact not previously identified, and is considered Class I.

These impact statements that have been added or modified are summarized as follows:

- Impact T-1 Under Existing and Near-Term Plus Project conditions 9 study area intersections would operate at unacceptable automobile, bicycle, or pedestrian LOS based on adopted multimodal level of service standards during AM and PM peak hours. Of these 9 intersections, impacts to Madonna Road & U.S. 101 SB, Los Osos Valley Road & Auto Park Way, and Higuera & Tank Farm would be temporary until the Prado Road Overpass & NB Ramps are constructed. Although temporary, the impact at these three locations would be Class I, significant and unavoidable.*
- Impact T-2 Under Existing and Near-Term Plus Project conditions the volume of traffic at 19 study area intersections would exceed lane capacities. Of these 19 intersections, impacts to Madonna & Los Osos Valley Road, Madonna & Oceanaire, Madonna & U.S. 101 NB, Madonna & Higuera, and Los Osos Valley Road & U.S. 101 NB would be temporary until the Prado Road Overpass & NB Ramps are constructed. Although temporary, the impact at these five locations would be Class I, significant and unavoidable.*
- Impact T-3 Under Existing and Near-Term Plus Project conditions 4 study area segment groups would operate at unacceptable automobile, bicycle, pedestrian, and/or transit LOS based on adopted multimodal level of service standards during AM and PM peak hours. Of these 4 segment groups, impacts to Madonna (Los Osos Valley Road to Higuera) and Los Osos Valley Road (Madonna to Higuera) would be temporary until the Prado Road Overpass & NB Ramps are constructed. Although temporary, the impact along these two segment groups would be Class I, significant and unavoidable.*
- Impact T-5 The proposed timing of the Froom Ranch Way Bridge would result in significant level of service and queuing impacts at study area intersections and roadway segments. This is considered a Class II, significant but mitigable impact.*
- Impact T-11 Under Existing and Near-term Plus Project conditions buildout of the project prior to construction of the Prado Road Overpass & NB ramps would result in portions of Highway 101 from Marsh Street to Los Osos Valley Road*

operating below Caltrans level of service standards. This is a Class I, significant and unavoidable impact.

Mitigation Measures. The Traffic Impact Analysis identified nine potential improvements that could mitigate the temporary impacts associated without having the Prado Road Overpass & NB Ramps constructed prior to buildout of the project under Existing and Near-Term conditions. In general, these would be limited improvements to several existing roadways, including the extension or addition of turn lanes at various intersections or freeway off-ramps in the project vicinity, either along Madonna Road, Los Osos Valley Road, or Higuera Street. (These are more fully described in Table 2.4-1 above, and also within the TIA in Appendix C.) However, due to right-of-way and structure conflicts, the feasibility of these mitigation measures is uncertain.

In addition, the full Prado Road Interchange would still be needed to mitigate cumulative impacts such that they would not be necessary so their effectiveness is limited in the context of providing necessary mitigation for a potentially short timeframe. Note that once the full interchange is built, these possible measures would ultimately result in excess capacity, which is potentially inconsistent with General Plan Circulation Element Policy 7.1.3, Growth Management & Roadway Expansion, which states:

“The City shall manage the expansion of roadways to keep pace with only the level of increased vehicular traffic associated with development planned for in the Land Use Element and under the City’s growth management policies and regional transportation plans.”

For these reasons, the nine potential measures to address near-term impacts prior to a full interchange being built are not recommended and not included in this SEIR.

The following mitigation measures are required to address potential impacts. These measures identify improvements under Existing and Near-Term Plus Project conditions that are required to reduce potentially significant project-specific impacts to study area intersections or to mitigate Class I, significant and unavoidable, impacts to the maximum extent feasible without causing significant secondary impacts. The project’s financial share of these project costs will be established and adopted in the San Luis Ranch Development Agreement. Note: the following mitigation measure numbering remains consistent with the existing certified Final EIR however, individual locations may have multiple mitigations identified in the various groupings analyzed in the TIA.

T-1(a) Intersection #1: Madonna Road & Los Osos Valley Road.

- City optimize signal timing to accommodate increased project volumes (ongoing by City)

T-1(b) Intersection #3: Madonna Road & Dalidio Drive/Prado Road.

- Extend existing westbound left turn lane on Madonna Road to Dalidio Drive/Prado Road to 310’ (Prior to Building Permits or Occupancy)
- Install 2nd westbound 310’ left turn lane on Madonna Road to Dalidio Drive/Prado Road (Prior to Building Permits or Occupancy)
- Install eastbound 250’ right turn pocket on Madonna Road to Dalidio Drive/Prado Road (Prior to Building Permits or Occupancy)

- Install 2nd northbound left shared with through-lane on Prado Road/Dalidio Drive to Madonna Road (Prior to Building Permits or Occupancy)
- Prohibit westbound U-turns on Madonna Road (Prior to Building Permits or Occupancy)
- Provide split phase operations & optimize signal timing (Prior to Building Permits or Occupancy)

T-1(c) Intersection #5: Madonna Road & U.S. 101 Southbound Ramps.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).
- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-1(d) Intersection #8: Higuera Street & South Street.

- Optimize Signal Timing (ongoing by City)

T-1(e) Intersection #9: Los Osos Valley Road & Froom Ranch Way.

- Install dedicated 230' right turn lane on northbound Froom Ranch Way approach to Los Osos Valley Road (with Froom Ranch Way bridge construction)
- Extend right turn lane on southbound Froom Ranch Way approach to Los Osos Valley Road to 110' (with Froom Ranch Way bridge construction)
- Install 2nd southbound left turn lane on Froom Ranch Way approach to eastbound Los Osos Valley Road (with Froom Ranch Way bridge construction)

T-1(f) Intersection #10: Los Osos Valley Road & Auto Park Way.

- Pay Fair Share Impact fees for Signalization (Prior to Building Permits or Occupancy)
- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).
- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-1(g) Intersection #16: S. Higuera Street & Tank Farm Road.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).

- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)
- Extend northbound right turn pocket to 230' and channelize movement (Prior to Building Permits or Occupancy)

T-1(h) Intersection #21: Prado Road/Dalidio Drive & Froom Ranch Way.

- Install multilane roundabout control (when connection is constructed)

T-1(i) Intersection #25: Prado Road/Dalidio Drive & SC Project Driveway.

- Install multilane roundabout control or restricted access (when connection is constructed)

Plan Requirements and Timing. Final design of mitigation measures to be constructed by applicant shall be approved by City, right of way dedicated to the City by applicant, constructed by applicant, and accepted by the City in accordance with the timing established above and to be executed in the San Luis Ranch Development Agreement. Payment of traffic mitigation fees shall be paid by applicant upon acceptance by the City of final design plans and in accordance with the above provisions to be executed in the San Luis Ranch Development Agreement. The travel demand management plan shall be accepted by the City in accordance with the timing established above.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area. The applicant shall fund and the City shall manage monitoring of travel demand in accordance with the final approved travel demand management plan.

Residual Impacts. Implementation of the identified mitigation measures would improve LOS at six impacted intersections to acceptable levels, so impacts on these facilities would be less than significant after mitigation. However, impacts associated with multimodal level of service standards at three impacted intersections (Madonna & U.S. 101 SB Ramp, Los Osos Valley Road & AutoPark Way, and Higuera & Tank Farm) would remain significant and unavoidable.

T-2(a) Intersection #1: Madonna Road & Los Osos Valley Road.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-2(b) Intersection #2: Madonna Road & Oceanaire Drive.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair

Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-2(c) Intersection #5: Madonna Road & U.S. 101 S.B Ramps.

- Extend northbound Madonna Road left turn lane to 150' (Prior to Building Permits or Occupancy)

T-2(d) Intersection #6: Madonna Road & U.S. 101 Northbound Ramps.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-2(e) Intersection #7: Madonna Road & Higuera Street.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-2(f) Intersection #9: Los Osos Valley Road & Froom Ranch Way.

- Install dedicated 230' right turn lane on Los Osos Valley Road approach to northbound Froom Ranch Way (with Froom Ranch Way bridge construction)
- Extend right turn lane on Los Osos Valley Road approach to southbound Froom Ranch Way to 110' (with Froom Ranch Way Bridge construction)
- Install 2nd southbound left turn lane on Froom Ranch Way approach to eastbound Los Osos Valley Road (with Froom Ranch Way bridge construction)

T-2(g) Intersection #12: Los Osos Valley Road & U.S. 101 Southbound Ramps.

- Extend off-ramp left turn pocket to 320' (Prior to Building Permits or Occupancy)

T-2(h) Intersection #13: Los Osos Valley Road & U.S. 101 Northbound Ramps.

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-2(i) Intersection #14: Los Osos Valley Road & Higuera Street.

- Extend eastbound right turn lane to 180' or as far as practical (Prior to Building Permits or Occupancy)

T-2(j) Intersection #18: Prado Road & Higuera Street.

- Install 2nd U.S. 101 northbound left turn lane (Prior to Building Permits or Occupancy)
- Extend westbound right turn pocket to 400' (Prior to Building Permits or Occupancy)

Plan Requirements and Timing. Final design of mitigation measures to be constructed by applicant shall be approved by City, right of way dedicated to the City by applicant, constructed by applicant, and accepted by the City in accordance with the timing established above and to be executed in the San Luis Ranch Development Agreement. Payment of traffic mitigation fees shall be paid by applicant upon acceptance by the City of final design plans and in accordance with the above provisions to be executed in the San Luis Ranch Development Agreement. The travel demand management plan shall be accepted by the City in accordance with the timing established above.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area. The applicant shall fund and the City shall manage monitoring of travel demand in accordance with the final approved travel demand management plan.

Residual Impacts. Implementation of the identified mitigation measures would improve capacity at five impacted intersections to acceptable levels, so impacts on these facilities would be less than significant after mitigation. However, impacts associated with capacity at six other intersections (Madonna & Los Osos Valley Road, Madonna & Oceanaire, Madonna & U.S. 101 NB Ramps, Madonna & U.S. 101 SB Ramps, Madonna & Higuera, and Los Osos Valley Road & U.S. 101 NB Ramps) would remain significant and unavoidable.

T-3(a) Segments #1 - #6: Madonna Road (Los Osos Valley Road to Higuera Street)

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).
- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)
- As part of the TDMP, consider operations and financial assessment/assistance of decreasing transit headways to 25 minutes (Prior to Building Permits or Occupancy)
- Construct parallel Class I multiuse path on Madonna between Hwy 101 and Oceanaire) and Class III Sharrows on Madonna Frontage

Road Between Oceanaire and Los Osos Valley Road (Prior to Building Permits or Occupancy)

T-3(b) Segments #7 - #8: Higuera Street (Madonna Road to Prado Road)

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)
- Pay Fair Share Costs for Construction of Class I Path Parallel to Higuera as identified in City’s Bicycle Transportation Plan (Prior to Building Permits or Occupancy)

T-3(c) Segments #13 - #17: Los Osos Valley Road (Madonna Road to Higuera Street)

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement). Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)
- Pay Fair Share Costs for Construction of Class I Path Parallel to Los Osos Valley Road as identified in City’s Bicycle Transportation Plan (Prior to Building Permits or Occupancy)

T-3(d) Segments #18 - #20: Dalidio Drive/Prado Road (Froom Ranch Way to Higuera Street)

- Construct parallel Class I multiuse paths (Concurrent with Construction/Widening of Prado Road along project frontages)

Plan Requirements and Timing. Final design of mitigation measures to be constructed by applicant shall be approved by City, right of way dedicated to the City by applicant, constructed by applicant, and accepted by the City in accordance with the timing established above and to be executed in the San Luis Ranch Development Agreement. Payment of traffic impact fees shall be paid by applicant upon acceptance by the City of final design plans and in accordance with the above provisions to be executed in the San Luis Ranch Development Agreement. The travel demand management plan shall be accepted by the City in accordance with the timing established above.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area. The applicant shall fund and the City shall manage monitoring of travel demand in accordance with the final approved travel demand management plan.

Residual Impacts. Implementation of the identified mitigation measures would improve multimodal level of service at one impacted segment to acceptable levels, so impacts

on this facility would be less than significant after mitigation. However, impacts associated with multimodal segment level of service at three other segments (Madonna Road (Los Osos Valley Road to Higuera Street), Higuera Street (Madonna Road to Prado Road), Los Osos Valley Road (Madonna Road to Higuera Street) would remain significant and unavoidable.

T-5 Froom Ranch Way Bridge Timing

- The Froom Ranch Way bridge connection shall be completed prior to any residential or non-residential building permits or occupancy permits.

Plan Requirements and Timing. Final design of mitigation measures to be constructed by applicant shall be approved by City, right of way dedicated to the City by applicant, constructed by applicant, and accepted by the City in accordance with the timing established above and to be executed in the San Luis Ranch Development Agreement.

Monitoring. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area.

Residual Impacts. Implementation of the identified mitigation measures would reduce multimodal level of service and capacity impacts to a less than significant level.

T-11(a) Northbound U.S. 101 Prado Road Off Ramp

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).
- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-11(b) Northbound U.S. 101 North of Prado Road

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).
- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

T-11(c) Northbound U.S. 101 North of Madonna Road

- Pay Fair share costs and dedicate necessary ROW for construction of the Prado Road Overpass & NB Ramps (Timing & Amount of Fair Share Payments as established in San Luis Ranch Development Agreement).

- Develop a Travel Demand Management Plan consistent with section 2.4.3 and to the satisfaction of the Public Works Director (Prior to Building Permits or Occupancy)

Plan Requirements and Timing. Payment of traffic impact fees shall be paid by applicant upon acceptance by the City of final design plans and in accordance with above provisions to be executed in the San Luis Ranch Development Agreement. The travel demand management plan shall be accepted by the City in accordance with the timing established above.

Monitoring. City Public Works staff shall confirm payment of applicable fees. The applicant shall fund and the City shall manage monitoring of travel demand in accordance with the final approved travel demand management plan.

Residual Impacts. Implementation of the identified mitigation measures would lessen project volumes on the Highway 101 mainline and mitigate interim impacts to the maximum extent feasible. However, impacts associated with mainline Highway 101 operations would remain significant and unavoidable.

Mitigation Measures for Impacts T-4, T-6, T-7, T-8, T-9 and T-10 remain unchanged for the revised project from those included in the July 2017 certified Final EIR.

2.4.3 Travel Demand Management Plan

Under existing and near-term conditions buildout of the project prior to construction of the Prado Road Interchange would result in several temporary Class I significant and unavoidable impacts. Mitigation requiring fixed sequential phasing dependent on the Prado Road interchange, which is outside the control of the applicant, would make the development project infeasible due to the associated financing constraints. Therefore, considering the interim nature of the impacts, mitigation to the maximum extent feasible, and as described previously, shall include development & implementation of a robust Travel Demand Management plan to reduce vehicular trips and minimize impacts until the Prado Road Overpass is completed. The key components of a Travel Demand Management Plan would include the following.

Non-Residential Trip Reduction Program

Non-Residential trip reduction programs shall be targeted primarily at employees since their travel behavior is easier to influence than customers. A separate customized trip reduction should be developed for each non-residential use to maximize effectiveness and include but not be limited to the following.

- A travel demand coordinator that will implement and monitor the program. The travel demand coordinator will be responsible for preparing quarterly reports to the City and working with employees to minimize automobile travel.
- Participation in SLO Regional Rideshare's Commute Survey and Trip Reduction Plan program. This program is provided at no cost to the employer and results in a Trip Reduction Plan prepared by Rideshare staff.

- Create an on-site bike share program open to employees and residents of the project. Monitor usage and supply bicycles as needed to accommodate demand.
- Provide close-in parking reserved for carpools and vanpools.
- Provide transit pass subsidies to employees.
- Provide on-site bike lockers and showers, on-site bicycle repair station, and secured bicycle parking.
- Work with Fun Ride and/or Zip Car to provide permanent car sharing parking spot(s) on site.

Residential Trip Reduction Program

- Consider unbundled parking spaces from multi-family residential units. This enables households that do not use parking spaces to save on housing costs. Offer reserved parking spaces for lease or sale to households who need them. Monitor and adjust the program as needed to ensure there is no parking spillover into nearby areas.
- Create a bus pass subsidy program and/or shuttle bus to reduce vehicle trips.
- Consider operations and financial assessment/assistance of decreasing transit headways to 25 minutes.
- Provide bicycles as part of the home purchase.

Implementing these TDM measures would reduce, but not eliminate, previously identified project transportation impacts. The level of impacts as identified in the certified Final EIR remain unchanged.