

3.7 Transportation

3.7.1 Introduction

This section of the SEIR describes the traffic conditions in the general vicinity of the proposed Project. The section also analyzes the potential traffic impacts that could occur with implementation of the Project. Information contained in this section is summarized from the *Le Conte Battery Energy Storage Project Traffic Study – Trip Generation Review* prepared by KOA Corporation (KOA, 2019). This document is included in Appendix G of the Technical Appendices of this SEIR.

3.7.2 Environmental Setting

3.7.2.1 Existing Street System

The existing roadway system and classifications are described below based on the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). (Excerpts from the Element are included in Appendix G of the Draft Traffic Impact Analysis of the 2011 FEIR.

- **Interstate 8 (I-8)** is constructed as a four-lane divided roadway with two lanes in each direction between Dunaway Road and Imperial Avenue.
- **Brockman Road (S 30)** is currently a paved roadway constructed as a two lane un-divided roadway between McCabe Road and SR 98. This segment of Brockman Road has a year 2003 classification of Major Collector in the Imperial County Circulation and Scenic Highways Element.
- **Drew Road (S 29)** is currently a paved roadway constructed as a two lane un-divided roadway between I-8 and SR 98. This segment of Drew Road has a year 2003 classification of Prime Arterial in the Imperial County Circulation and Scenic Highways Element.
- **Ferrell Road** is currently a paved roadway constructed as a two lane un-divided roadway between Kubler Road and SR 98. This segment of Ferrell Road has a year 2003 classification of Major Collector in the Imperial County Circulation and Scenic Highways Element.
- **Fisher Road** does not have a paved surface. However, there is generally sufficient room for two lanes of traffic between Drew Road and Pulliam Road. Fisher Road has a year 2003 classification of Minor Collector in the Imperial County Circulation and Scenic Highways Element.

- **Forrester Road (S 30)** is currently a paved roadway constructed as a two lane un-divided roadway between I-8 and McCabe Road. This segment of Forrester Road has a year 2003 classification of Prime Arterial in the Imperial County Circulation and Scenic Highways Element.
- **Kubler Road** is currently a paved roadway constructed as a two lane un-divided roadway between Drew Road and Ferrell Road. This segment of Kubler Road has a year 2003 classification of Minor Collector in the Imperial County Circulation and Scenic Highways Element.
- **McCabe Road** is currently a paved roadway constructed as a two lane un-divided roadway between Brockman Road and Forrester Road. This segment of McCabe Road has a year 2003 classification of Major Collector in the Imperial County Circulation and Scenic Highways Element.
- **Pulliam Road** from Kubler Road to SR 98 has a paved surface and is currently constructed as a two lane un-divided roadway. Pulliam Road from Fisher Road to Kubler Road does not have a paved surface; however, there is generally sufficient room for two lanes of traffic. The segment of Pulliam Road between Fisher Road and SR 98 has a year 2003 classification of Minor Collector in the Imperial County Circulation and Scenic Highways Element.
- **Rockwood Road** is currently a paved roadway constructed as a two lane un-divided roadway between Kubler Road and SR 98. This segment of Rockwood Road has a year 2003 classification of Minor Collector in the Imperial County Circulation and Scenic Highways Element.
- **State Route (SR 98)** is currently a paved road constructed as a two lane un-divided roadway between Drew Road and Dogwood Road. This segment of SR 98 has a year 2003 classification of State Highway in the Imperial County Circulation and Scenic Highways Element.

3.7.2.2 Level of Service

3.7.2.2.1 Intersections

Traffic conditions on most roadway facilities are analyzed using the principles of the specific analysis methods contained in the latest version (2010) of the Highway Capacity Manual (HCM), a publication of the Transportation Research Board, a research agency affiliated with the Federal Government. Chapter 18 of the HCM 2010 is devoted to analysis of signalized intersections. The methodology in the HCM 2010

for signalized intersections is based upon measurements or forecasts of control delay for traffic utilizing all approaches to the intersection.

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the 2010 Highway Capacity Manual unsignalized intersection analysis methodology. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The analysis of peak hour intersection conditions was conducted using the Synchro 9 software program developed by Trafficware. Results are displayed in terms of control delay (seconds per vehicle) and an equivalent LOS as shown in Table 3.7-1.

Table 3.7-1: LOS Criteria for Unsignalized and Signalized Intersections

Level of Service	Un-Signalized Average Control Delay (seconds/vehicle)	Signalized Average Control Delay (seconds/vehicle)
A	<10	<10
B	>10 and <20	>10 and <15
C	>20 and <35	>15 and <25
D	>35 and <55	>25 and <35
E	>55 and <80	>35 and <50
F	>80	>50

Source: Highway Capacity Manual 2010

3.7.2.2.2 Roadway Segment

Roadway segment LOS standards and thresholds provide the basis for analysis of roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. The County of Imperial level of service analysis was performed by utilizing the Circulation and Scenic Highways Element, January 2008. The thresholds for each facility type are presented in Table 3.7-2.

Table 3.7-2: County of Imperial ADT Level of Service Volumes by Roadway Type

Circulation Element Road Classification	Cross Section	LOS A	LOS B	LOS C	LOS D	LOS E
Expressway	154/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	64/84	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	40/70	1,900	4,100	7,100	10,900	16,200

Source: Imperial County Circulation and Scenic Highways Element 2008 and Imperial County Long Range Transportation Plan 2013 Update

Notes: *Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

3.7.2.2.3 Freeway Segment

The trips generated by the Project that would be assigned to a freeway did not meet the Caltrans thresholds requiring a traffic study therefore a freeway segment analysis was not completed. The Project falls under the 1 to 49 trip threshold for trips assigned to a state freeway. The existing ADT on I-8 at Drew Road is 16,300 (Caltrans 2017 count) which equates to a LOS A or B and as such a traffic study of Caltrans freeway segments is not required.

3.7.2.3 Existing Traffic Volumes

This section documents the Existing Year Conditions in the study area. The Existing Year is taken to be 2019 for analysis purposes based on existing traffic counts taken in May 2019. The discussion presented here is limited to segments and intersections in the Project's vicinity. Each of the key roadways, as well as associated study intersections within the study area, are discussed below.

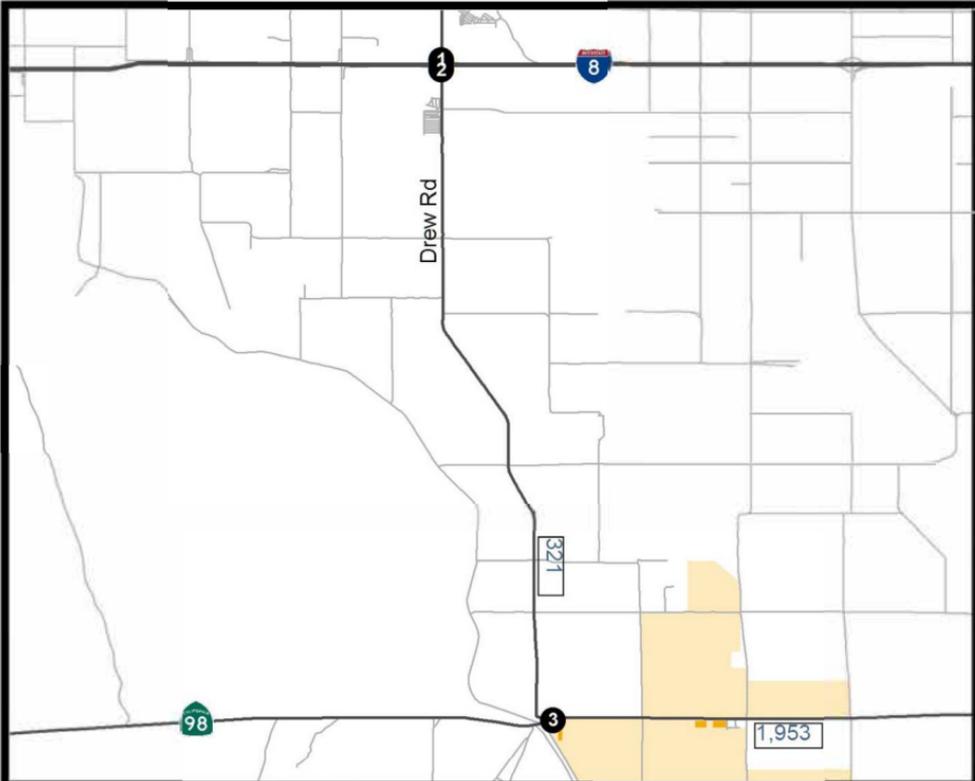
Existing turning movement counts at the study intersections and segment counts were conducted on Wednesday, May 22, 2019. The existing condition reflects those land uses that were built and occupied at the time of the traffic counts and represent a typical weekday commute period. Intersection turning movement counts are provided in Appendix G. Existing segment counts, and also weekday AM and PM peak hour traffic volumes are shown on **Figure 3.7-1**.

3.7.2.3.1 Existing Year (2019) Conditions

This section documents the existing traffic conditions of study area segments and intersections.

3.7.2.3.2 Segments

Roadway segment analysis was conducted for the study area's specified segments. Using ADT counts, KOA was able to determine the existing level of service for the designated roadway segments. Table 3.7-3 below displays these levels of service.



Legend

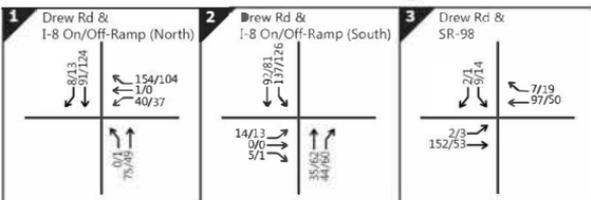
-  Intersection
-  Road
-  Proposed Battery Energy Storage System
-  Centinela Solar Energy Site

123 - Daily Traffic

123/456 - AM/PM Volumes



0 5,000 10,000
Feet



Source: KOA, 2019



Figure 3.7-1
Existing Year Volumes

Table 3.7-3: Existing Year (2019) Conditions Roadway Segment Analysis

Roadway Segment	Lanes/Class	LOS E Capacity	Existing		
			ADT	V/C	LOS
Drew Road	2-Ln Collector	16,200	321	0.02	A
SR 98	State Hwy (2 U)	20,900	1,953	0.09	A

Source: KOA, 2019

3.7.2.3.3 Intersections

An intersection LOS analysis was prepared for the existing (without-Project) condition and is summarized in Table 3.7-4 which indicates that there are two study area intersections. Detailed LOS worksheets are included in Appendix G.

Table 3.7-4: Existing Year (2019) Conditions Peak Hour Intersection Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Drew Road / I-8 WB Ramps	MSSC	A	9.1	A	8.9
2	Drew Road / I-8 EB Ramps	MSSC	B	10.1	B	12.7
3	Drew Road / SR-98	MSSC	A	8.9	A	9.5

Source: KOA, 2019

Delay is in seconds/vehicle. LOS = Level of Service, MSSC = Minor street stop control

3.7.3 Regulatory Setting

3.7.3.1 Federal

There are no federal plans, policies, regulations, or laws related to traffic and transportation that apply to the Project or alternatives under consideration.

3.7.3.2 State

3.7.3.2.1 California Department of Transportation

The California Department of Transportation (Caltrans) has jurisdiction over state highways and establishes maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. Transportation and traffic impacts are regulated by Caltrans codes pertaining to licensing, size, weight, and load of vehicles operated on highways (California Vehicle Code (CVC), division 15, chapters 1 through 5) as well as the Street and Highway Code (Code §§660-711, 670-695) which requires permits from Caltrans for any roadway encroachment during truck transportation and delivery. The Street and Highway Code includes regulations for the care and protection of state and county highways and provisions for the issuance of written permits and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

3.7.3.3 Local

3.7.3.3.1 County of Imperial General Plan

The Imperial County General Plan Circulation and Scenic Highways Element is intended to provide a plan to accommodate a pattern of concentrated and coordinated growth, providing both, regional and local linkage systems between unique communities, and its neighboring metropolitan regions while protecting and enhancing scenic resources within both rural and urban scenic highway corridors. The Imperial County General Plan Circulation and Scenic Highways Element policies related to the proposed Project are outlined below. Table 3.7-5 summarizes the proposed Project's consistency with the applicable General Plan policies.

While this SEIR analyzes the proposed Project's consistency with the General Plan pursuant to CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

Table 3.7-5: Imperial County General Plan Consistency Analysis

General Plan Policies	General Plan Consistency	Analysis
Circulation and Scenic Highway Element		
Safe, Convenient, and Efficient Transportation System		
<p>Goal 1: The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.</p>	Yes	<p>Construction and operation of the proposed Project would utilize County roadways for transport of materials and workers. Compliance with local regulations would minimize impacts to County roads and require that roads damaged by Project-related traffic be repaired. Therefore, the proposed Project is consistent with this goal.</p>
<p>Objective 1.1: Maintain and improve the existing road and highway network, while providing for future expansion and improvement based on travel demand and the development of alternative travel modes.</p>	Yes	<p>Compliance with local regulations would reduce impacts to roads and address roadway damage resulting from construction-related traffic. This is consistent with the County's objective to maintain roadways. Therefore, the proposed Project is consistent with this objective.</p>

General Plan Policies	General Plan Consistency	Analysis
<p>Objective 1.2: Require a traffic analysis for any new development which may have a significant impact on County roads. A traffic analysis may not be necessary in every situation, such as when the size or location of the project will not have a significant impact upon and generate only a small amount of traffic. Also, certain types of projects, due to the trip generation characteristics, may add virtually no traffic during peak periods. These types of projects may be exempt from the traffic analysis requirements. Whether a particular project qualifies for any exemption will be determined by the Department of Public Works Road Commissioner.</p>	Yes	<p>A Draft Traffic Impact Analysis was prepared for the proposed Project by KOA Corporation (Appendix G). The analysis examined Project trip generation of both the construction and operational phases. Therefore, the proposed Project is consistent with this objective.</p>

3.7.4 Environmental Consequences

3.7.4.1 Thresholds of Significance

Based on criteria derived from Appendix G of the CEQA Guidelines, the Project would result in a significant transportation impact if the Project were to:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- d) Result in inadequate emergency access.

The significance criteria for traffic impacts are based on the ICDS standard as outlined in the “Circulation Element”. *“The County’s goal for an acceptable traffic service standard on an Average Daily Traffic (ADT) basis and during AM and PM peak periods for all County-Maintained Roads shall be LOS C for all street segment links and intersections.”*

- 1) Strive to maintain LOS “C” or better on arterial and collector streets, at all intersections, and on principal arterials during the hour of highest volume during the AM hours and also during the PM hours. Imperial County has established LOS “C” as the general threshold for acceptable overall traffic operations for both signalized and un-signalized intersections.
- 2) Accept LOS “D” after finding that there is no practical and feasible way to mitigate to LOS “C;” and the development causing the lower level of service provides a clear, overall public benefit.
- 3) For segments that operate at LOS D or lower, an incremental increase in v/c of greater than 0.02 is considered to be a significant impact. For intersections that operate at LOS D or lower, an incremental increase in vehicle delay of 2.0 seconds or greater is considered to be a significant impact.

3.7.4.2 Issues Scoped Out

Appendix Criterion “c” was scoped out as part of the CEQA Appendix G Environmental Checklist Form. Criterion “c” was scoped out because no changes in the existing circulation network or access will occur as a result of implementation of the Project. Based on the Project’s location in a rural portion of Imperial County with low traffic volumes, it is not considered to increase hazards due to a geometric design or an incompatible use with surrounding agricultural land. Therefore, no impact is anticipated in association with hazards due to a design feature or incompatible uses.

3.7.4.3 Methodology

3.7.4.3.1 Imperial County Department of Public Works Traffic Study and Report Policy: Study Area Criteria

The study area for traffic impact analyses was established by the County of Imperial Department of Public Works Traffic Study and Report Policy dated March 12, 2007 (revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007, page 14) as follows:

“The study area for the project will be expected to encompass an adequate surrounding area to ensure that all impacts are identified to a sufficient extent that any mitigation measures, regardless of importance are shown, e.g. stop signs, yield signs, etc.”

The study area for this Project includes those locations that likely will be affected by this Project. The Project study area was determined based on similar solar projects in the same general area. The specific study area consists of the following intersections:

- 1) SR-98/Drew Road
- 2) Drew Road/I-8 WB Ramps
- 3) Drew Road / I-8 EB Ramps
- 4) Project Access Driveway/SR 98

The study area also includes the following study segments:

- 1) Drew Road from Kubler Road to SR-98
- 2) SR-98 Drew Road to Ferrell Road

3.7.4.3.2 Scenario Criteria

The proposed Project's traffic impacts were analyzed in the scenarios as listed below. The traffic analysis included intersections and roadway segments within Imperial County and Caltrans District 11 in the following scenarios to determine the potential impacts:

- Existing Year (2019) Conditions
- Existing Year (2019) + Project Conditions
- Existing Year (2019) + Project + Cumulative Conditions
- Near-Term Year 2021
- Near-Term Year 2021 + Project Conditions
- Near-Term Year 2021 + Project + Cumulative Conditions
- Decommissioning Year + Project Conditions

3.7.4.3.3 Trip Distribution and Assignment

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that project-related traffic will likely affect. Trip distribution and assignment information can be estimated from observed traffic patterns, experience or through use of a computerized travel forecast model. Once the proposed developments trips have been estimated, they are assigned to the study area street network. The trip distribution was estimated based on using logical travel paths between the

project and local origins. The trip distribution for the project-related trips is shown in Figure 3.7-2. Project generated trips are shown in Figure 3.7-3.

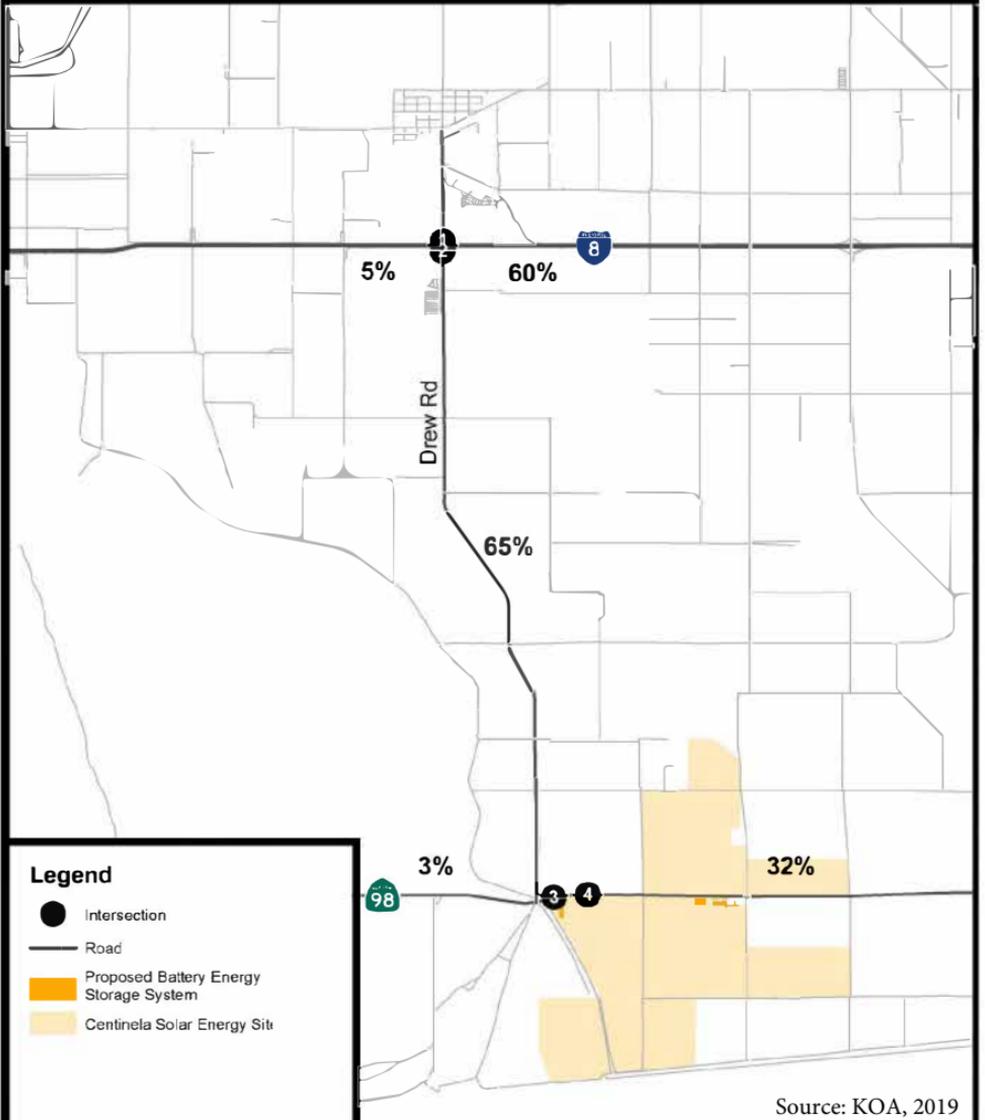
3.7.5 Project Impacts

The following subsections evaluate the significance of various potential Project impacts with respect to the criteria outlined above.

Impact 3.7-1: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction, Operation and Decommissioning Impacts

There will be temporary traffic generation during the short-term construction and decommissioning phase of the Project. A maximum of 50 employees will be on-site during peak construction (battery installation and connection phase), and it is anticipated that a portion of these employees will carpool (two workers per vehicle). It is assumed that workers will commute during the AM and PM peak hours. It is assumed that any off-site trips for meals will be taken in the hours outside of AM or PM peak commute times. The Project facility will be remotely monitored and have no daily staff on-site. Routine unscheduled security rounds and maintenance trips will be made, though they will be negligible (anticipated 2 trips per week) few. Therefore, operational traffic will not be substantial and will not create delays in the regional or local circulation system, nor will it not conflict with Imperial County standards. Access to and from the site will be provided from an existing driveway along SR 98 to the existing solar farm east of Drew Road. The primary driveways serving the site are on SR 98. The volumes associated with the development are such that peak hour volumes do not warrant the need for additional storage lanes or storage length for entrances along SR 98. There is no need for storage lanes for vehicles exiting the property. The existing parking demand for up to 50 vehicles and for construction equipment will be provided on-site. This impact is anticipated to be less than significant.



Source: KOA, 2019

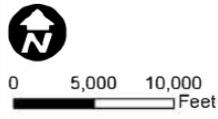
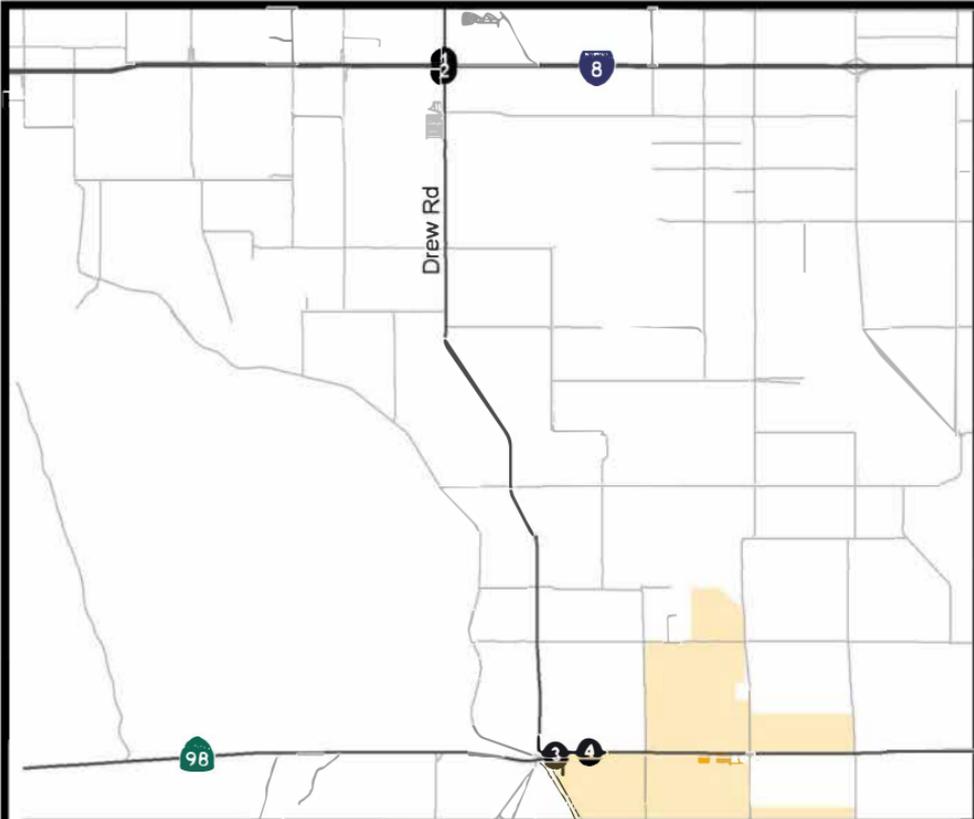


Figure 3.7-2
Trip Distribution



Legend

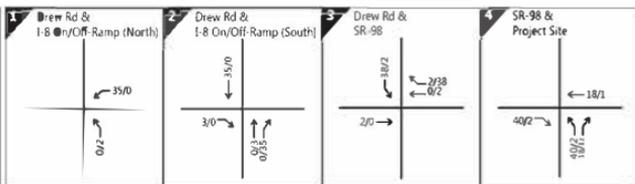
- Intersection
- Road
- Proposed Battery Energy Storage System
- Centinela Solar Energy Site

123 - Daily Traffic

123/456 - AM/PM Volumes



0 5,000 10,000
Feet



Source: KOA, 2019

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Figure 3.7-3
Project Generated Trips

The Project will be required to comply with all local Imperial County requirements. A traffic control plan will be submitted at least 30 days prior to the start of any construction to Caltrans District 11, as required. This plan will outline any detours that would be used during construction, including routes and signage. On-site traffic surfaces will meet Department of Public Works and Fire/OES Standards as well as those of the Air Pollution Control District (APCD) (per Imperial County Code of Ordinances, Chapter 12.10.020 A). All permanent structures at the Project site will be located outside of road ROW. No equipment or appurtenances will pose a traffic hazard.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Impact 3.7-2: Would the Project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Overall, during the construction phase, at peak construction (battery installation and connection phase), the Project is anticipated to generate a net total of 128 trip ends per day with 61 AM peak hour trips and 61 PM peak hour trips. When operating, the Project was assumed to generate approximately 2 trips per week. The Project is not expected to create significant impacts at study intersections or study segments. All study intersections and segments were found to operate at LOS C or better for all of the traffic scenarios analyzed.

Construction and Operational Impacts

The Project trip generation consists of a construction phase and operations phase. The construction phase will have the highest intensity traffic demand followed by an operations phase with significantly fewer trips. For the operations phase, when construction is complete and the facility is in operation, the facility will be unmanned and will only be visited sporadically by maintenance and inspection personnel. For purposes of this analysis it was assumed that during operations (approximately 2 trips per week would be generated).

Construction activities are expected to take approximately 12 months. The on-site construction workforce will consist of laborers, craftspeople, supervisory personnel, and support personnel. Construction activities include site preparation (including grading), digging foundations, excavating trenches, and conduit installation. A concrete truck will also be utilized during construction activities to pour concrete

foundations. All equipment and material will be staged on the Project site or on the adjacent CSE facility site.

The construction workforce will include an average 15 people on-site, with a peak of 50 people that will occur during the battery installation and connection phase. Work hours will be between the hours of 8:00 a.m. and 5:00 p.m. Monday through Saturday. The trips generated during the peak construction period are shown in Table 3.7-6. Truck trips have been converted into passenger equivalent volumes (PCE) using a PCE factor of 2.0. The trips generated during the building and facilities construction phase are less than for the installation and connection phase and are shown in Table 3.7-7.

Table 3.7-6: Construction Trip Generation – Peak Labor Construction Phase

	Intensity	Unit	Daily Rate (1)	Daily Trips		AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Peak Construction Workers	50.0	Employee	2	100	Rate	1.00	100%	0%	1.00	0%	100%
					Trips	50	50	0	50	0	50
Equipment Deliveries and Construction Truck Trips (PCE)	85.0	1,000 sf.	0.1639	128	Rate	0.13	75%	25%	0.13	25%	75%
					Trips	11	8	3	11	3	8
Total					Trips	61	58	3	61	3	58

Source (Trip Rate): California Emissions Estimator Model (CalEEMod) Appendix A Calculation Details for CalEEMod, p.13.

<http://www.aqmd.gov/docs/default-source/calceemod/calceemod-appendixa.pdf?sfvrsn=2>

Table 3.7-7: Construction Trip Generation – Non-Peak Labor Construction Phase

	Intensity	Unit	Daily Rate (1)	Daily Trips		AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Construction Workers	15.0	Employee	2	Employee	Rate	1.00	25%	75%	1.00	63%	37%
					Trips	15	4	11	15	9	6
Equipment Deliveries and Construction Truck Trips (PCE)	85.0	1,000 sf.	0.1639	1,000 sf.	Rate	0.13	75%	25%	0.13	25%	75%
					Trips	11	8	3	11	3	8
Total					Trips	26	12	14	26	12	14

Source (Trip Rate): California Emissions Estimator Model (CalEEMod) Appendix A Calculation Details for CalEEMod, p.13.

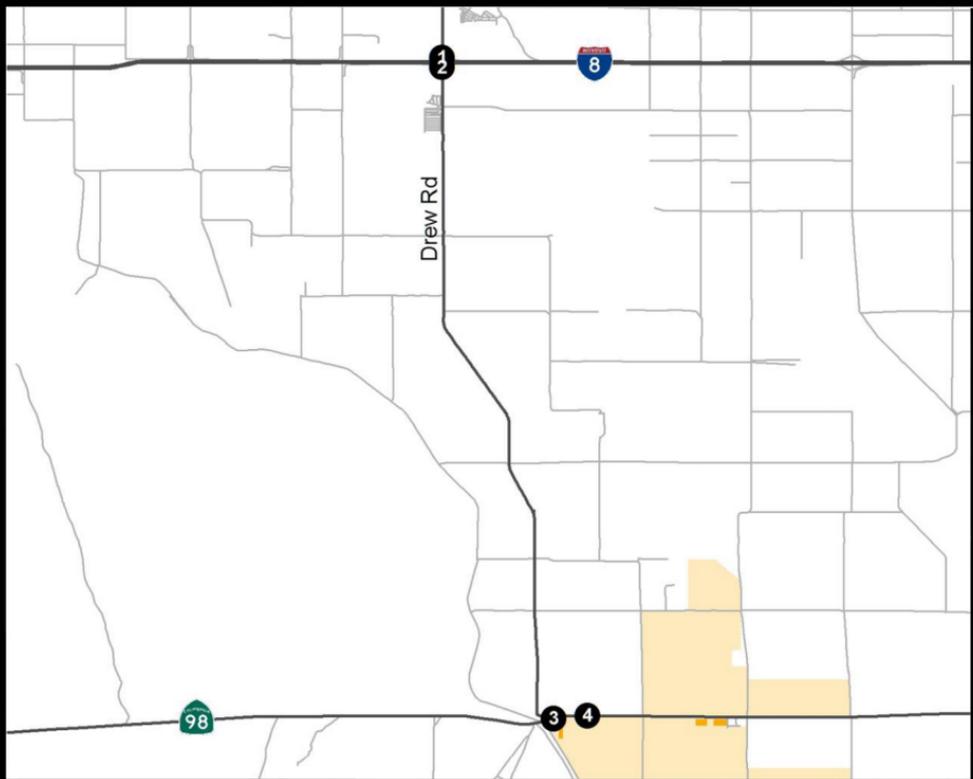
<http://www.aqmd.gov/docs/default-source/calceemod/calceemod-appendixa.pdf?sfvrsn=2>

Existing with Project Conditions

This section documents the addition of construction traffic onto year 2019 conditions to document the scenario if the Project was constructed immediately over 12 months. **Figure 3.7-4** shows the Existing with Construction Project traffic volumes in the study area.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Level of service for the designated roadway segments was determined using ADT counts. Table 3.7-8 below displays these levels of service.

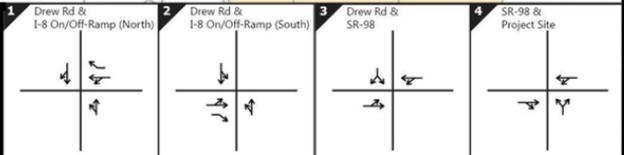


Legend

-  Intersection
-  Road
-  Proposed Battery Energy Storage System
-  Centinela Solar Energy Site

123 - Daily Traffic

123/456 - AM/PM Volumes



Source: KOA, 2019



0 5,000 10,000
Feet

Graphic created by KOA, 2019



Figure 3.7-4
Existing Year with Project
Hour Volumes

Table 3.7-8: Existing Year (2019) with Project Conditions Roadway Segment Analysis

Roadway Segment	Lanes/Class	LOS E Capacity	Existing		
			ADT	V/C	LOS
Drew Road	2-Ln Collector	16,200	404	0.02	A
SR 98	State Hwy (2 U)	20,900	1,994	0.10	A

Source: KOA, 2019

Table 3.7-9 displays the operation at each intersection with the Project traffic added to the Existing Year scenario. Intersection LOS calculations are shown in Appendix G.

Table 3.7-9: Existing Year (2019) with Project Conditions Peak Hour Intersection Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Drew Road / I-8 WB Ramps	MSSC	A	10.2	A	9.7
2	Drew Road / I-8 EB Ramps	MSSC	B	11.9	B	12.7
3	Drew Road / SR-98	MSSC	A	9.5	B	10.1
4	Site Driveway / SR 98	MSSC	A	7.5	B	10.4

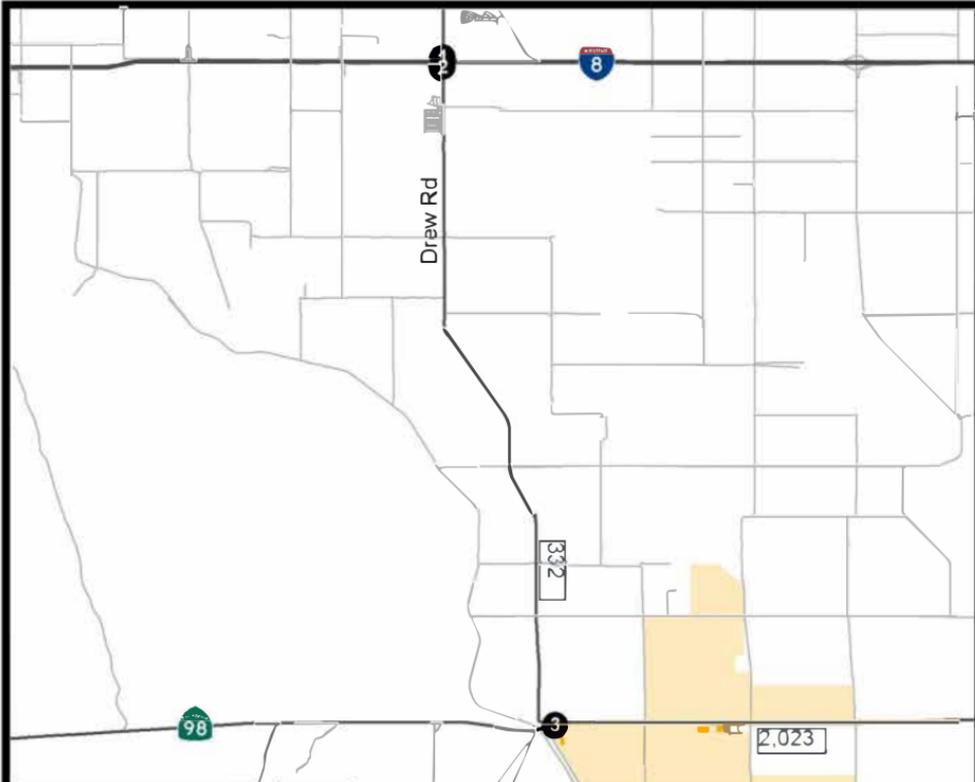
Source: KOA, 2019

Delay is in seconds/vehicle. LOS = Level of Service, MSSC = Minor street stop control

Opening Year 2021 Conditions

This section documents the analysis for the Project Completion Year conditions. This scenario considers the traffic conditions at the time that the proposed development is completed by increasing the existing traffic counts by an ambient growth rate and cumulative projects. Projected Project only volumes are then added to create the 2021 Baseline with Project Scenario. It is anticipated that the Project will be completed in Year 2021. An annual ambient growth of 1.8% was utilized to account for traffic growth between 2019 and 2021.

The growth rate is based on the California Economic Forecast California County-Level Economic Forecast 2015-2040, dated September 2015 documents an average annual growth factor of 1.8 percent from 2015 to 2020 for Imperial County. Year 2021 traffic data was obtained by factoring the 2019 traffic counts by the application of the 1.8 percent annual growth (3.6 percent total). **Figure 3.7-5** illustrates the anticipated Project Completion Year background volumes.



Legend

- Intersection
- Road
- Proposed Battery Energy Storage System
- Centinela Solar Energy Site

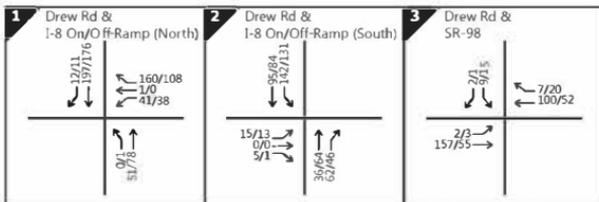
123 - Daily Traffic

123/456 - AM/PM Volumes



0 5,000 10,000
Feet

Graphic created by KOA, 2019



Source: KOA, 2019

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Figure 3.7-5
Project Opening
Year Volumes

Opening Year Conditions

This section documents the opening year traffic conditions of study area segments and intersections.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using ADT counts, the opening year level of service was determined for the designated roadway segments. Table 3.7-10 below displays these levels of service.

Table 3.7-10: Existing Year (2019) Conditions Roadway Segment Analysis

Roadway Segment	Lanes/Class	LOS E Capacity	Existing		
			ADT	V/C	LOS
Drew Road	2-Ln Collector	16,200	333	0.03	A
SR 98	State Hwy (2 U)	20,900	20,900	0.13	A

Source: KOA, 2019

Intersections

An intersection LOS analysis was prepared for the opening year (without-Project) condition and is summarized in Table 3.7-11. Detailed LOS worksheets are included in Appendix G.

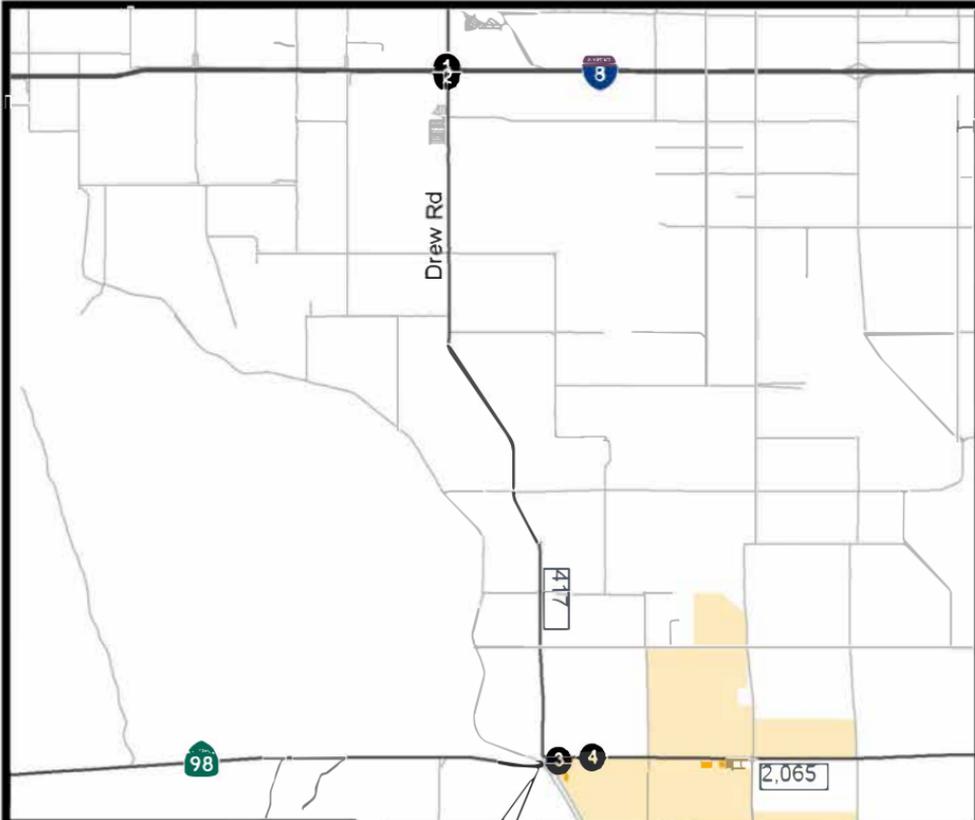
Table 3.7-11: Opening Year Peak Hour Intersection Analysis without Project

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Drew Road / I-8 WB Ramps	MSSC	A	9.81	A	9.6
2	Drew Road / I-8 EB Ramps	MSSC	B	12.3	B	13.2
3	Drew Road / SR-98	MSSC	A	9.4	B	10.0

Source: KOA, 2019

Opening Year with Project Conditions

This section documents the addition of construction traffic onto opening conditions to document the scenario if the Project is constructed as planned in the year 2021. **Figure 3.7-6** shows the Opening Year with Construction Project traffic volumes in the study area.



Legend

-  Intersection
-  Road
-  Proposed Battery Energy Storage System
-  Centinela Solar Energy Site

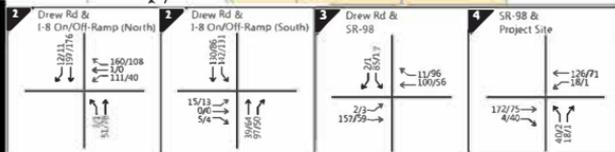
123 - Daily Traffic

123/456 - AM/PM Volumes



0 5,000 10,000
Feet

Graphic created by KOA, 2019



Source: KOA, 2019

 **BURNS
& MCDONNELL**

Figure 3.7-6
Project Opening Year
with Project Volumes

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using average ADT counts, the level of service was determined for the designated roadway segments. Table 3.7-12 below displays these levels of service.

Table 3.7-12: Opening Year Peak Hour Intersection Analysis

#	Roadway Segment	Lanes/Class	LOS E Capacity	AM Peak Hour		
				ADT	V/C	LOS
1	Drew Road	2-LN Collector	16,200	416	0.03	A
2	SR 98	State Hwy (2 U)	20,900	2,065	0.10	A

Source: KOA, 2019

An intersection LOS analysis was prepared for the Opening Year with Project condition and is summarized in Table 3.7-13. The table indicates that there are no study area intersections would operate at an unacceptable LOS (i.e., LOS D or worse) during the peak AM. or PM hours. Detailed LOS worksheets are included in Appendix G.

Table 3.7-13: Opening Year with Project Peak Hour Intersection Analysis

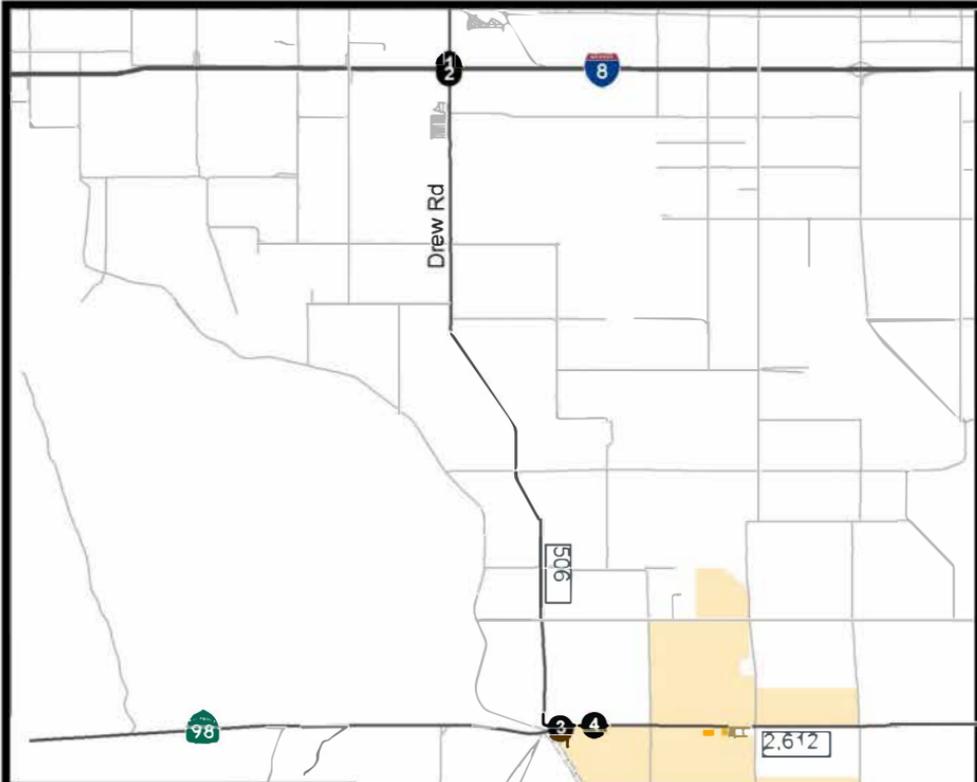
#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Drew Road / I-8 WB Ramps	MSSC	B	10.5	A	9.6
2	Drew Road / I-8 EB Ramps	MSSC	B	12.3	B	13.2
3	Drew Road / SR-98	MSSC	A	9.7	B	10.2
4	Site Driveway / SR 98	MSSC	A	7.5	B	10.4

Source: KOA, 2019

Note: 1 = Delay is in seconds/vehicle, 2 = Level of Service, * delay greater than 180 seconds

Decommission Year (2046) with Project

The Project is anticipated to be in operations for 25 years. This sets the Project decommission year at 2046. This scenario represents year 2046 traffic with Project conditions. This scenario considers the traffic conditions with an approximate 25-year horizon by increasing the existing traffic counts by the ambient growth rate. Projected Project only volumes are then added to create the Horizon Year (2040) with Project Scenario. An annual ambient growth of 1.0% was utilized to account for traffic growth between 2019 and 2046. **Figure 3.7-7** on the next page illustrates the Year 2046 plus Project peak hour volumes.



Legend

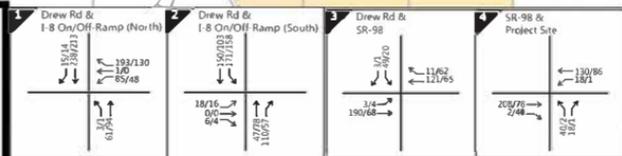
- Intersection
- Road
- Proposed Battery Energy Storage System
- Centinela Solar Energy Site

123 - Daily Traffic
 123/456 - AM/PM Volumes



0 5,000 10,000
 Feet

Graphic created by KOA, 2019



Source: KOA, 2019



Figure 3.7-7
 Decommission Year Volumes

Segments

Roadway segment analysis was conducted for the study area's specified segments. Level of service for designated roadway segments as determined using ADT counts. Table 3.7-14 displays these levels of service.

Table 3.7-14: Opening Year Peak Hour Intersection Analysis

#	Roadway Segment	Lanes/Class	LOS E Capacity	AM Peak Hour		
				ADT	V/C	LOS
1	Drew Road	2-LN Collector	16,200	416	0.03	A
2	SR 98	State Hwy (2 U)	20,900	2,065	0.10	A

Source: KOA, 2019

Intersections

An intersection LOS analysis was prepared for the Horizon Year (without Project) condition and is summarized in Table 3.7-15 which indicates that there are no study area intersections currently operating at an unacceptable LOS (i.e., LOS D or worse) during the peak hours. Detailed LOS worksheets are included in Appendix G.

Table 3.7-15: Decommission Year Plus Project Peak Hour Intersection Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Drew Road / I-8 WB Ramps	MSSC	B	11	A	9.9
2	Drew Road / I-8 EB Ramps	MSSC	C	17.1	B	14.8
3	Drew Road / SR-98	MSSC	A	9.8	B	11.0
4	Site Driveway / SR 98	MSSC	A	10.2	B	10.7

Source: KOA, 2019

Note: 1 = Delay in seconds/vehicle, 2 = Level of Service,

Mitigation Measures

The Project is not expected to create significant impacts at study intersections or study segments, therefore no mitigation measures are required. All study intersections and segments were found to operate at LOS C or better for all of the traffic scenarios analyzed.

Level of Significance After Mitigation

Not applicable.

Impact 3.7-3: Would the Project result in inadequate emergency access?

Access to the CSE project site is via US Interstate 8 (I-8), SR 98 and local roads. From I-8, the proposed Project can be accessed via Drew Road or Brockman Road. All entrances to the CSE facility site parcels use local roads with the exception of one parcel south of SR 98 and west of the Mount Signal Drain that access the site off of SR 98. All weather, 24-foot wide, gravel roads are located inside the perimeter of each fenced existing CSE solar field area. Interior gravel roads 20-foot wide spaced no more than 500-feet apart align in either a north to south or east to west direction through the solar fields. This access also serves the CSE substation. The Imperial County Fire Department will require that all fire apparatus access roads are properly designed to accommodate emergency access. Also, a traffic control plan will be submitted at least 30 days prior to the start of any construction to Caltrans District 11 (as required). This plan will outline any detours that would be used during construction, including routes and signage. Therefore, impacts associated with emergency access are anticipated to be less than significant.

Mitigation Measures

As required, a traffic control plan shall be submitted as part of the Project.

Level of Significance After Mitigation

Impacts to emergency access are considered less than significant.