

November 20, 2014
B42083

Dan Klausenstock, PE
NV5/Nolte
15070 Avenue of Science, Suite 100
San Diego, CA 92128

SUBJECT: TRAFFIC STUDY AND RESPONSE TO CPUC COMMENTS FOR SDG&E SX-PQ SEGMENT B - TRANSMISSION UNDERGROUNDING CONSTRUCTION ALONG CARMEL VALLEY RD, CITY OF SAN DIEGO

Dear Mr. Klausenstock:

KOA Corporation has prepared this response to comments from the California Public Utilities Commission (CPUC) "Request for additional data: Data needs for the Sycamore-Peñasquitos 230 Kilovolt Transmission Line Project Application (A. 14-04-011)," for the Segment-B portion of transmission line undergrounding in the area of Carmel Valley Rd in the Torrey Highland/Black Mountain Ranch communities. The following are the CPUC comments and a response index to our attached findings in the form of maps and tables:

CPUC DR#2, Comment #117 (PEA DR#1, Item 54):

Provide additional information regarding roads in the project area to define existing traffic volumes, vehicle speeds, number of lanes, and parking. The PEA did not provide adequate information to characterize baseline traffic on arterial, collector, or local roadways. The following information is needed to complete the analysis:

Comment 1) Speed limit along underground segment of project

KOA Response: See Table I "Existing Roadway Segments Summary"

Comment 2) Current bi-directional ADT counts on all legs of the following intersections:

- a) Black Mountain Road / Carmel Valley Road

- b) Camino Del Sur / Carmel Valley Road
- c) Black Mountain Park Driveway / Carmel Valley Road

KOA Response: See Table 2 “Existing Roadway Segment Conditions”

Comment 3) Peak hour turning movement counts, including bikes and pedestrians at the following roads:

- a) Black Mountain Road / Carmel Valley Road
- b) Camino Del Sur / Carmel Valley Road
- c) Black Mountain Park Driveway / Carmel Valley Road

KOA Response: See Figures 1-2 and 2-2 “Existing Peak Hour Intersection Turning Movements,” and Table 3 “Existing Bike and Pedestrian Daily Entering Volumes”

Comment 4) The source and year of each ADT volume provided in Table 4.14-2

KOA Response: See Table 2 “Existing Roadway Segment Conditions”

CPUC DR#2, Comment #119 (PEA DR#1, Items 55 and 60):

Describe how long lane closures, road closure, or other effects to traffic flow would be needed for construction activities on Carmel Valley Road in Segment B.

Construction activities on Carmel Valley Road would impact travelers on Carmel Valley Road. The PEA and SDG&E response to Data Request #1 do not provide adequate information to determine how traffic activities would affect traffic flow, traffic hazards, and emergency vehicle access. Please address the following:

Comment 1) Will Project construction require complete closure of the road (i.e., closure in both directions) at any time? Where would these closures occur along Carmel Valley Road? What is the maximum duration and expected frequency of any closures?

KOA Response: No, the project construction will not require the complete closure of two-way traffic at any time during construction.

Comment 2) Will construction require closure of one direction of traffic on Carmel Valley Road (e.g., closure of all eastbound lanes) at any time? Where would these single-lane closures occur along Carmel Valley Road? What is the maximum duration and expected frequency of any single-lane closures?

KOA Response: Yes, the project will temporarily require eastbound single-lane closures on Carmel Valley Rd at 7 of 10 vault locations, twice each, for approximately 10 minutes to set the two halves of the vaults from the tractor trailer into the vault trench. The crane will be stationed in front of the vault trench prior to the vault delivery to shorten the lane interruption. Additionally, vault trailers will be on standby waiting to be radioed in once traffic is clear for placement. This action will be further defined in the traffic control plans.

- Please see Figure 3 “Single-lane Vault Placement and Delay Locations” for the 7 identified locations for temporary eastbound road closures, and estimated duration of road closure.

Comment 3) Would construction occur in more than one location at a time along Carmel Valley Road? If so, where would this occur?

KOA Response: Yes, the proposed construction plan will have 2 simultaneous construction crews working on separate segments of the project length.

Comment 4) Would traffic be restricted at the intersections with Black Mountain Rd and Camino Del Sur during construction? How would the restriction affect turning? Would the restriction cause single-lane closures?

What is the maximum duration of each traffic restriction at the intersection? How often would the restriction be in place?

a. Can construction be completed with intersections open in all directions and for all turning movements?

KOA Response: Yes, traffic would be restricted at the intersections of Camino Del Sur and Black Mountain Rd. However, in order to minimize the effect on all movements of the intersection, the construction will be staged with a traffic control plan that would provide for allowing through movements in all directions of the intersection. Depending on the constraints of the staged work zone, certain left-turn movements may have to be temporarily restricted. In the areas resulting in restricted left-turn movements, traffic would be directed through the intersection to the following intersection where a u-turn would allow drivers to return to the intersection and make a right-turn to complete their directional movement. Since multiple approach lanes exist at these intersections, there would be the loss of a lane for the phased construction and traffic would be directed to the remaining lane(s). Depending on the traffic control plan, phased construction through the intersection is expected to happen in 2-3 phases in the intersections. Each phase through the intersection is expected to last one working day.

Sincerely,
KOA CORPORATION



J. Arnold Torma, P.E.
Senior Engineer

Attachments:

Table 1 – Existing Roadway Segments Summary
Table 2 – Existing Roadway Segment Conditions
Table 3 – Existing Bike and Pedestrian Daily Entering Volumes
Figure 1-2 – Existing AM Peak Hour Intersection Turning Movements
Figure 2-2 – Existing PM Peak Hour Intersection Turning Movements
Figure 3 - Single-lane Vault Placement and Delay Locations

Table 1

Existing Roadway Segments Summary

Roadway Name	Limits	Arterial Classification	Lanes Per Direction	Curb-to-Curb Width	Posted Speed Limit	Median / TWLTL	Left-Turn Channel	Sidewalks	Bike Lanes	Parking Permitted
Black Mountain Rd.	S/O Carmel Valley Rd.	4 Lane Collector	2	75 ft	45 mph	X	X	X	X	
Black Mountain Park Way	N/O Carmel Valley Rd.	2 Lane Sub-Collector	1	34 ft	None					X
Carmel Valley Rd.*	W/O Caminito Vistana / Chamady	4 Lane Major	2	100 ft	50 mph	X	X	X	X	
Carmel Valley Rd.*	E/O Caminito Vistana / Chamady	2 Lane Major	1	100 ft	45 mph	X	X	X	X	
Caminito Vistana	N/O Carmel Valley Rd.	2 Lane Collector	1	56 ft	25 mph	X				X
Camino Del Sur	N-S/O Carmel Valley Rd.	4 Lane Collector	2	100 ft	50 mph	X	X	X	X	
Chadamy Way	S/O Carmel Valley Rd.	2 Lane Cul-de-sac	1	28 ft	25 mph	X		X		X
Torrey Del Mar Dr.	S/O Carmel Valley Rd.	2 Lane Collector	1	48 ft	25 mph	X	X	X		X

*Community Plan ultimate classification is 4-lane major.

Abbreviations: TWLTL: Two Way Left Turn Lanes, N: North, S: South, E: East, W: West, O: of

Table 2

Existing Roadway Segment Conditions							
Street	Segment	Count Date*	Lanes / Class	LOS E (Capacity)	Existing ADT	V/C	LOS
Black Mtn. Rd.	S/O Carmel Valley Rd.	5/29/2014	4CL	40,000	12,300	0.308	A
Black Mtn. Park	N/O Carmel Valley Rd.	10/29/2014	2SC	2,200	681	0.310	A
Caminito Vistana	N/O Carmel Valley Rd.	11/6/2014	2CL	8,000	1,030	0.129	A
Camino Del Sur	N/O Carmel Valley Rd.	10/29/2014	4CL	40,000	15,470	0.387	B
Camino Del Sur	S/O Carmel Valley Rd.	5/28/2014	4CL	40,000	17,730	0.443	B
Carmel Valley Rd.	E/O Camino Del Sur	7/8/2014	2MA	16,667	10,490	0.629	C
Carmel Valley Rd.	W/O Camino Del Sur	11/6/2014	2MA	16,667	12,100	0.726	C
Carmel Valley Rd.	E/O Black Mtn. Rd.	7/8/2014	2MA	16,667	13,790	0.827	D
Carmel Valley Rd.	W/O Black Mtn. Rd.	7/8/2014	2MA	16,667	10,490	0.629	C
Carmel Valley Rd.	E/O Black Mtn. Park Way	10/29/2014	2MA	16,667	15,250	0.915	E
Carmel Valley Rd.	W/O Black Mtn. Park Way	7/8/2014	2MA	16,667	13,790	0.827	D
Carmel Valley Rd.	E/O Chadamy - Caminito Vistana	11/6/2014	4 MA	40,000	12,100	0.303	A
Carmel Valley Rd.	W/O Chadamy - Caminito Vistana	11/6/2014	4 MA	40,000	11,987	0.300	A
Carmel Valley Rd.	E/O Torrey Del Mar	11/6/2014	4 MA	40,000	12,180	0.305	A
Carmel Valley Rd.	W/O Torrey Del Mar	11/11/2014	4MA	40,000	10,290	0.257	A
Chadamy Way	S/O Carmel Valley Rd.	11/6/2014	2CU	n/a	540	n/a	n/a
Torrey Del Mar	S/O Carmel Valley Rd.	11/6/2014	2CL	10,000	2,210	0.221	A

* Source: Traffic count data provided by Pacific Technical Data and Accurate Video Counts Inc.

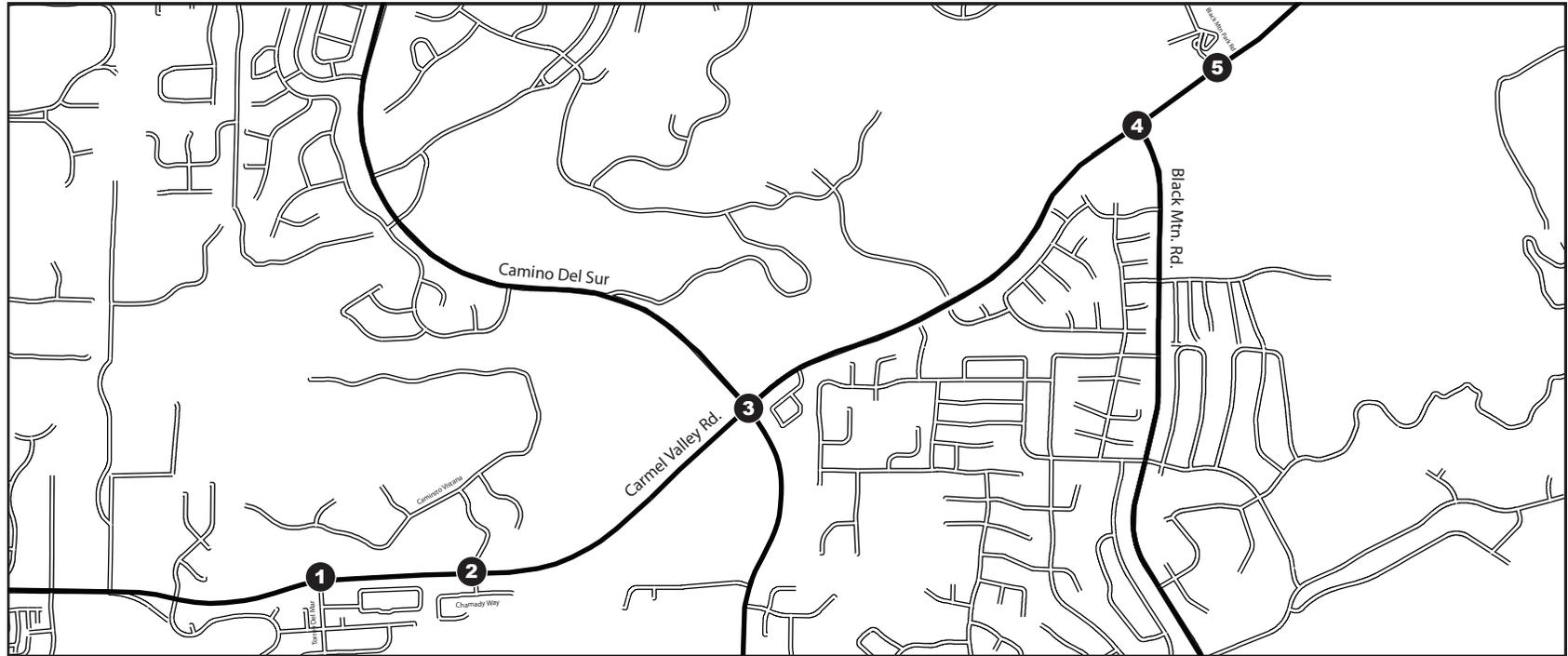
** Capacity for local residential street not specified in San Diego Traffic Impact Study Manual, July 2008.

Abbreviations: 4MA: 4 lane major arterial. 2MA: 2 lane major arterial. 4CL: 4 lane collector. 2CL: 2 lane collector. 2CU: 2 lane cul-de-sac. 2SC: 2 lane sub-collector

Table 3

Existing Bike and Pedestrian Daily Entering Counts			
Intersection Name	Count Date*	Bike	Pedestrian
Carmel Valley Rd. and Camino Del Sur	10/29/2014	24	12
Carmel Valley rd. and Black Mountain Rd.	7/8/2014	10	5
Carmel Valley Rr. and Black Mountain Park Way	10/29/2014	5	1
Total:		39	18

* Source: Traffic count data provided by Pacific Technical Data and Accurate Video Counts Inc.



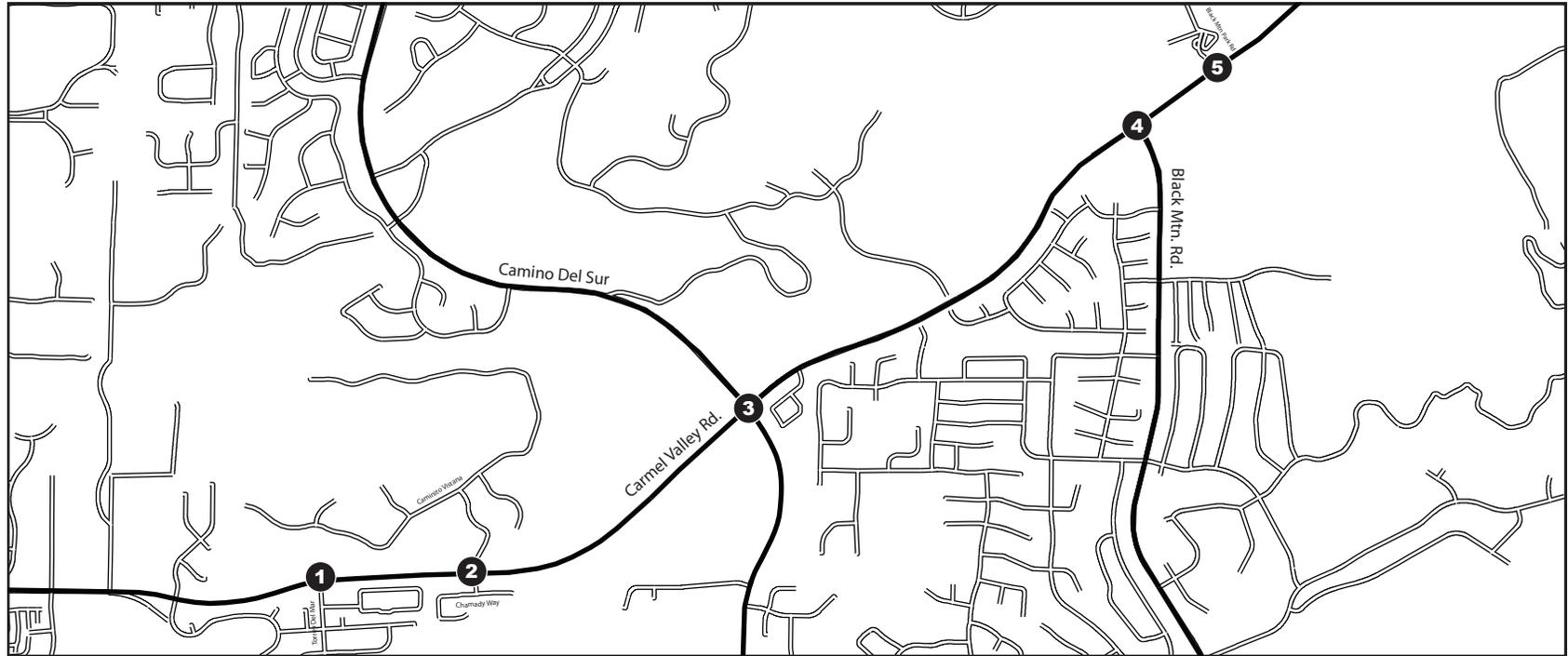
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Figure 1-2
Existing AM Peak Hour Intersection Conditions



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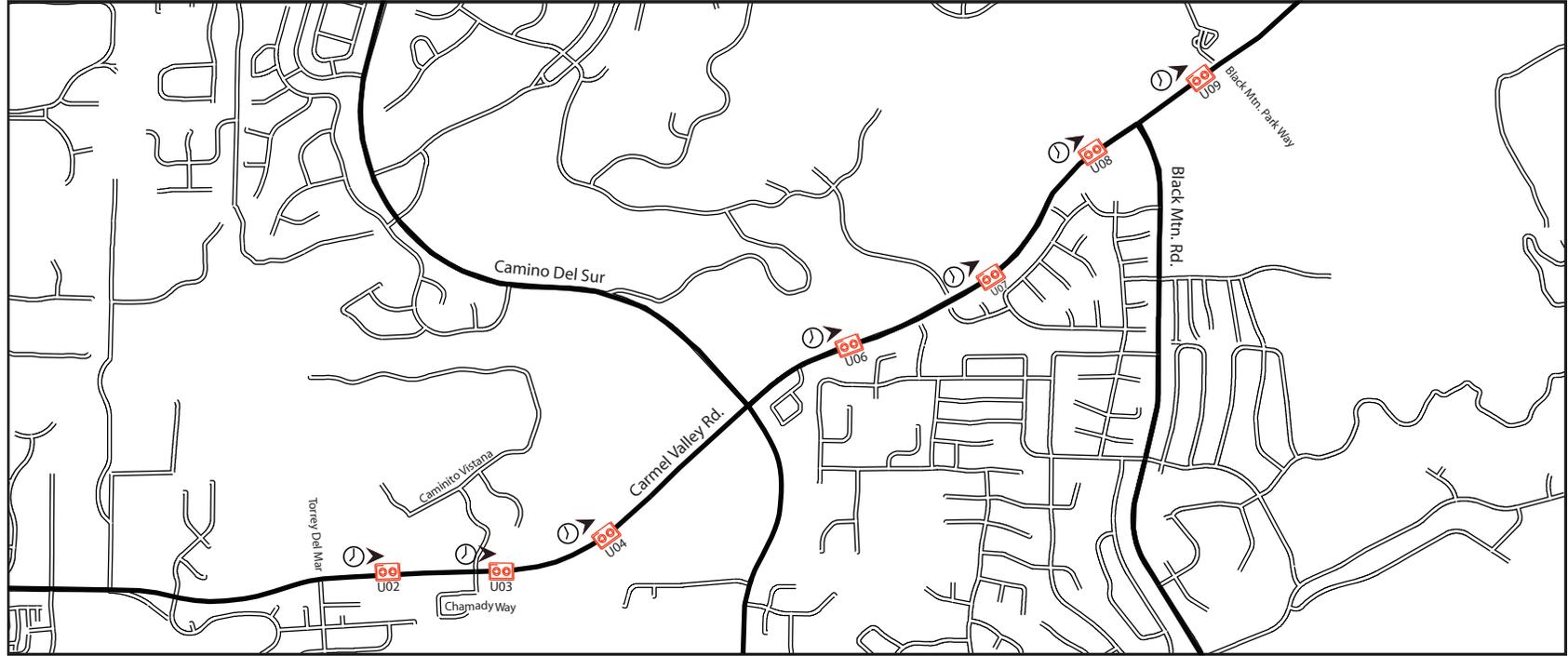
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10 ↗	PM Peak Hour Traffic

Figure 2-2
Existing PM Peak Hour Intersection Conditions



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Figure 3
Single-lane Vault Placement and Delay Locations



SDG&E Carmel Valley Rd. TIS

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2 Part Vault Placement



10 Min. EB Delay*

U01

SDG&E Vault Location**

EB: Eastbound lanes

* 10 Minute temporary lane closure per 2 part vault placement

** SDG&E Preliminary Vault Locations: DRI-Q4 & Q57_Segment B Alignment & Working Limits



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