KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

May 11, 2016

Mr. Joe Power, Principal
RINCON CONSULATANTS, INC.
180 North Ashwood Avenue
Ventura, CA 93003

Dear Mr. Power:

INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide this technical memorandum regarding the 12282 Beach Boulevard Project Revised Focused Traffic Analysis prepared by Kunzman Associates Inc. (October 16, 2014). The project site is located on the northeast corner of the Beach Boulevard and Catherina Avenue intersection in the City of Stanton. The 12282 Beach Boulevard Project consists of an 120 bed assisted living facility with 4,296 square feet of high-turnover (sit-down) restaurant, and 1,471 square feet of pharmacy without drive-thru.

GAP ANALYSIS

In a letter dated April 21, 2016 (see Appendix A) the California Department of Transportation requested that a gap study be conducted at the intersection of Beach Boulevard and Catherine Avenue. Field data was obtained by Kunzman Associates, Inc. staff at this location on Tuesday, May 10, 2016 from 4:30 PM – 4:45 PM to capture the evening peak hour traffic volumes on a typical weekday. The evening peak hour was chosen as to provide for a "worse case" analysis since the volume to capacity ratio at the intersection utilizing the Intersection Capacity Utilization methodology as exhibited in the focused traffic analysis was greater than during the morning peak hour. Additionally, the northbound traffic volumes are greater than the southbound traffic volumes during the evening peak hour.

A gap of 7 or more seconds has been deemed as acceptable due to standards and practices and information contained within the 2010 Highway Capacity Manual. A gap exceeding 7 seconds may actually provide an opportunity for multiple vehicles to make their desired turning movement. For every 3.5 seconds exceeding 7 seconds, an additional gap occurs. For example, a gap of 7 seconds is one gap, 10.5 seconds is two gaps, 14 seconds is three gaps, etc.

The westbound left turning movement from the minor roadway (Catherine Avenue) to the major roadway (Beach Boulevard) is the critical movement being analyzed for this intersection. It is worth noting that although Beach Boulevard is currently 8 lanes divided with a raised median, the approximately 18 foot wide raised median as constructed provides ample room for a vehicle to stage. This allows for a motorist making a westbound left turn movement from Catherine Avenue onto Beach

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Boulevard the opportunity to cross northbound traffic volumes when an acceptable gap occurs and to stage in this median break until an acceptable southbound gap occurs.

Table 1 shows the results of the gap analysis. Based upon the field survey, there were 22 northbound gaps that occurred that were greater than or equal to 7 seconds in the 15 minute recorded period. This translates to approximately 88 gaps per hour. Accounting for the ability of multiple gaps to occur with increased gap time as previously explained, a total of approximately 63 acceptable gaps were present during the 15 minute recorded period. This translates to 252 gaps per hour with a gap occurring approximately every 14.29 seconds.

CONCLUSIONS

For Opening Year (2016) With Project traffic conditions, there are projected to be approximately 29 westbound left turning movements at the intersection of Beach Boulevard and Catherine Avenue during the evening peak hour. There are currently 252 northbound gaps for these 29 turning movements or approximately 8.69 acceptable gaps per turning movement. Therefore, it is projected that there are sufficient acceptable gaps to allow for westbound turning movements to occur at this intersection as designed as an east-west two-way stop controlled intersection.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES , INC.

Bryan Crawford
Senior Associate

REGISTERED PROFESSIONAL ENGINEER
WILLIAM A. KUNZMAN
No. TR0056
TRAFFIC
STATE OF CALIFORNIA

KUNZMAN ASSOCIATES, INC.

William Kunzman

William Kunzman, P.E.
Principal

Jn5648

Table 1

Gap Analysis Data
Catherine Avenue and Beach Boulevard, Stanton
Northbound Gaps (4:30 PM - 4:45 PM)

Seconds	Observed Gaps	Adjusted Gaps	Seconds	Observed Gaps	Adjusted Gaps
1	N/A		26		
2	N/A		27	2	12
3	6		28	1	7
4	2		29		
5	6		30		
6	7		31		
7	1	1	32		
8	5	5	33		
9	4	4	34		
10	1	1	35		
11	1	2	36	1	9
12			37		
13	1	2	38		
14			39		
15	1	3	40		
16			41		
17	1	3	42		
18	1	4	43		
19	1	4	44		
20			45		
21			46		
22			47		
23			48		
24			49		
25	1	6	50		
Total Gaps:				22	63

APPENDIX A

COMMENT LETTER

DEPARTMENT OF TRANSPORTATION
DISTRICT 12
3347 MICHELSON DRIVE, SUITE 100
IRVINE, CA 92612-8894
PHONE (949) 724-2086
FAX (949) 724-2592
TTY 711
www.dot.ca.gov

Serious Drought.
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Help save water!

April 21, 2016

Ms. Kelly Hart,
Interim Community Development Director
City of Stanton
Planning Division
7800 Katella Avenue
Stanton, CA. 90680

File: IGR/CEQA
SCH#: None
Log #: 4668
SR-39

Dear Ms. Hart:

Thank you for the opportunity to review and comment on the **12282 Beach Boulevard Mixed-Use Project Initial Study.** The proposed development (the project) would involve development of a five-story (63-foot-high) mixed-use building that would include commercial space, parking, and a residential care facility on a 1.12-acre site located in the City of Stanton. The residential care facility would include assisted living units with meal service, social programs, activity rooms, and offices for support staff. Off-street parking would be provided on the first and second floors of the building. The project site is comprised of three contiguous parcels (APN 131- 483-01, -02, and -03) located at 12282 Beach Boulevard, in the City of Stanton.

Caltrans Local Development-Intergovernmental Review program reviews impacts of local development to the transportation system, including the State Highway System. The Department works to ensure that local land use planning and development decisions include the provision of transportation choices, including transit, intercity rail passenger service, air service, walking and biking, when appropriate. The Department advocates community design (e.g. urban infill, mixed use, transit oriented development) that promotes an efficient transportation system and healthy communities.

The Department of Transportation (Caltrans) is a responsible agency on this project and has the following comments for your consideration.

1. Please provide a gap study at the unsignalized intersection of Route 39 (Beach Blvd.) and Catherine Ave. Since Beach Blvd. is an 8-lane highway, the Highway Capacity Manual methodology is not applicable due to the methodology limitation of analyzing an intersection with a major highway that has no more than 6 through lanes.

2. Aesthetics and visual sections are satisfactory. Any landscaping within state right of way must comply with the Encroachment Permits Manual.

3. Any project work (e.g. street widening, emergency access improvements, sewer connections, sound walls, stormdrain construction, street connections, lighting and signage, etc.) proposed in the vicinity of the Caltrans Right of Way, would require an encroachment permit and all environmental concerns must be adequately addressed. For specific details on Caltrans Encroachment Permits procedure, please refer to Caltrans Encroachment Permits Manual. The latest edition of the Manual is available on the web site http://www.dot.ca.gov/hq/traffops/developserv/permits/

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Aileen Kennedy at (949) 724-2239.

Sincerely,

Aileen Kennedy

for MAUREEN EL HARAKE
Branch Chief, Regional-Community-Transit Planning
District 12

c: Lee Haber, Traffic Operations Northeast
Eric Dickson, Landscape Archtichture