### **APPENDIX F**

### TRANSPORTATION IMPACT ANALYSIS PEER REVIEW

## Kimley *Whorn*

July 31, 2017

Ms. Cindy Gnos Raney Management 1501 Sports Drive, Suite A Sacramento, CA 95834

#### **RE:** Peer Review of Rocketship School in Antioch, CA

Dear Ms. Gnos:

Thank you for inviting Kimley-Horn and Associates, Inc. (Kimley-Horn) to peer review the *1700 Cavallo Road Antioch Rocketship School Transportation Impact Analysis* dated May 16, 2017 and written by Hexagon Transportation Consultants, Inc. After submittal of the initial peer review comments, Hexagon responded to them in a letter dated July 17, 2017 and also submitted a revised Transportation Impact Analysis (TIA). Kimley-Horn appreciates the time and effort that Hexagon spent to address Kimley-Horn's initial comments. This letter discusses and summarizes the key findings of the peer review.

#### BACKGROUND

The proposed Rocketship School project is located at 1700 Cavallo Road in Antioch, CA. The project will have access from three driveways on-site, as well as access from the adjacent County parcel. The school is proposed to be a Kindergarten through 5<sup>th</sup> grade charter elementary school with a total enrollment of 600 students. This proposed project will replace an existing vacant lot, and therefore no project trip credits will be taken.

### **OBSERVATIONS AND RECOMMENDATIONS**

Kimley-Horn has reviewed the Response to Comments letter dated July 17, 2018, as well as the revised TIA. In general, Hexagon has adequately addressed the comments from the previous peer review letter dated May 31, 2017, except with the following additional comments:

1. Previously in Comment #3, Kimley-Horn commented: In reviewing the Synchro outputs in the Appendix, it appears the peak hour factor used was 1.00 for all movements and all intersections. Is this appropriate? The CCTA Technical Procedures mention that the standard is to use 0.92 or 0.90 depending on the volumes, or use actual count date.

Hexagon's response: The analysis in the updated report now uses a peak hour factor of 0.92.

Kimley-Horn follow-up response: In review of the Synchro outputs in the Appendix, it appears that a factor of 0.92 was not used for all intersections. The following is a list of PHF by intersection:

• Int #1 – PHF = 0.90 in the AM peak hour and 0.92 in the PM peak hour

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- Int #2 PHF = 0.90 in the AM peak hour and 0.90 in the PM peak hour
- Int #3 PHF = 0.95 in the AM peak hour and 0.92 in the PM peak hour
- Int #4 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #5 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #6 PHF = 0.90 in the AM peak hour and 0.90 in the PM peak hour
- Int #7 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #8 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #9 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #10 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour
- Int #11 PHF = 0.92 in the AM peak hour and 0.92 in the PM peak hour

Please confirm.

- Previously in Comment #7, Kimley-Horn commented: Page 15 (Figure 5) There are discrepancies between the movements shown in Figure 5 and the lanes on Google Maps at the following locations (please confirm):
  - a. Intersection #2 The EB approach on Google maps shows one eastbound (EB) left turn lane, one EB through lane, and one EB shared through-right turn lane. This differs from Figure 5.

Hexagon's response: Figure 5 has been modified to reflect one left-turn lane, one through lane, and one shared through/right-turn lane on the eastbound approach at the intersection of Cavallo Road and Wilbur Avenue.

Kimley-Horn follow-up response: Figure 5 shows one EB through lane and one shared through-right turn lane. It is missing the EB left turn lane. Please update.

3. Previously in Comment #19, Kimley-Horn commented: "Page 35 (Table 9) – The vehicle storage for the northbound left turn movement at the intersection of A Street and West 10<sup>th</sup> Street/Beede Way is shown as 225 feet. Can you confirm if this storage length includes the middle of the intersection of A Street and Beede Way? And is this appropriate?

Hexagon's response: The updated report includes a revised queuing storage length of 190 feet. Field observations at the intersection of "A" Street and W. 10<sup>th</sup> Street/Beede Way showed northbound left-turn vehicles queue within the striped turn pocket both north and south of Beede Way, however, not in the middle of the intersection. Therefore, the reported queuing storage does not include the middle of the "A" Street/Beede Way intersection.

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Kimley-Horn follow-up response: The text, on page 34, describing the queues for the intersection of "A" Street and West 10<sup>th</sup> Street/Beede Way was not updated to reflect the updated storage length of 190 feet. It still mentions that the queue exceeds the storage by 25 feet, but with the updated 190 feet storage, the queue exceeds the storage by 60 feet in the Existing and Cumulative AM scenarios and by 10 feet in the Existing and Cumulative PM scenarios. Please update.

Thank you for the opportunity to peer review the updated *1700 Cavallo Road Antioch Rocketship School Transportation Impact Analysis* report dated July 17, 2017. Please let us know if you have any further questions.

Sincerely,

3.40

Ben Huie, P.E. Project Manager #C76682