

Appendix G.3 Crain & Associates, Peer Review



VIA HAND DELIVERED

October 19, 2015

Wendy Lockwood
Sirius Environmental
1478 N. Altadena Drive
Pasadena, California 91107

Subject: Peer Review of the Traffic and Parking Impact Study and Supplemental Traffic Analysis for the Harvard-Westlake School Parking Improvement Plan

Dear Wendy,

Harvard-Westlake School (the “School”) is proposing to construct a parking structure on land along the west side of Coldwater Canyon Avenue across from the main Upper School campus. Associated with the parking structure construction will be a series of transportation improvements. The improvements include the construction of a pedestrian bridge linking the parking structure to the Upper School campus on the east side of Coldwater Canyon Avenue, and the widening of Coldwater Canyon Avenue along the parking structure frontage (together referred to as the “Project”). Crain & Associates has been retained to conduct a peer review of the traffic study documents included in the Project’s environmental impact report. Those documents are:

- The Traffic & Parking Impact Study for the Harvard-Westlake School Parking Improvement Plan, prepared by Linscott, Law & Greenspan, Engineers and dated October 30, 2012 (the “Traffic Study”), and
- A Supplemental Traffic Analysis for the Project, dated October 6, 2015, also prepared by Linscott, Law & Greenspan, Engineers (the “Supplemental Analysis”).

The purpose of our review was to determine if the Traffic Study and the Supplemental Analysis:

- Follows standard professional traffic engineering methodology and procedures;

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- Addresses the potential Project transportation impacts in a manner consistent with the California Environmental Quality Act (“CEQA”) requirements;
- Identifies assumptions that are reasonable and consistent with the Project description; and
- Reaches conclusions that are consistent with the documented results of the analyses and, considering the assumptions, that the conclusions are credible.

The conclusions we have reached based on our reviews are as follows.

Traffic Study, October 30, 2012.

The Traffic Study was the original transportation analysis conducted for the Project. The documentation in the Traffic Study demonstrates the use of standard traffic engineering procedures for this type of project in the City of Los Angeles. Specifically, Los Angeles Department of Transportation (“LADOT”) procedures were followed in the Traffic Study, and those procedures address the CEQA requirements.

The accepted traffic engineering procedures which the Traffic Study indicates as followed were:

1. Preparing a complete description of the Project (from a transportation point of view) so that pertinent factors were identified and considered;
2. Scoping the Traffic Study with the reviewing agency, considering the Project area and Project description;
3. Describing the setting in which the Project is to be constructed including the anticipated growth in Project area development levels;
4. Determining the existing (current) conditions through counts of the traffic volumes at critical locations in the study area;
5. Calculating the Project trip generation and assigning the Project trips to the study area network;
6. Analyzing the impact of the Project trips on the area roadway system, site access, and other Project components; and
7. Analyzing the Project impacts on other area transportation systems.

We conclude that the Traffic Study completed all seven accepted traffic engineering procedures. Set forth below is our analysis and conclusion for each procedure.

1. A Project description is provided in the Traffic Study. Our review indicated that the description is complete, including appropriate graphics to illustrate the Project layout. The description contains separate sections describing the Site Access and Circulation, and the Project Parking;
2. The Traffic Study was scoped with the San Fernando Valley Planning Bureau Office of LADOT. The staff of that office is comprised of staff who are responsible for reviewing

the traffic studies for the projects in this vicinity. They are very familiar with the Project area and had a complete Project description;

3. The existing condition description in the Traffic Study was complete. The description fully describes the area transportation network and the area land-uses which affect the conditions on that network.
4. Manual counts were conducted at the five study intersections at the beginning of the traffic analysis. Those counts were extended in time to include both the school peak and roadway peak periods during the afternoon. We believe the selected time periods are appropriate to address the most significant Project traffic impact.
5. The Project's trip generation was calculated using standard assumptions set forth in the Trip Generation Manual, 9th Edition by the Institute of Transportation Engineers (the "Manual") for Private Schools (Land Use Code 536). The Manual is the standard reference used in this type of traffic analysis. The Project will not modify the School's enrollment or employment levels. These are the only two independent variables considered under the Manual procedures for Land Use Code 536. These two independent variables were correctly considered in the trip generation calculations for the Project. Therefore, we concur with the Traffic Study conclusion that the Project will not increase the Project trip generation upon occupancy.

We also concur with the Traffic Study's detailed analysis of the construction period impacts, during which the Project will have greater trip generation. The assumption that all construction workers will drive alone is conservative. The Traffic Study also appropriately determines the trip generation from the parking areas based on field observations as standard rates are not available. We concur that a trip generation estimate of the parking redistribution is needed for the analysis of the localized impacts, and that the methods used to develop that trip generation estimate are appropriate.

6. We agree that the Project will have two potentially significant traffic impacts that require detailed traffic impact analysis:
 - a. The Project Construction Phase - Since construction traffic impacts all of the study intersections, the analysis correctly examines the impacts at all five study intersections during the construction period; and
 - b. Localized Trip Reassignment Following Occupancy - We agree that upon occupancy, the Project will only have localized impacts at the Harvard-Westlake Driveway and Coldwater Canyon Avenue intersection, and only that intersection needs to be analyzed for that phase.

We conclude that both impact analyses consider the highest Project impact times, use standard traffic engineering methodologies, and make appropriate assumptions within the calculations.

7. During the construction period, the Project trucks and worker trips will also impact the area freeways, other Congestion Management Plan locations, and area transit systems. The Traffic Study follows standard practice in analyzing these impacts. The assumptions set forth in the Traffic Study are all best estimates consistent with standard engineering practices and information. The Project also has beneficial impacts to area traffic

conditions due to the Coldwater Canyon Avenue street widening along the Project frontage. The methodology used to analyze these benefits, taken from the Highway Capacity Manual (“HCM”), results in an appropriate best estimate.

Supplemental Analysis, October 6, 2015

The Traffic Study contained the then appropriate assumption that the Project would be completed within four years – by 2016. Project delays resulted in the preparation of the Supplemental Analysis. The Supplemental Analysis used a completion and occupancy year of 2019. Further, based on discussions between the School and other stakeholders, some changes to the construction period haul times were made. Those changes were addressed in the assumptions within the Supplemental Analysis. We concur that a supplement analysis was appropriate as the Project will not reasonably be constructed and occupied within the next year, and haul time changes would affect the Project construction period impacts. Further, the Supplemental Analysis provided the details of the left-turn pocket length calculations to address community concerns.

The most important consideration in the Supplemental Analysis is potential changes to the environmental setting, in terms of the traffic volumes and ongoing land-use growth patterns. The Supplemental Analysis utilized counts conducted in 2015 at the study intersections. The peak hour volumes from the 2015 counts at Coldwater Canyon Boulevard and Ventura Boulevard were compared to the peak volumes in the 2011 counts. We concur with this approach as an appropriate method to establish changes in the study area traffic levels. The Supplemental Analysis further considered the impacts of the City Trunk Line construction along Coldwater Canyon Avenue and demonstrated that the volumes decreased on Ventura Boulevard (which was unaffected by the City Trunk Line improvements) as well as on Coldwater Canyon Avenue. The Supplemental Analysis concludes that the 2011 volumes are greater and utilizes those values with an added 2% per year growth factor. We consider this to be a conservative set of assumptions. Additionally, the related projects are updated, with the updated cumulative growth considered. This update is needed and appropriate so that current cumulative impacts are properly identified in the Supplemental Analysis.

In the Supplemental Analysis, the Project construction phase impacts are reanalyzed using the updated counts, related projects, and haul hours. Construction work shifts have been scheduled such that trips are to occur outside the peak periods. However, as a worst case, a greater number of construction workers were assumed in the Supplemental Analysis than in the Traffic Study (to account for the shorter haul hours) and a greater percentage (60%) of the construction workers departures were assumed to occur during the single PM peak hour of the roadway. We consider these to be very conservative assumptions.

Further, we concur with the Supplemental Analysis being an expansion of the Traffic Study to address changes made to the haul hours and to include the School peak and the Saturday peak

time periods. We also concur that the Project's localized impacts from the trip reassignment following occupancy will continue to affect only one study intersection – Harvard-Westlake Driveway and Coldwater Canyon Avenue. The trip reassignment remains the same as in the Traffic Study, so the analysis methodology appropriately remains the same. The transit impact and CMP impacts conclusions do not change as a result of the environmental setting condition changes (new counts and related projects list) since those conclusions are based on Project parameters (daily and peak hour trips, neither of which will increase).

The Supplemental Analysis, in response to public concerns, provides in depth information on the calculations used to develop the left-turn pocket lengths for the intersection of Coldwater Canyon Avenue with the new Project driveway. The Supplemental Analysis follows standard Traffic Engineering procedures and utilized the Highway Capacity Software to estimate queue lengths. The lane length exceeding the 95th percentile anticipated queue length is the standard engineering approach. The lengths will substantially exceed the 95th percentile queues length and are considered to be more than adequate.

We reviewed the Supplemental Analysis and concur with the conservative estimate of the equivalent number of passenger vehicles associated with trucks traveling to and from the project site. The Supplemental Analysis utilized a passenger car equivalency (PCE) factor of 2.0 truck trips and we find that this factor is consistent with standard traffic engineering practice. This is consistent with the 2.0 multiplier for heavy vehicles recommended within the Adjustment for Heavy Vehicles section in Chapter 18, Signalized Intersections of the HCM the. The 2.0 per truck factor is appropriate for the signalized intersections studied.

Finally, we agree with the Supplemental Analysis's characterization of the vacation of Hacienda Drive west of Coldwater Canyon Avenue. Using City of Los Angeles plans and maps, we verified that the portion of Hacienda Drive west of Coldwater Canyon Boulevard is an unimproved Local Street. We also verified that the portion of Hacienda Drive right-of-way that extends westerly from Coldwater Canyon Boulevard terminates without intersecting any other public streets. In sum, we agree that the Hacienda Drive street vacation will not have any adverse effects on public safety or traffic operations.

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Conclusion

Based on a careful and complete review of the Traffic Study for the Harvard-Westlake School Parking Improvement Plan, and the Supplemental Analysis prepared as an update of that study, we concur with the preparers (Linscott, Law & Greenspan, Engineers) and the LADOT reviewers. The studies are a complete and appropriate analysis of the traffic impacts of the Project. We agree with the conclusion in the studies that the Project will not have an adverse significant impact on the arterial streets, freeway system, transit system, or area parking and the design parameters contemplated are appropriate.

Sincerely,



George Rhyner, PE
Senior Transportation Engineer
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GR/lc
C21931
Enclosure/