# **APPENDIX N**

CONSTRUCTION TRAFFIC ANALYSIS

# Allen Concepcion

From:"Chin S. Taing" <taing@llgengineers.com>To:"Allen Concepcion" <ajc@pai-la.com>Cc:"David Shender" <shender@llgengineers.com>; "K.C. Jaeger" <jaeger@llgengineers.com>Sent:Wednesday, February 22, 2012 6:05 PMAttach:LLG Draft Construction Analysis (02.22.12).docSubject:RE: Studio City Senior Living Center Project - Construction Traffic AnalysisHi Allen:

Attached is the updated construction traffic analysis summary based on your comments below. Also, do you have any information regarding the project alternatives?

Thanks, Chin

Chin S. Taing Transportation Planner III taing@llgengineers.com



## Traffic isn't pretty, but for more than 45 years, we've made it work better.

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LLG Reference:

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From: Allen Concepcion [mailto:ajc@pai-la.com]
Sent: Wednesday, February 15, 2012 6:06 PM
To: Chin S. Taing
Cc: David Shender; K.C. Jaeger
Subject: Re: Studio City Senior Living Center Project - Construction Traffic Analysis

Chin,

Thanks. The construction hours are correct, 7-9 M-F and 8-6 on Sat. Can you please change the wording to say that construction hours are "restricted" to those hours as opposed to "envisioned"? The B&S Commissioners are fairly inconsistent with the haul route restriction hours they impose on haul route approvals. The last case I saw (Porter Ranch exporting 3,028 cy of earth) they required hauling operations to take place only between 9am and 3:30pm, Monday through Friday. No hauling allowed on weekends and on

## STUDIO CITY SENIOR HOUSING PROJECT CONSTRUCTION TRAFFIC

#### **Construction Assumptions**

It is assumed that demolition and grading would occur on the project site during the first year of construction. It is also assumed that after completion of the initial phase of grading, final grading and structure construction would begin on the site and would extend over an approximate twoyear period. It is estimated that the excavation would require the removal of approximately 82,000 cubic yards of material from the site. It is assumed that the equipment staging area during the initial phases of construction grading, as well as after the start of construction, would occur on and adjacent to the project site. Construction worker parking would occur within the project site as well as on Valleyheart Drive North adjacent to the project site. Construction hours will be restricted from 7:00 AM to 9:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturday.

#### Construction Traffic Trip Generation – Demolition, Construction Grading and Material Export

It is assumed that heavy construction equipment would be located on-site during grading activities and would not travel to and from the project site on a daily basis. However, truck trips would be generated during the grading, and export period, so as to remove material (from grading) from the project site. Trucks are expected to carry the export material to a receptor site located within 20 miles of the project site. The project applicant anticipates that 18-wheel bottom dumping truck and trailer (assuming 20 cubic yards capacity per truck) would be used during the export period between the hours of 7:00 AM and 4:00 PM, Monday to Saturday with the exception of Sundays. Hauling will also not take place between 6:00 PM and 7:00 AM. These estimated restriction hours for hauling activities will be confirmed with the City of Los Angeles Department of Building and Safety. The export period is assumed to require approximately 20 workdays per month for approximately four months. During the peak, grading and export activities, up to 102 truck trips per day (i.e., 51 inbound trips and 51 outbound trips) are anticipated. Of the 102 daily truck trips, it is estimated that approximately ten trucks trips (five inbound trips and five outbound trips) would occur during each of the weekday AM peak hour and PM peak hour.

#### Construction Traffic Trip Generation – Final Grading and Structure Construction

Activities related to the final grading/structure construction period would generate a higher number of vehicle trips as compared to the grading and material export period. Thus, the greatest potential for impact on the adjacent street system would occur during the final grading/structure construction period.

During the final grading and structure construction period, it is assumed that a trip generation rate of 0.32 worker vehicle trips per 1,000 square feet of commercial development per day is used. Construction workers are expected to typically arrive at the project site before 7:00 AM and most will depart before 3:00 PM. Thus, these construction work trips generally would occur outside of the peak hour of traffic on the local street system. For example, as shown in the traffic study, the peak hour of traffic at the study intersections adjacent to the project site typically begins between 7:45 and 8:00 AM during the morning commuter period, and typically begins at 3:15 and 5:00PM during the afternoon commuter period.

It is anticipated that construction workers would remain on-site throughout the day. It is estimated that approximately 108 vehicle trips per day (i.e., 54 trips inbound and 54 trips outbound) would be generated by the construction workers during the peak construction phases at the project site. Of the peak daily trip generation of 108 daily trips, it is estimated that approximately 11 construction worker vehicle trips (i.e., ten percent of the daily construction worker inbound or outbound trips) would occur during each of the weekday AM peak hour and PM peak hour.

In addition to construction worker vehicles, additional trips may be generated by miscellaneous trucks traveling to and from the project site. These trucks may consist of larger vehicles delivering equipment and/or construction materials to the project site, or smaller pick-up trucks or four-wheel drive vehicles used by construction supervisors and/or City inspectors. During peak construction phases, it is estimated that approximately 50 trips per day (i.e., 25 trips inbound and 25 trips outbound) would be made by miscellaneous trucks. To conservatively estimate the equivalent number of vehicles associated with the trucks, a passenger car equivalency factor of 2.0 was utilized based on standard traffic engineering practice. Therefore, conservatively assuming 50 daily truck trips, it is estimated that the trucks would generate approximately 100 passenger car equivalent (PCE) vehicles trips (i.e., 50 trips inbound and 50 trips outbound) on a daily basis. It is estimated that approximately 10 PCE vehicle trips (five inbound trips and five outbound trips) would occur during each of the weekday AM peak hour and PM peak hour, assuming ten percent of the daily truck trips occur during the peak hours.

Taken together, the construction worker vehicles and miscellaneous trucks are forecast to generate 208 PCE vehicle trips per day (i.e., 104 inbound and 104 outbound) during peak final construction and structure construction phases at the site. During the weekday AM peak hour and PM peak hour, it is estimated that approximately 21 PCE vehicle trips would be generated during each of these peak hours. By comparison, it is noted in the traffic study that the removal of the existing tennis courts on the project site is forecast to result in a reduction of 27 AM peak hour trips and 62 PM peak hour trips.

# Future With Construction Conditions

Based on the relatively low number of generated construction related trips, traffic impacts due to construction activities are forecast to be less than significant at the five study intersections during the weekday AM and PM peak hours.

# Construction Management and Haul Route Approval

Approvals required by the City of Los Angeles for implementation of the proposed project include a Truck Haul Route program approved by LADOT. With regard to other construction traffic-related issues, construction equipment would be stored within the perimeter fence of the construction site. With the required haul route approval and other construction management practices described above, construction activity is considered to be less than significant. Impacts would be further reduced with the implementation of the following design features:

- Maintain existing access for the existing site uses and parking facilities;
- Limit any potential roadway lane closures to off-peak travel periods;
- Schedule receipt of construction materials to non-peak travel periods, to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for protracted periods of times; and
- Prohibit parking by construction workers on adjacent streets and directing the construction workers to available parking within the project site.