M R O
ENGINEERS

660 Auburn Folsom Rd.

Suite 201B
Auburn, California

95603

PHONE (916) 783-3838

FAX (916) 783-5003

March 29, 2017

Ms. Laurel L. Impett, AICP
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, California 94102

Subject: ***Review of Transportation/Traffic Analysis***
Draft Environmental Impact Report
Los Angeles International Airport (LAX) Terminals 2 and 3 Modernization Project
Los Angeles, California

Dear Ms. Impett:

As requested, MRO Engineers, Inc., (MRO) has reviewed the "Construction Surface Transportation" section of the Draft Environmental Impact Report (DEIR) for the Los Angeles International Airport (LAX) Terminals 2 and 3 Modernization Project (City of Los Angeles, February 2017). That section of the DEIR is based on a traffic impact analysis prepared by Ricondo & Associates (Ricondo) in January 2017.

Our review focused on the technical adequacy of the analysis, including the detailed procedures and conclusions documented in the Ricondo study.

Construction Surface Transportation Analysis Review

Our review of the DEIR "Construction Surface Transportation" analysis revealed potentially significant deficiencies that should be addressed prior to approval of the project and its related environmental documentation by the City of Los Angeles. These issues are summarized below.

1. ***Inadequate Study Area*** – The construction traffic analysis study area is described at DEIR p. 4.4-3:

   > *The construction traffic study area includes intersections and roadways that would be directly or indirectly affected by the construction of the proposed project. . . . The construction traffic study area for this analysis includes those roads and intersections that would most likely be used by employee and truck traffic associated with construction of the proposed project.*

   In reality, though, the study area, as illustrated at DEIR Figure 4.4-1 (DEIR p. 4.4-2), barely extends beyond the boundaries of LAX, which inappropriately suggests that only an insignificant amount of the construction traffic will travel east of La Cienega Boulevard, south of Imperial Highway or Interstate 105, or north of Westchester Parkway or Howard Hughes Parkway. Moreover, even within this limited study area, a number of intersections are ignored that should be analyzed.

   In particular, we reference the following locations that were evaluated in the recent DEIR for the Los Angeles International Airport (LAX) Landside Access Modernization Program (Los Angeles World Airports, September 2016), but are absent from the Ricondo analysis:

- Sepulveda Boulevard & I-105 Westbound Ramps,
- Sepulveda Boulevard & Mariposa Avenue,
- Sepulveda Boulevard & Grand Avenue,
- Sepulveda Boulevard & El Segundo Boulevard,
- Sepulveda Boulevard & Rosecrans Avenue,
- Avion Drive & Century Boulevard,
- Airport Boulevard & Century Boulevard,
- Nash Street & El Segundo Boulevard,
- Douglas Street & El Segundo Boulevard,
- Bellanca Avenue & Century Boulevard,
- Aviation Boulevard & West 120th Street,
- Aviation Boulevard & El Segundo Boulevard,
- Concourse Way & Century Boulevard,
- La Cienega Boulevard & West 120th Street,
- La Cienega Boulevard & El Segundo Boulevard,
- El Segundo Boulevard & I-405 Northbound Ramps, and
- Inglewood Avenue & Imperial Highway.

Each of those intersections is in close proximity to one or more of the study intersections addressed in the Ricondo analysis. Consequently, it is reasonable to conclude that they would also, ". . . be directly or indirectly affected by the construction of the proposed project."

To ensure that the traffic analysis for the Terminals 2 and 3 Modernization Project is not only thorough but credible, the intersections listed above should be incorporated into the analysis. A revised DEIR should then be circulated for further public comment.

2. ***Traffic Volume Data***– DEIR p. 4.4-3 states that the intersection turning movement traffic volume counts employed in the analysis:

> *. . . were collected at key traffic study area intersections over a two-year period (2013 to 2015) from 7:00 a.m. to 9:00 a.m., and from 4:00 p.m. to 6:00 p.m.*

There are two issues with this description of the traffic volume data, both of which relate to conformance with requirements of the City of Los Angeles Department of Transportation (LADOT). The specific requirements governing the conduct of traffic impact analysis in the City of Los Angeles are presented in a document entitled, *Traffic Study Policies and Procedures* (August 2014). Page 7 of the document states:

> *When collecting turning movement data at the study intersections, manual traffic volume counts should be collected in 15-minute intervals during the hours of 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., unless LADOT specifies other hours*

> *. . . The traffic study should not use any traffic counts that are more than two years old.*

Thus, the two-hour counts (7:00 – 9:00 AM and 4:00 – 6:00 PM) performed in conjunction with the Ricondo analysis are deficient with respect to the LADOT requirement for consideration of three-hour peak periods (7:00 – 10:00 AM and 3:00 – 6:00 PM). Consequently, it is not certain that the Ricondo analysis has actually addressed the AM and PM peak hours within the study area, although it is certain that the counts described violate the pertinent LADOT policy.

Moreover, any data collected in 2013 and some data collected in 2014 would exceed the two-year age limitation imposed by LADOT. The Notice of Preparation for the LAX Terminals 2 and 3 Modernization Project was issued on August 11, 2016. Thus, any data collected prior to August 11, 2014 would violate the LADOT policy. (In contrast, DEIR p. 4.4-4 refers to the "time of the analysis" as November 2016, which would suggest that the earliest acceptable data would be from November 2014.)

The traffic count data employed in the Ricondo analysis is not included in the DEIR or its appendices. However, assuming that the data used in the Ricondo analysis is the same data that was used in the September 2016 LAX Landside Access Modernization Program DEIR, the traffic counts for the following study intersections were performed on October 8, 2013:

- Sepulveda Boulevard & 76th/77th Street,
- Sepulveda Boulevard & 79th/80th Street, and
- Sepulveda Boulevard & 83rd Street.

In addition, counts at nine study intersections were performed on July 23rd or 24th of 2014, which would also violate the LADOT requirement, based on both the NOP issue date and the "time of analysis" date. Those intersections are as follows:

- Aviation Boulevard & Century Boulevard (July 23, 2014),
- Imperial Highway & Aviation Boulevard (July 24, 2014),
- Aviation Boulevard & 111th Street (July 24, 2014),
- Sepulveda Boulevard & Century Boulevard (July 23, 2014),
- Imperial Highway & Sepulveda Boulevard (July 24, 2014),
- Imperial Highway & I-105 Ramp (July 24, 2014),
- Sepulveda Boulevard & La Tijera Boulevard (July 24, 2014),
- Sepulveda Boulevard & Lincoln Boulevard (July 24, 2014), and
- Sepulveda Boulevard & Manchester Avenue (July 24, 2014).

In summary, some or all of the traffic volume data employed in the Ricondo analysis violates the basic governing LADOT requirements. To ensure conformance with LADOT requirements, new data will be required. It will then be necessary to revise the traffic analysis and present the results in revised DEIR.

3. ***Peak-Hour Analysis Periods*** – The analysis time periods are presented at DEIR p. 4.4-4 and p. 4.4-8. According to the DEIR:

> *The estimated peak hours for construction-related traffic were determined by reviewing the estimated hourly construction-related trip activity for the proposed project developed for this study. The a.m. peak hour was determined to be 7:00 a.m. to 8:00 a.m. and the p.m. peak hour was determined to be 4:00 p.m. to 5:00 p.m.* [DEIR p. 4.4-4]

The estimated hourly construction-related travel patterns are documented at DEIR Table 4.4-4 (p. 4.4-17 & 4.4-18). As indicated in the DEIR, the highest level of construction-related traffic in the morning will occur between 7:00 and 8:00 AM; this corresponds to the AM peak hour analyzed in the Ricondo study.

In the afternoon, though, DEIR Table 4.4-4 shows that the highest level of construction traffic will occur between 3:00 and 4:00 PM. During that one-hour time period, 211 trips will be generated by project construction activities. The DEIR, however, analyzed the following hour – 4:00 to 5:00 PM – when only 30 construction-related trips are projected to occur. Of course, as noted above, the traffic volume data used in the analysis did not include the 3:00 – 4:00 PM hour, in violation of LADOT requirements.

Consequently, the analysis of PM peak hour conditions documented in the DEIR is deficient, in that it fails to address the actual peak period of construction-related traffic demand occurring within the LADOT-required three-hour PM peak period. Instead, the DEIR addresses a PM time period when project-related construction traffic will be 14 percent of the peak level.

This is obviously a substantial deficiency in the analysis, which must be rectified in combination with collection of new traffic data, as described above.

4. ***Inadequate Haul Route Analysis*** – The DEIR identifies the proposed construction vehicle routes on p. 4.4-18 and on Figure 4.4-3 (DEIR p. 4.4-20). Among the roads to be substantially affected is West Imperial Highway along the northern edge of the City of El Segundo. In fact, DEIR Figure 4.4-3 (DEIR p. 4.4-20) appears to indicate that as many as 67 percent of the project-related trucks would use West Imperial Highway, as follows:

   - 32 percent regional trips to/from the east on I-105;
   - 23 percent regional trips to/from the south on I-405;
   - 5 percent local trips to/from the east on West Imperial Highway;
   - 5 percent local trips to/from the south on Sepulveda Boulevard; and
   - 2 percent local trips to/from the south on Aviation Boulevard.

   DEIR Table 4.4-4 (DEIR pp. 4.4-17 - 4.4-18) shows that a total of 360 passenger-car-equivalent truck trips per day are estimated, based on application of a "passenger car equivalent" (PCE) factor of 2.5 for trucks; that is, one truck is equivalent to 2.5 passenger cars, in terms of its effect on the roadway system. (DEIR p. 4.4-16) If 67 percent of those trips are on West Imperial Highway, an additional 240 PCE truck trips will occur there each day throughout the course of the more than six-year construction period.

The DEIR largely ignores the effects of trucks on West Imperial Highway and other affected roads, however. Trucks have an inordinate adverse effect on traffic operations and safety, due to their size and operating characteristics, particularly with regard to slower acceleration, longer braking distances, and the need for greater separation between vehicles. Key concerns that were not addressed in the DEIR include:

A. Safety – The traffic study includes no discussion or analysis of auto-truck conflicts and the potential safety issues associated with mixing automobile traffic with a substantially increased volume of heavy-vehicle traffic.

B. Pavement Condition – The addition of substantial volumes of heavy trucks will take a toll on the condition of the pavement on West Imperial Highway and the other haul routes. A mitigation measure must be identified to address this issue, particularly calling for reimbursement of the additional costs incurred by the City of El Segundo to maintain this critical roadway in acceptable condition.

C. Cumulative Effects of Truck Traffic – The DEIR notes that a number of other projects are currently being considered at LAX. DEIR Table 4.4-6 (DEIR p. 4.4-24) lists eight other LAX projects that are anticipated to be under construction in November 2019 (i.e., the "overall cumulative peak" construction period), including the following:

- Midfield Satellite Concourse North,
- Miscellaneous Projects/Improvements,
- LAX Northside Development Area Project,
- Airport Metro Connector 96th Street Transit Station,
- Airport Security Buildings,
- Landside Access Modernization Program,
- Concourse 0, and
- North Airfield Improvements Project.

In addition, DEIR Table 4.4-5 (DEIR p. 4.4-21) lists thirteen more LAX-area projects (for a total of 21) that will be under construction during some or all of the six-year-plus construction period for the proposed project. And, of course, DEIR Table 3-2 (DEIR pp. 3-9 – 3-17) lists a total of 212 "LAX Area Probable Development Projects." Thus, up to 233 development projects are anticipated in or near the study area, each of which will generate truck traffic during its construction period. (As will be discussed later, all but the above-listed eight projects were inappropriately ignored in all aspects of the DEIR traffic analysis.)

Each of the projects described above will generate substantial truck volumes during construction. For example, the Landside Access Modernization Program, which is also currently under environmental review, is estimated to generate 1,944 PCE truck trips each day on the same roads that will be affected by the proposed Terminals 2 and 3 project. (Reference: Los Angeles World Airports, *Draft Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program*, September

2016, Table 4.12.3-4, p. 4.12-215.) If 67 percent of those trips use West Imperial Highway, 1,300 PCE truck trips will be added to that road each day.

As another example, the LAX Northside Development Area Project will generate 238 daily truck trips. (Reference: Gibson Transportation Consulting, Inc., *Transportation Study for the LAX Northside Plan Update*, May 2014, p. 269.) Those truck trips will be equivalent to about 600 passenger car trips.

Further, detailed review of DEIR Table 4.4-6 raises questions regarding the accuracy of the truck trip numbers presented there. Specifically, Footnote 3 to that table indicates that the truck trip estimates have been adjusted using a PCE factor of 2.5. If that were the case, the smallest number that could appear in the columns indicating truck trips would be 3 (i.e., 1 truck * 2.5 = 2.5 PCE, which would round up to 3). However, two of the projects are shown to have only one PCE trip in each direction in both the AM and PM peak hours (Miscellaneous Projects/Improvements and North Airfield Improvements).

In addition, application of the 2.5 PCE factor should mean that each truck trip value presented in the table would be a multiple of 2.5 (with appropriate consideration of rounding). However, that is not the case. For example, the Landside Access Modernization Program is shown to have 71 PCE truck trips in each direction in both peak hours. Seventy-one PCE divided by 2.5 indicates 28.4 truck trips. To test whether this is simply a result of round-off error, we multiplied 28 trucks by 2.5 and got 70 PCE truck trips. We then multiplied 29 trucks by 2.5 and got 72.5, which would round to 73. In short, there is no number of truck trips that can be multiplied by 2.5 and get a result of 71 PCE trips.

Similarly, the Airport Security Buildings project is shown to have 6 PCE trips in each direction in both the AM and PM peak hours. Obviously, 6 is not a multiple of 2.5, and no calculation would round-off to 6. Only PCE values of 5 or 8 (i.e., 7.5 rounded up) make sense in this case.

In summary, substantial additional truck travel will occur in the study area in conjunction with the proposed Terminals 2 and 3 Modernization Project as well as a number of other LAX-area projects. As noted above, only 8 of the 233 LAX-area development projects identified in the DEIR were considered in the traffic analysis, even though all of them will generate truck traffic during their respective construction periods. Despite this, the potential cumulative impacts relating to truck-related safety and pavement condition in the study area have been ignored in the DEIR. Furthermore, the estimated number of PCE trips employed in the cumulative conditions intersection level of service analyses appears to be incorrect.

5. ***Baseline Traffic Volumes*** – With regard to determination of "baseline" traffic conditions, DEIR p. 4.4-4 says:

> *Baseline conditions used in the analysis of project-related construction traffic impacts are defined as the existing conditions within the construction traffic study area at the time of the analysis (November 2016). Intersection turning movement volumes were collected over a two-year period (2013 to 2015), representing the most current comprehensive traffic counts completed by LAWA* [Los Angeles World Airports]. *Additionally, LAWA conducts annual driveway volume counts at various locations throughout the Airport . . . Furthermore, LAWA collects annual traffic volume counts each August along the CTA* [Central Terminal Area] *roadways to*

> *estimate annual growth in Airport traffic. . . . Consequently, both the driveway count data and CTA data were used to establish a growth rate to adjust the 2015 traffic volumes to 2016 levels. . . . The a.m. traffic volumes were increased by 12.1 percent, while the p.m. traffic volumes were increased by 11.2 percent. These volumes were used as a basis for preparing the construction traffic analysis and assessing project-related construction traffic impacts.*

First, we note that 2013 – 2015 is actually a three-year period (2013, 2014, and 2015), rather than a two-year period, as described in the DEIR.

We also note that, while the DEIR describes how counts from 2015 were adjusted to represent baseline (2016) conditions, no corresponding description is provided with respect to adjustment of traffic volumes from 2013 or 2014. Treating the percentages described above as average (i.e., uncompounded) growth rates would suggest that a 2013 AM peak-hour traffic volume would need to be increased by 36.3 percent to estimate a 2016 value (i.e., three years at 12.1 percent per year), and a 2013 PM peak-hour count would be increased by 33.6 percent (i.e., three years at 11.2 percent per year). For 2014 counts, the growth factors would be 24.2 percent and 22.4 percent for the AM and PM peak hours, respectively. Were these equivalent annual growth factors applied to the older counts? If not, why not?

6. ***Future Cumulative Traffic Volumes*** – Development of the cumulative (November 2019) traffic volumes is described at DEIR p. 4.4-6 and, in more detail, beginning at DEIR p. 4.4-19. In summary, that process involved application of a two percent per year growth factor, in combination with the traffic associated with eight other planned projects that are expected to be under construction in November 2019.

   Specifically, DEIR p. 4.4-6 states:

   > *. . . background traffic was increased to reflect additional growth from non-specific projects, which may include both Airport and non-Airport related projects. The construction traffic analysis assumed a two percent annual growth in background traffic which produces a conservative traffic volume scenario that would account for additional construction-related traffic in the event that additional construction projects are initiated during the timeframe evaluated for this study.*

   Obviously, the two percent per year growth factor employed in this process varies substantially from the 12.1 percent and 11.2 percent growth factors that were used to develop the baseline traffic volumes. As described above, the larger percentages were based directly on data collected at and near LAX. On the other hand, the two percent per year value was apparently used simply because it is, ". . . consistent with previous direction first provided by LADOT for use in the SAIP construction traffic analysis . . ." (DEIR p. 4.4-6) SAIP refers to the South Airfield Improvement Project, which was the subject of an environmental impact report prepared in October 2005, over 11 years ago. Clearly, to develop a truly "conservative traffic volume scenario," it is appropriate to use the more recent and more relevant LAX-area growth factors described above in place of the historical two percent value.

   In addition to the inadequate two percent per year growth factor, the analysis incorporates estimated traffic volumes for eight concurrent LAX construction projects, which are listed in DEIR Table 4.4-6 (DEIR p. 4.4-24). That is, the DEIR considers only LAX-area related projects that are expected to be under construction at the same time as the proposed Terminals

2 and 3 Modernization Project; it ignores any related projects that might generate non-construction-related traffic in the study area, including a number of the 29 projects listed in DEIR Table 3-1 (DEIR pp. 3-4 – 3-7), which lists "Development Projects At/Adjacent to LAX."

Moreover, DEIR Table 3-2 (DEIR pp. 3-9 – 3-17) presents a list of 212 "probable" development projects that were ignored in the traffic analysis. That list includes projects in the Cities of Los Angeles, Culver City, El Segundo, Manhattan Beach, Lawndale, Inglewood, Hawthorne, and the County of Los Angeles. It seems obvious that consideration of only the projects listed in DEIR Table 4.4-6 (DEIR pp. 4.4-24) in combination with the two percent annual growth factor is inadequate to provide a reasonable estimate of cumulative traffic volumes during the construction period for the proposed project.

In summary, the cumulative traffic volumes employed in the analysis are deficient in that they:

- Are based, in part, on a growth factor that fails to accurately reflect the recent level of traffic growth in the vicinity of LAX, as documented in the traffic study;
- Account for only construction-related traffic associated with a selected list of eight related projects "at/adjacent to" LAX;
- Are the result of inaccurate conversion of truck trips to PCE trips, as described above,)
- Totally ignore non-construction-related traffic from any other projects, including the 212 "probable" projects listed in the DEIR.

Consequently, the cumulative traffic analysis documented in the DEIR fails to adequately or accurately evaluate the potential impacts of the proposed project. The analysis must be revised to incorporate accurate estimates of future traffic volumes in the study area.

7. ***Fuel Consumption Estimates*** – Construction-related fuel consumption associated with the proposed project is estimated beginning at DEIR p. 6-4. Three tables are presented there, as follows:

   - Table 6-1: Construction Worker Gasoline Demand (DEIR p. 6-5),
   - Table 6-2: Construction Off-Site Deliveries and Hauling Demand (DEIR p. 6-6), and
   - Table 6-3: Construction On-Site Deliveries and Hauling Demand (DEIR p. 6-6).

   In each case, fuel consumption was estimated from total estimated carbon dioxide emissions using a designated conversion factor for either gasoline or diesel fuel. To check the reasonableness of the fuel consumption estimates, we have performed an additional step, in which we derived the fuel economy values (in terms of miles per gallon or MPG) associated with the information presented in the three tables. That process involved first deriving values for "total miles traveled" by multiplying the number of trips by the trip length. The fuel economy values were then derived by dividing that total miles traveled value by the number of gallons of fuel presented in each table. Tables 1 – 3 summarize that information.

Table 1 summarizes the gasoline consumption figures related to construction worker travel. As shown, the fuel economy values vary substantially by phase, from as low as 0.85 MPG to as high as 12.57 MPG. Overall, a fuel economy value of 2.00 MPG was derived from the information in DEIR Table 6-1.

Table 1
Construction Worker Gasoline Demand[1]

Phase	Trips	Trip Length (Miles)	Total Miles Traveled[2]	Gallons of Gasoline	Miles Per Gallon[3]
Airside Civil/Apron Work	5,186	40	207,440	16,498	12.57
Terminal 3BHS Sprung Building	310	40	12,400	5,050	2.46
Terminal 3 Concourse	7,166	40	286,640	71,829	3.99
Terminal 2& 3 Headhouse	5,267	40	210,680	246,465	0.85
Terminal 2 Concourse	5,785	40	231,400	93,603	2.47
Terminal 3 North (Satellite)	1,984	40	79,360	43,322	1.83
Terminal 3.5 Headhouse	3,705	40	148,200	112,458	1.32
TOTAL	29,403	40	1,176,120	589,225	2.00

Notes:
[1] Source: DEIR, Table 6-1: Construction Worker Gasoline Demand, p. 6-5.
[2] Derived by multiplying "Trips" by "Trip Length"
[3] Derived by dividing "Total Miles Traveled" by "Gallons of Gasoline"

Table 2 presents similar information for Construction Off-Site Deliveries and Hauling Demand, based on diesel consumption data presented in DEIR Table 6-2. Substantial variation is again shown for the various phases of construction activity, with fuel economy values ranging from 5.92 MPG to 34.38 MPG, with an overall value of 26.29 MPG.

Table 2
Construction Off-Site Deliveries and Hauling Demand[1]

Phase	Trips	Trip Length (Miles)	Total Miles Traveled[2]	Gallons of Diesel	Miles Per Gallon[3]
Airside Civil/Apron Work	42,931	40	1,717,240	49,951	34.38
Terminal 3BHS Sprung Building	50	40	2,000	296	6.76
Terminal 3 Concourse	1,665	40	66,600	4,828	13.79
Terminal 2& 3 Headhouse	4,496	40	179,840	15,074	11.93
Terminal 2 Concourse	175	40	7,000	1,182	5.92
Terminal 3 North (Satellite)	340	40	13,600	2,069	6.57
Terminal 3.5 Headhouse	1,426	40	57,040	4,335	13.16
TOTAL	51,083	40	2,043,320	77,735	26.29

Notes:
[1] Source: DEIR, Table 6-2: Construction Off-Site Deliveries and Hauling Demand, p. 6-6.
[2] Derived by multiplying "Trips" by "Trip Length"
[3] Derived by dividing "Total Miles Traveled" by "Gallons of Diesel"

Finally, Table 3 presents the derivation of the diesel fuel economy estimates for Construction On-Site Deliveries and Hauling Demand. In this case, the trip length is somewhat shorter than was indicated in the two tables above, because of the nature of "on-site" travel. This table indicates substantially less fuel economy variation among the construction phases, with a range of 6.62 to 9.76 MPG and an overall value of 6.77 MPG.

Table 3
Construction On-Site Deliveries and Hauling Demand[1]

Phase	Trips	Trip Length (Miles)	Total Miles Traveled[2]	Gallons of Diesel	Miles Per Gallon[3]
Airside Civil/Apron Work	42,931	16.5	708,362	106,995	6.62
Terminal 3BHS Sprung Building	50	16.5	825	99	8.33
Terminal 3 Concourse	1,665	16.5	27,473	3,645	7.54
Terminal 2& 3 Headhouse	4,496	16.5	74,184	9,852	7.53
Terminal 2 Concourse	175	16.5	2,888	296	9.76
Terminal 3 North (Satellite)	340	16.5	5,610	690	8.13
Terminal 3.5 Headhouse	1,426	16.5	23,529	2,857	8.24
TOTAL	51,083	16.5	842,870	124,434	6.77

Notes:
[1] Source: DEIR, Table 6-3: Construction On-Site Deliveries and Hauling Demand, p. 6-5.
[2] Derived by multiplying "Trips" by "Trip Length"
[3] Derived by dividing "Total Miles Traveled" by "Gallons of Diesel"

In each of the three cases, it is unclear why the fuel economy values form each phase should vary to such a large degree. A single fuel-specific factor was used to convert the carbon dioxide emissions estimates to gallons of either gasoline or diesel fuel. This would suggest uniformity among the derived values, but that is not the case. Moreover, the derived fuel economy values do not all appear to be reasonable. For example, the overall fuel economy figure for construction worker trips is 2.00 MPG, with all but one of the individual phase values being less than 4.00 MPG.

The process used to derive the fuel consumption estimates must be reviewed. If that process reveals that the results are inaccurate, revised figures must be provided for public review. At a minimum, a better explanation must be provided with respect to derivation of the fuel consumption values presented in DEIR Tables 6-1 through 6-3.

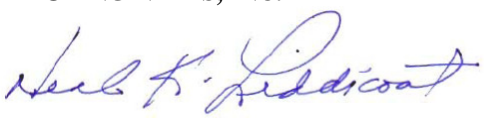
CONCLUSION

Our review of the "Construction Surface Transportation" section of the Draft Environmental Impact Report for the LAX Terminals 2 and 3 Modernization Project in Los Angeles, California revealed several substantial issues the affecting validity of the conclusions presented in that document. A modified traffic analysis must be prepared, and that updated analysis should be incorporated into a revised environmental document.

We hope this information is useful. If you have questions concerning anything presented here, please feel free to contact me at (916) 783-3838.

Sincerely,

MRO ENGINEERS, INC.



Neal K. Liddicoat, P.E.
Traffic Engineering Manager

877433.1