

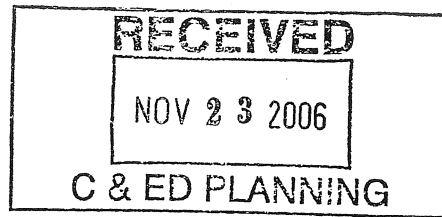
LETTER C

DEPARTMENT OF TRANSPORTATION

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November 20, 2006

**10-STA-108-PM- 26.60
 Draft EIR For
 Tivoli Specific Plan
 SCH # 2005072125**

Paul Liu
 City of Modesto
 Community and Economic Development
 P.O. Box 642
 Modesto, CA 95353

Dear Mr. Liu :

Thank you for the opportunity to review the Draft Environmental Impact Report for Tivoli Specific Plan . The Tivoli Specific Plan would include about 286 acres of residential land use designation, totaling 3,241 residential dwelling units, 14 acres of neighborhood-serving commercial, 6 acres of general commercial, 67 acres of regional-serving commercial, 2 acres of professional office space, a 14 acre elementary school site, about 30 acres of parks and open space, 4 acres of public infrastructures and about 31 acres of interior collector roadways within the Specific Plan area. The project is proposed to be implemented in phases, with anticipated commencement in 2007 and buildout by approximately 2017. This project is located on the west side of Roselle Avenue north of Sylvan Avenue, east of Oakdale Road and south of future California Avenue in Modesto.

We have circulated copies of the application, plans, and supporting documentation to our functional units for review. Caltrans has the following comments:

Traffic Forecasting

1. Traffic Impact Study does. Not adequately reflect existing/ prevailing travel patterns such as journey to work and retail shopping. Specifically noting that access to HWY 99 was not included in this traffic Study. The existing pattern is that large amounts of people will live in the central Valley and commute to jobs in the Bay Area, some 60 to 80 miles away, impacting that transportation infrastructure as well. Additionally, trip making to the large local shopping centers such as Costco and Vantage Fair Mall were omitted from the study. Please correct and resubmit.

C.1

Traffic Operations

2. The proposed project traffic would impact the following intersections on McHenry Ave (SR-108) and interchanges on SR-99. C.2
 - McHenry Ave (SR-108)/Floyd Ave
 - McHenry Ave (SR-108)/Briggsmore Ave
 - McHenry Ave (SR-108)/Rumble Rd
 - SR-99/Carpenter/Briggsmore Rd
 - SR-99/Beckwith Rd
 - SR-99/Pelandale Rd
 - SR-99/Kiernan Ave (SR-219)

These locations were not analyzed as part of the Traffic Impact Assessment. Specific impact to the intersections and interchanges should be analyzed for the following conditions:

 - Existing (2006)
 - Existing plus Project Phase 1 (2012)
 - Existing plus Project build out (2017)
 - Cumulative (2025)
3. Roadway segments analysis should include McHenry Ave (SR-108) from Briggsmore Ave to Claribel Rd. C.3
4. For 2012, 2017, 2025 Baseline and With Project AM (PM) Peak hour conditions, a PHF of 1.0 was used. Need to revise use PHF<1.0. C.4
5. For 2012, 2017, 2025 Baseline and With Project AM (PM) Peak hour conditions, the lane configurations in the Traffic Impact Assessment and the Traffix Input Sheet do not match. (See Appendices D-I pages 170-172,270-272, 368-370, 455-457, 553-555, 640-642) C.5
6. The City should be responsible for implementing and assessing the local developments mitigation identifies in Tables 19, 20, 21, 22, 23 and 24 to address the potential traffic impacts at the intersections of SR 108 and Claratina Avenue, Sylvan Avenue, and Claribel Road. C.6
7. Traffic Operations recommends SR-99 interchanges, roadway segment and other intersections along McHenry Ave (SR-108) (see comments #1 and #2) will need to be analyzed. C.7

Mr. Liu

November 20, 2006

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If you have any questions or would like to discuss these comments in more detail, please contact Saeed Erfan at (209) 948-7936 (e-mail: serfan@dot.ca.gov) or myself at (209) 941-1921. We look forward in continuing to work with you in a cooperative manner.

Sincerely,

A handwritten signature in black ink that reads "Saeed Erfan". The signature is written in a cursive style with a long horizontal flourish at the end. Below the signature, the year "2006" is written in a smaller, less distinct script.

**TOM DUMAS, Chief
Office of Intermodal Planning**

Cc: Scott Morgan, SCH

**RESPONSES TO LETTER C:
California Department of Transportation – Tom Dumas, Chief, Office of Intermodal
Planning**

Response to Comment C.1

The comment combines concerns regarding existing and future travel patterns. It is assumed the main concern of the comment is over the scope of the study area and the manner in which the regional travel patterns of the project are addressed. References to “existing” patterns are assumed to refer to expected future conditions based on prevailing conditions. Existing travel patterns were documented through collection of traffic data. This data was collected in May 2005 at over fifty intersections in the project vicinity. See Section IV.D, Transportation and Circulation, Figure IV.D.1 and Table IV.D.1 on pp. IV.D.5-IV.D.6 for a map and list of the traffic analysis locations, respectively. Furthermore, project-related impacts on travel patterns were assessed at the identified intersections at three different points in time both with and without the project; Year 2012, Year 2017, and Year 2025 (see Section IV.D, Transportation and Circulation Table IV.D.10 on pp. IV.D.26–IV.D.27; Table IV.D.11 on pp. IV.D.40–IV.D.41; and Table IV.D.13 on pp. IV.D.26–IV.D.27).

Regarding the impact of project traffic upon future prevailing travel patterns, the relevant comparison is between the General Plan-approved development traffic data in the 2025 Future Baseline No Project Scenario and the 2025 Future Baseline With Project Scenario, or more specifically, between the future travel patterns anticipated in the General Plan and those expected as a result of the proposed project. The future traffic model used in the traffic study was validated to ensure that newly completed projects (e.g., James C. Enochs High School) and those anticipated for completion are accounted for, and, in cases where that does not hold (e.g. Crossroads Regional Shopping Center), traffic information was added to the model. It is important to note that, existing regional commercial uses such as Costco and Vintage Faire Mall are accounted for in the model. On that basis, the projects contribution to future travel patterns is determined by comparing the preferred alternative with the Existing General Plan alternative (Alternative 3). At locations within the study area, differences in levels of significance between the Existing General Plan alternative and the preferred alternative are addressed fully within the section on project alternatives (see Section VI, Alternatives).

Beyond the study area the differences in traffic diminish as distance from the project site increases. For example, the current general plan model projects 96,600 vehicles per day on Pelandale Avenue east of SR 99 with the proposed project and 96,200 vehicles per day with no project, an increment of 0.4 percent (.004). At Kiernan Avenue the volume with project is 69,301 versus 68,858 with no project, an increment of 0.7 percent (0.007). At Standiford/Beckwith the

project volume would be 90,777 versus 89,527 with no project, an increment of 1.4 percent (0.014). The Carpenter/W.Briggsmore and SR 99 interchange is located at a distance of over 5 miles from the project site and was not included in the analysis. Given that the standard of significance applied to study locations where level of service is already at LOS F is an increase in volume-to-capacity ratio of 0.05, these locations would all be impacted by project-generated traffic at less than significant levels. This is an indication that detailed analysis of such distant facilities would not yield meaningful results.

It should be added that the regional impacts identified as part of General Plan development are acknowledged as part of the City of Modesto's commitments to public infrastructure financing. Development projects approved under an adopted Specific Plan are subject to assessment of development fees. These fees would apply to the proposed Tivoli Specific Plan development.

Response to Comment C.2

Caltrans identifies a number of other facilities that might be included in the analysis. Beyond the study facilities included in the report the project's contribution to traffic can be estimated, but with the distances involved, the expected reliability of these estimates does not support a detailed assessment of project traffic impacts and location specific mitigation measures.

The area of analysis used in the report is fully consistent with the guidelines established by the City of Modesto for traffic impact analysis. The logic of limiting the extent of the study area is that beyond two miles the tools available for estimating the assignment of individual vehicle turning movements at specific locations are not adequate to develop specific findings of impact based on estimated project turning movements. At such distances turning movement estimates are highly speculative. Instead the regional impact of a project upon transportation facilities located more than two miles from the project site is best mitigated by implementing the policies identified in the Modesto General Plan. The locations identified in the comment are already acknowledged in the General Plan as subject to significant and unavoidable impacts. When considering the additional roadway volumes the Tivoli Specific Plan's contribution to further impacts is not significant on the approaches to SR 99 listed; SR 99/ Kiernan Avenue, SR 99/Pelandale Avenue, SR 99/ Standiford/Beckwith, and SR 99 Carpenter/W. Briggsmore (see Response to Comment C.1). Considering the locations identified along McHenry Avenue, the project does not add more than 5 percent to the future volume at any location. The only approach where more than 1.4 percent of the total volume is from the proposed project is the westbound approach of Floyd at McHenry where the project-generated increase of 350 vehicles per day over 7,550 in the General Plan alternative represents a 4.4 percent increment. This again, is less than significant using the criteria applied in the traffic study of a 0.05 or greater increase in volume to capacity ratio as the criteria of significance.

Ultimately, given the distances involved between the project and the various locations proposed in the comment for analysis (in some cases over 5 miles such as SR 99/Carpenter-W. Briggsmore), the basis is weak for including these locations in the full analysis. This conclusion is supported by the results of travel demand modeling as presented above.

Response to Comment C.3

See Response to Comment C.2. The segment of McHenry Avenue from Briggsmore Avenue to Claribel Road is parallel two or more miles west of the major North-South routes directly serving the project. This segment would not provide the most direct route for project traffic to reach any destinations except those located along this segment of McHenry Avenue. Conventional traffic impact assessment would reveal negligible contributions of project traffic, and regional transportation issues along McHenry Avenue are addressed by contributions to the Stanislaus County Public Facility Fee (County PFF) program. The PFF is a potential funding source for improvements to roadway segments of McHenry Avenue north of Claribel Road. The City requires developers to pay County PFF.

Response to Comment C.4

The comment indicates that a peak hour factor of less than 1.0 should be used for analysis of future conditions at study intersections. The peak hour factor is a volume adjustment used to adjust hourly traffic volume data to obtain traffic flow conditions for the peak 15 minutes of the peak hour (the peak surge condition). To analyze existing conditions, peak hour factors less than one are used based on the traffic conditions observed for each intersection approach. While the use of a peak hour factor is clearly appropriate when there is existing count data to identify peaking or to justify the use of a default, the use of a peak hour factor to adjust forecasted traffic volumes is problematic and therefore was not used in this analysis.

First, project traffic is estimated based on published trip generation rates from ITE Trip Generation 7th Edition (Institute of Transportation Engineers, 2004). It is not standard practice to adjust project trip generation estimates for peaking, because the peak rates used represent the maximum traffic present at the project driveways based on observations. When this traffic becomes dispersed over intersections throughout the study area it becomes less concentrated over time, not more concentrated in the manner simulated by the use of peak hour factors. For this reason, it is standard practice to apply a peak hour factor only to the background traffic and to add the estimated project generated traffic without a peak hour factor. Trip accounting based traffic generation/assignment software such as TRAFFIX follows exactly this procedure, and, following that convention, peak hour factors are not applied to project traffic in this study.

Under future scenarios, existing traffic accounts for a small proportion of the total traffic. The exercise of applying a peak hour factor to the existing traffic and adding this small increment to the total traffic as currently estimated would not be fruitful and would in many instances reduce the number of locations where the project traffic would result in an impact or reduce the intensity of a project-related impact. This last point is because the increment would be added to both the no project and the project conditions and thus it would reduce the proportional project contribution to changes in volume and volume-to-capacity by increasing the volume for both the no project and with-project conditions. This would have the effect of making the analysis less, not more, conservative. For example a 0.05 percent change in the volume-to-capacity ratio calculated without using the peak hour factor (a project impact if at LOS E or F) would become a 4.95 percent change (NO impact) if the final adjusted volumes are all increased by using a peak hour factor of 0.9.

Finally, when the travel demand model assignment was performed for the Tivoli study, most of the links in the immediate project vicinity operate at or above hourly capacity. These routes would therefore not have any additional capacity to sustain peaking and for operational purposes would be metered at forecasted demand levels (with a peak hour factor equivalent to 1.0) through the peak hour.

Response to Comment C.5

This comment cites inconsistencies between the input lane geometries shown in the technical appendix and those shown in the graphics in the body of the traffic study report. The pages cited in the comment as being inconsistent were compared the October 2006, *Traffic Study for the Tivoli Specific Plan EIR* and the technical appendix for that document. The comparison revealed no discrepancies. This appears to indicate that the reviewer misinterpreted the codes contained in the calculation sheets in the appendix.

For example on page 170 of the Appendix the lane configuration shown for McHenry Avenue at Claribel Road for 2012 Baseline conditions is listed as:

NB	SB	EB	WB
1 0 2 0 1	1 0 2 0 1	1 0 1 0 1	1 0 0 1 0

This equates to:

- NB: one exclusive left turn lane, two exclusive thru lanes, one exclusive right turn lane.
- SB: one exclusive left turn lane, two exclusive thru lanes, one exclusive right turn lane.
- EB: one exclusive left turn lane, one exclusive thru lanes, one exclusive right turn lane.
- WB: one exclusive left turn lane, one shared through-right turn lane.

This is precisely what is shown in the traffic study for intersection #19 on Figure 5a – 2012 Baseline AM(PM) Peak Hour Intersection Turning Movements (excerpted below).

Response to Comment C.6

The commenter addresses expectations for the implementation of various mitigation measures. All of the mitigation measures identified in the report are under consideration by the City of Modesto, as the lead agency, as feasible options to address circulation impacts directly attributable to the project. The City must make determinations that identify the basis on which the mitigation measures are to be implemented or whether the measures may be rejected. These determinations are made as part of the EIR process after the preparation of the traffic impact analysis. The City's determinations in these respects are discussed on pp. IV.D.29-IV.D.30 for the intersection analysis. On the one hand, the traffic impact analysis is intended to identify what measures will restore LOS D, while ultimately on the other hand the EIR applies feasibility tests to each of these measures. So for example, mitigation is identified under the 2017 scenario for the intersection of SR 108 at Sylvan Avenue (mitigation D.31) involving the addition of third eastbound and westbound through lanes, whereas under 2025 conditions mitigation is identified involving fourth eastbound and westbound lanes (mitigation D.51) but this is not feasible given existing development.

Response to Comment C.7

See Response to Comments C.1 and C.2.

Traffic Study Figure 5a – 2012 Baseline AM (PM) Peak Hour Intersection Turning Movements

