

MEMORANDUM

To: Michelle Mahan
From: Bill Fox
Date: December 15, 2010
Project: Hogan-Pancost Property Development Proposal Review
Subject: Review of Transportation Impact Feasibility Study

At your request, and on behalf of the City of Boulder, I have reviewed the Transportation Impact Feasibility Study report (May 2010 and Revised November 2010) prepared by Drexel, Barrell & Co. for the Hogan-Pancost Property. Review comments are summarized by topic as follows:

General Comments

1. In general, I concur with the traffic study methodology and most of its findings, but offer the following comments and suggestions that should be addressed in the final traffic study for this project when completed.

Existing Conditions and Background Traffic

2. The report refers to Kewanee Drive as an east/west “community collector” roadway and Manhattan Drive as a “local” roadway. I believe these descriptions would be more accurate if they were reversed, but this would not change any of the findings of the study.
3. On Figure 2, daily traffic is illustrated on Manhattan Drive and 55th Street just north of South Boulder Road. It would be helpful to also illustrate daily traffic volumes (actual count or estimate from peak hour counts would be acceptable) just south of Baseline Road on both Manhattan and 55th.
4. Peak hour traffic count dates should be illustrated on Figure 2. It appears that all peak hour traffic counts used in this study are from 2008 when an earlier version of this study was prepared. The City may want these counts to be updated for the final traffic impact study on this project, per the City’s traffic study requirements.

5. Section 3.1 discusses the traffic growth rates used to estimate the background traffic growth at study area intersections. It appears that the growth rates referenced are annual rates, but the text does not specifically say so. This should be clarified in the final traffic study report text.
6. Section 3.2.1 discusses the existing traffic control in the intersection of South Boulder Road and Manhattan Drive and the existing level of service (LOS). The study evaluates two options for improving intersection operation. The first is the restriping of the southbound approach on Manhattan to create a separate left turn lane. The second is the installation of a traffic signal. The study conducted a traffic signal warrant analysis at this intersection and concluded that two of the eight warrants in the MUTCD are currently met.

It is my understanding that the City of Boulder Transportation staff would consider the restriping of the southbound approach (assuming that no roadway widening is required), but does not believe that a traffic signal is warranted currently at this location based on automobile LOS and delay. However, the City does believe that a traffic signal at this location would be beneficial to RTD riders who get on/off buses on South Boulder Road at this intersection, particularly since some of these transit riders who must cross South Boulder Road are students accessing the Manhattan School. In fact, the City has submitted a grant application through the Safe Routes to School Program to seek funding for this traffic signal.

Trip Generation and Distribution

7. The study references the trip generation rates from the 7th Edition of the ITE Trip Generation Manual in the text, and the 8th Edition of the Trip Generation Manual on Table 2. This inconsistency should be resolved in the final report for this project. It appears that the most current trip rates have been used in the analysis.
8. In the initial study the trip generation did not take any reduction for multi-modal travel that typically occurs in Boulder. At staff's suggestion, the revised study includes a trip reduction to reflect Boulder specific travel patterns. I believe this to be more representative.
9. After reviewing the initial report, staff had suggested using area traffic counts to refine the trip distribution estimates. The initial estimates appeared to underestimate the traffic that would use Kewanee Drive and Manhattan Drive. The revised report has included updated trip distribution percentages which I believe to be much more realistic.

Transportation Impact Analysis

10. I do not have issue with the intersection LOS analysis presented.

Accident Analysis

11. The study reviewed a five year traffic accident history at four major intersections within the study area. No correctable auto/auto traffic accident patterns were identified in any of the intersections.
12. It was noted that there were six automobile / bicycle accidents in the Baseline / 55th intersection in the five years studied. I am in the process of procuring and reviewing the traffic accident reports to help determine if the City should consider any corrective measures to mitigate bicycle / auto traffic accidents in this intersection.
13. The study concluded that the additional traffic generated by the project will not increase the traffic accident frequency at these intersections or result in the need for any mitigation measures.

Recommendations and Conclusion

14. The study recommends restriping the southbound approach on Manhattan at South Boulder Road to include a separate left turn lane. It also recommends that the City consider a traffic signal at this location. As noted above, the City does not believe that a traffic signal is warranted at this location to accommodate automobile traffic, but is pursuing funding through the Safe Routes to School Program to install a traffic signal to accommodate pedestrians crossing South Boulder Road at this location.
15. The study recommends restriping the southbound approach on 55th at South Boulder Road to add a separate left turn lane. This treatment was also recommended in an earlier traffic study completed for the East Boulder Community Park. I believe that City Transportation staff supports this recommendation.
16. The study concludes that the transportation network can accommodate the additional traffic that will be generated by development of the Hogan-Pancost site with the recommended improvements noted above. I concur that the traffic generated by this project can be accommodated by the existing transportation network. Signalization of the South Boulder Road / Manhattan Drive intersection, and adding restriping to add southbound left turn lanes on Manhattan and 55th will improve traffic operations at these intersections.

Please let me know if you have any questions.

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