



February 7, 2017

Mr. Steve Meyer, P.E.  
Director of Public Works  
City of Des Peres  
12325 Manchester Road  
Des Peres, Missouri 63131

RE: Traffic Impact Study Peer Review  
Des Peres Commons Shopping Center  
515-0011-OTE / 1TE

Dear Mr. Meyer:

In accordance with your request, Lochmueller Group has completed an initial review of the Traffic Impact Study (TIS) that was submitted for the proposed re-use of the westernmost building at Des Peres Commons Shopping Center, which is located in the northeast quadrant of Manchester Road and Harwood Road in Des Peres, Missouri. It is our understanding that the main level of this building was previously occupied by a specialty retail store (outdoor furniture), but it is now vacant. A restaurant (Circle 7) has been proposed to occupy almost one-half of that space with the remainder to eventually be re-occupied with specialty retail.

Given the proposed addition of a restaurant, the City Code requires the issuance of a Conditional Use Permit. Accordingly, the City has required the submittal of a Traffic Impact Study for consideration in its deliberations, and a study was submitted on behalf of the applicant by HR Green. We have performed an initial review of that study and our preliminary comments are provided below.

1. In general, we agree with the methodologies, sources and calculations that were employed by HR Green in the preparation of their Technical Memorandum. The document is generally in keeping with professional practices and standards that are applied for these purposes.
2. The traffic study makes reference to the Conceptual Master Plan being prepared for Manchester Road, though it incorrectly states that the Master Plan only extends from Ballas Road to Bopp Road. The Master Plan actually extends eastward to the City Limits at Meier Lane, and includes the frontage of Des Peres Commons. In fact, the Master Plan recommends that in the event of redevelopment, the shopping center's easternmost driveway be relocated further to the west (spaced approximately 250 feet from the westernmost driveway), thereby providing improved spacing from Lockett Road and increased sight distance to the east (visibility is currently limited by a vertical crest on Manchester Road). While the proposed re-use of the building at Des Peres Commons does not represent redevelopment, the Master Plan's recommendation could still apply in order for the site to better accommodate a more intense use.
3. We concur with the evaluation of existing operating conditions at the site's access drives and the intersection of Manchester Road with Harwood Road. The TIS acknowledges the challenges that motorists already encounter when attempting to make left turns onto Manchester Road, though the

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presence of a center-left-turn lane accommodates two-stage turns that allow left turns out of the site to operate at Level of Service (LOS) D during the midday peak period and LOS E or E/F during the p.m. peak period. That said, it must be recognized that MoDOT does not recognize two-stage turns as a legal maneuver (this position has been interpreted differently by various communities along Manchester Road). Moreover, based on anecdotal testimony provided by area residents during deliberations over the Reliance Bank/Starbucks project, midday conditions may be under-stated, perhaps due to the heavy dispersion of east-west traffic, which reduces the number of safe gaps and makes left-turn maneuvers more difficult at that time of day.

4. On Page 7 of the TIS (Paragraph 1), the proposed restaurant is said to have a floor area of 5,100 square feet (s.f.), but this appears to be in error when compared to the Parking Study, which cites a floor area of 3,851 s.f. Fortunately, this misstatement does not have any impact on the analysis because the traffic generation calculations were based on proposed seating rather than floor area.
5. We concur with the traffic generation calculations and estimates of directional distribution from the TIS. As such, the net increases in site-generated traffic from the proposed restaurant are expected to be relatively modest during the peak hours of Manchester Road, as are the impacts to any one turning movement into or out of the site. However, we would cite two concerns about the assignment of trips exiting from the site:

- a. In recognition of the difficulty that motorists have making left turns out of the site, the TIS assumed that a portion of those trips generated by the restaurant would instead make a right turn out of the site, followed by a downstream U-turn (for the record, Figure 8 suggests that as much as 25% of the outbound traffic would have to make that maneuver, but the site-generated traffic assignments shown in Figure 9 reflect one-third as many U-turns).

This assumption was based on observations of existing motorists making similar maneuvers (anecdotally, those U-turns are made through commercial properties on the south side of Manchester, rather than at the intersection with Lindemann or Bopp). While it is acknowledged that these maneuvers are already occurring, it would not be appropriate to depend on that practice. In reality, there is a natural constraint that may deter some motorists from patronizing the site if they have to exit via a left turn at certain times of the day, but this condition would also induce some motorists to make potentially unsafe maneuvers if there is not adequate capacity to accommodate those turns.

- b. The site-generated traffic assignments shown on Figure 9 suggest that as much as 20% of the outbound trips generated by the restaurant (and the adjacent retail) would use the shopping center's easternmost driveway. However, that driveway would not be attractive to motorists leaving the restaurant – it is not proximate to their primary parking field, and its sight distance limitations make it unappealing for outbound trips. We believe that those motorists would be more likely to use the shopping center's westernmost driveway, and while they would represent a nominal increase, they would likely exacerbate the forecasted operating conditions for that driveway. There is already evidence to suggest that there are not sufficient gaps to accommodate the existing left-turn demands out of the site, much less additional forecasted volumes.

6. The TIS acknowledges that as a result of the change in use, southbound left turns from the shopping center and Harwood Road would degrade by one level during both peak periods, and they would operate at LOS E or F. We concur that the restaurant would not generate sufficient traffic to justify mitigation measures (signalization, roadway improvements, etc.), but a failing LOS invites further scrutiny. While these conditions are not uncommon along the Manchester corridor, those sites with the highest levels of activity usually have access to a signalized intersection. Given the relative "fragility" of these outbound operations, it would be appropriate to provide additional analyses - actual delay measurements and/or gap studies - to make sure that there is actually sufficient capacity to safely accommodate movements exiting from the site. If it is concluded that there is not sufficient capacity, then the City may choose to consider whether a more intense use of the building (the restaurant would generate almost three times as much traffic as would a comparable amount of specialty retail space, as previously existed) is appropriate.
7. As an aside, the TIS scope presumably excluded an evaluation of deliveries associated with the proposed restaurant. While the volume of deliveries is not an operational concern, a restaurant can be expected to generate more trips from large trucks or tractor trailers (as compared to the existing retail space), so the site plan should be reviewed to ensure that deliveries can be accommodated on the site without creating conflicts or obstructions. Specifically, since there is not a separate loading area (service doors are identified on either side of the building), deliveries would periodically block the internal drive aisles. More importantly, there is some question as to whether a tractor trailer (if applicable) could maneuver through the site, so it is recommended that turning templates be applied to the plan.

We trust that these comments will aid the City's representatives in its deliberations over this application. Please feel free to contact us with any questions that you may have or if more detailed evaluations are required.

Sincerely,

A handwritten signature in black ink that reads "Douglas S. Shatto".

Douglas S. Shatto, P.E., PTOE  
Vice President / COO