Real People. Real Possibilities:

DON SCHONHARDT, MAYOR

## TRAFFIC IMPACT STUDY REVIEW COMMENTS

**Project:** Traffic Access Study of Carr Farms TIS

**Date:** 7/24/2018

**Review Type:** Traffic Impact Study Review

**Designer:** EMH&T

**Reviewer:** Scott Seaman, PE (GPD), Kevin Moderie, PE (GPD);

Letty Schamp, PE (Hilliard)

## General

- 1. Provide all referenced data with the impact study for completeness. The following data needs to be included in the Appendix with the traffic impact study:
  - a. 11 x 17 site plan
  - b. All traffic counts
  - c. The senior housing traffic counts example with a table showing the entering and exiting PM trips from the example sites. Also provide ITE LU trip generation in a table, for both sites, to show that the counts are less than projected as stated in the report.
  - d. The approved MOU
  - e. The correspondence with the approved growth rate
  - f. Include an exhibit showing current layout of Grener Park as it is referenced (provided by City)
- 2. On Figure 1, show Grener Park and the Hayden Run Development
- 3. On Figure 2, complete the following:
  - a. Zoom out to show all of the study intersections.
  - b. Add call outs of the proposed land uses on top of the site plan.
  - c. The figure is blurry. Could you include an 11" by 17" in the appendix and sharpen this image?
  - d. Add a callout of the potential site access connection that is analyzed.
  - e. Label Grener Park and the Hayden Run Development.
  - f. Edie Drive is a public street. A gate at this access point is prohibited. Remove reference to a gate and/or restricted access at Edie Drive from the report. If gating of the Epcon Community is critical, then revise site plan to provide extension of Edie Drive to the single-family component of the development to allow for connection of all public streets.
- 4. On page 6, please expand the discussion and reference the counts that were conducted of the senior adult housing and have them also included in the Appendix. In addition, include a table in the report or Appendix showing that the actual counts are less than the projected volumes from the ITE.

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5. For Table 2 and Table 3 provide total trips.

- 6. Indicate that the City of Hilliard conducted traffic counts at the HOSA Soccer Complex on Scioto Darby Road in May 2018 and that based on the these counts, the ITE rates for the park appear to be in line with existing soccer park uses in the City. Conclude that the ITE equations for a Municipal Park type land use in the PM peak are appropriate.
- 7. Further discussion is needed of the southern access on Leppert Road closing and how the distribution entering and exiting the site changes. Please include a figure in the Appendix showing this distribution of entering and exiting trips.
- 8. On page 8, the purpose of the scenarios is to see whom is responsible for various improvements. If an intersection operates acceptably for the worst condition, then it is fine to show only the worst case. However, if an intersection is failing and would need improvements, then every scenario should be reviewed and documented as to what improvements are required to obtain satisfactory operation and level of service per the City's Traffic Study Guidelines.
- 9. Table 4 and the turn lanes were not verified with this review as traffic counts are needed to verify final volumes. With a roundabout as the definite traffic control for the proposed intersection, turn lanes and storage lengths are not required for the approaches of the roundabout. However, utilize the roundabout analysis to quantify vehicle queues to ensure satisfactory operation along the entire improved Leppert Road corridor.
- 10. Show all scenarios mentioned in the MOU in Table 5 of all intersections that are showing unacceptable delay. Provide a complete matrix include individual movements that are deemed insufficient.
- 11. Since a multi-jurisdictional corridor improvement that includes two single lane roundabouts is currently planned on Leppert Road, we agree that a proportional contribution to the roundabouts should be contemplated rather than modeling and determining turn lane storage lengths (as previously conducted with the 2015 single family rezoning). Please provide an ADT or 24 hour analysis for proposed site and existing background traffic at all the site drive locations. This percentage of use analysis will provide a more in-depth outcome using 24 hours of roadway volumes and site generation trips versus the combined A.M. and P.M. peak hours.
- 12. In the Summary of Proposed Improvements on Page 13, reiterate the 100% Developer requirements (previously outlined on page 3), specifically:
  - a. Widen Leppert Road & resurface both lanes along the site frontage to provide two 11' vehicle lanes
  - b. Provide a 4-foot wide, full-depth paved shoulder and ditch improvements on the east side of Leppert Road
  - c. Provide a shared-use path on the east side of Leppert Road for the full site frontage, connecting to Davidson Road

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13. Confirm the Developer's proportionate share of improvements at the Leppert Road/Carr Farms roundabout and at the Leppert Road/Davidson Road roundabout based on ADTs.

- 14. Update the Trail Connectivity Plan Exhibit showing the Hayden Run COG Trail connecting to the Heritage Trail via the Grener Park as per the attached marked up exhibit.
- 15. Provide traffic counts and figures of the final volumes used in the analysis.
- 16. For the HCS analysis, be more specific in the scenario and timeframe descriptions as they are hard to distinguish from each other. In addition, analyze all scenarios for failing intersections and review the volumes used in the analysis as the volumes from the HCS worksheets did not match the traffic volumes used in the Sidra roundabout capacity analysis.
- 17. Note that the turn lane warrants, as applicable, and storage lengths will be reviewed with the next submittal.

## Recommendation

1. Please revise the traffic study per the City review comments and resubmit to meet the Planning and Zoning Meeting submittal schedule. A revised, reviewed and accepted Traffic Impact Study is a mandatory condition of Planning and Zoning's approval of the development.



Comments by lety Scheung 7-24-2018