

From: Paul G. Shumejko, MBA, M.S., PTOE, P.E., Transportation Engineering Manager - *PGS*

To: Kristen Kapelanski, AICP, Planning Manager

Date: May 29, 2020

Re: Rochester Hills Research Park PUD, City File #18-021, Sec 21 City Council Meeting – June 1st

Subsequent to the Planning Commission meeting held on Tuesday, April 21, 2020, the applicant has submitted supplemental traffic impact study information to Engineering Services for further, with previous input from the Road Commission for Oakland County (RCOC), for the subject project.

Traffic/Roads

The following traffic mitigation improvements were discussed for inclusion on the site plans as part of the proposed development:

- 1. SB Livernois Rd just north of existing dental office.
 - Extend the full right-turn lane from the dental office and tie into dedicated right-turn lane at EEI Global's current main entrance. This will create one continuous right-turn lane and eliminate the existing "jog".
 \$25k
- 2. WB Horizon Ct (future Horizon Dr).
 - a. Construct a dedicated right-turn lane exit to allow traffic to continue travelling without having to stack waiting for NB Livernois Rd traffic to exit. ~\$150k
 - i. Right-turn lane length 150 feet
 - ii. Entering taper length 100 feet
- 3. NB Livernois Rd at Horizon Ct (future Horizon Dr). ~\$175k
 - a. Improve the existing passing lanes to meet RCOC requirements.
 - i. Entering taper 150 feet
 - ii. Passing lane length 150 feet
 - iii. Thru lane portion 100 feet
 - iv. Exiting taper 150 feet
 - v. They are currently 100 feet, 100 feet, 95 feet and 125 feet, respectively.

The estimated ball park costs for items 3(a) thru 3(c) are in the \$350k range (construction costs only).

The applicant previously agreed to Items 1 and 2 at the PC meeting. Item 3 was deemed to require further traffic analysis.

Based upon the supplemental traffic study provided, the data indicates that the extension of the passing lane will not have a major benefit to improve traffic flow operations. While it is acknowledged that the improvements outlined in item 3 won't have a significant impact in improving traffic operations, there will be some benefit on reducing vehicle queues and allowing additional throughput, especially during peak traffic hours. Over the life of the project, the additional costs would be deemed worth the investment. Therefore, staff recommends that the improvements listed in item 3 be incorporated into the approved PUD plans.

PGS/au

Attachments: RCOC CLTL, Passing Lane and Taper Lane Details

c: Allan E. Schneck, P.E., Director; DPS Paul Davis, P.E. City Engineer/Deputy Director; DPS Tracey Balint, P.E., Public Utilities Engineering Mgr.; DPS Keith Depp, Project Engineer; DPS Jason Boughton, AC, Eng. Utilities Specialist; DPS Adele Swann, Technician – Utilities; DPS Jenny McGuckin, Right of Way/Survey Technician; DPS Scott Windingland, Engineering Aide; DPS Maureen Gentry, Economic Development Assistant; P&ED Bill Cooke, Assistant Chief/Fire Marshall; RHFD Vince Foisy, Communications Systems Administrator; RHFD File