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April 10, 2018

Mr. Joel Miller, P.E.  
Engineer I  
City of Keller – Public Works Department  
1100 Bear Creek Parkway  
Keller, TX 76248

Re: *Concordia Residential Development TIA – Addendum*

Dear Mr. Miller:

This document summarizes the results of an evaluation of potential mitigating measures for the southbound Concordia Roadway approach at the median opening on North Tarrant Parkway. As identified in the City of Keller *Unified Development Code (UDC)*:

Mitigation of impacts shall be required if the proposed development would cause a facility or traffic movement to exceed LOS C, or where it already exceeds LOS C and the development would contribute 5% or more of the total traffic during any projected horizon year. If mitigation is required, the applicant must only mitigate the impact of the proposed development, and would not be responsible for alleviating any deficiencies in the thoroughfare system that may occur without the proposed development.

As identified in the latest traffic impact analysis (TIA) for the Concordia Residential Development (dated March 28, 2018), the new southbound Concordia Roadway approach to the median opening on North Tarrant Parkway is predicted to operate at a LOS D during the PM peak hour under Buildout (2020) Total conditions. This operation is predicted with the eastbound left turn lane on North Tarrant Parkway and two southbound lanes on the Concordia Roadway approach being constructed as part of the Concordia Residential Development. The following three (3) additional potential mitigation measures have been identified to help the southbound Concordia Roadway approach improve to LOS C or better during the PM peak hour:

- 1) Prohibiting access to North Tarrant Parkway
- 2) Relocating Concordia access to the west of the existing median opening and allowing right-in/right-out only movements for Concordia traffic
- 3) Installing a traffic signal at the existing median opening on North Tarrant Parkway

These three potential additional mitigating measures are discussed in detail in the following sections.

1) Prohibiting access to North Tarrant Parkway

Under this mitigating measure, all traffic generated by the proposed Concordia Residential development would be forced to use the Vasey Oak Drive connection to the Chase Oaks residential subdivision located to the north. This would result in an additional 52 and 69 vehicles during the AM and PM peak hours,



respectively, travelling on the residential street (Vasey Oak Drive) of the adjacent neighborhood. While the elimination of access to North Tarrant Parkway would mitigate the LOS D for the southbound approach during the PM peak hour at the median opening on North Tarrant Parkway, forcing all site generated traffic to use the roadways of the adjacent neighborhood development would not be a preferred option, especially for Chase Oaks residents on Vasey Oaks Drive.

2) Relocating Concordia access to the west of the existing median opening and allowing right-in/right-out only movements for Concordia traffic

Under this mitigating option, eastbound traffic approaching the site to enter the Concordia Residential Development would be required to perform an eastbound u-turn movement at the existing apartment complex median opening. Site traffic departing the Concordia Residential development desiring to travel to the east (North Tarrant Parkway), north and south (Rufe Snow Boulevard) would exit and travel westbound to the downstream median opening on North Tarrant Parkway at Willowcrest Drive. Requiring u-turns at median openings is not an ideal mitigation measure.

3) Installing a traffic signal at the existing median opening on North Tarrant Parkway

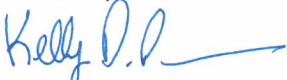
As stated on page 24 of the TIA, "While installing a traffic signal would help mitigate the levels of service for the northbound and southbound approach, signal warrants are not predicted to be met, given the low volumes on the minor street (northbound and southbound) approaches." Although traffic signal warrants from the *Texas Manual on Uniform Traffic Control Devices* are not required to be met for the installation of a traffic signal, they serve as guidelines for when a traffic signal installation would best fit the conditions at an intersection. A traffic signal at this intersection would not meet warrants and would introduce unnecessary stops and delays for the through traffic on North Tarrant Parkway.

Of the three (3) options identified above, if a treatment were selected to best alleviate the predicted LOS D for the southbound Concordia Roadway approach during the PM peak hour, it would be installing a traffic signal at the median opening. This would avoid having the undesirable impact of all site traffic generated by the Concordia residential development using the residential streets of the Chase Oaks residential development to the north (Option 1) and avoid requiring u-turn movements on the high-volume six-lane divided roadway (Option 2).

If the City decides that additional mitigation is required and an unwarranted traffic signal should be installed at the median opening, the proportion of traffic generated by the Concordia Residential Development during the AM and PM peak hours at the median opening on North Tarrant Parkway under Buildout (2020) Total conditions is approximately two percent (2%). Therefore, this two percent (2%) represents the proportional amount of the cost the Concordia Residential Development would be responsible for if the City decides that an unwarranted traffic signal were to be installed at this intersection.

If you have any questions regarding this additional analysis, feel free to contact me at (972) 248-3006.

Sincerely,



Kelly D. Parma, P.E., PTOE  
Senior Project Manager  
Lee Engineering, LLC  
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