From: Jardin, David < David. Jardin@clark.wa.gov>

Sent: Tuesday, August 30, 2016 9:52 AM

Clark County Concurrency

The proposed development is required to meet the standards established in CCC 41.350.020(G) for corridors and intersections of regional significance. Typically, the County's transportation model is used to determine what urban area developments are currently being reviewed, approved, or are under construction and in the vicinity of the proposed development. The traffic these developments generate is referred to as "in-process traffic" and will ultimately contribute to the same roadway facilities as the proposed development. This "in-process traffic" is used to evaluate and anticipate area growth and its impact on intersection and roadway operating levels with and without the proposed development, helping to determine if roadway mitigation necessary to reduce transportation impacts.

Unsignalized Intersections

The applicant has submitted a traffic study that reports anticipated levels-of-service on the intersection of NE 28th Street/NE 232nd Avenue. This intersection was reported to have a level-of-service "F" on the stop controlled approach in the 2018 evaluation year with the proposed development. The applicant's traffic study also indicates that there are vehicle trips assigned to the failing approach in this intersection.

The applicant has provided an email (below) to supplement the submitted traffic study dated May 25, 2016. The supplemental email has analyzed the impacts of the proposed development on the intersection approaches, listed above, to determine if mitigation requirements would be warranted per CCC 40.350.020 (G)(1)(c).

The applicant's analysis compared the anticipated impacts against the criteria in the code section listed above and found that only one (1) of the three (3) criterion were met. Staff concurs with the applicant's findings.

The County has determined that this development can comply with adopted Concurrency Standards for unsignalized intersections.

SAFETY:

Mitigation for off-site safety deficiencies may only be a condition of approval on development in accordance with CCC 40.350.030(B)(6) The code states that "nothing in this section shall be construed to preclude denial of a proposed development where off-site road conditions are inadequate to provide a minimum level of service as specified in Section 40.350.020 or a *significant* traffic or safety hazard *would be caused or materially aggravated* by the proposed development; provided, that the applicant may voluntarily agree to mitigate such direct impacts in accordance with the provisions of RCW 82.02.020."

Crash History

The applicant's traffic study analyzed the crash history as obtained from Washington State Department of Transportation (WSDOT) for the period 2010 through 2014.

The intersection crash rates, for the study intersection did not exceed thresholds that would warrant additional analysis. However, Staff did review the reported crash at the intersection of NE 28th Street/NE 232nd Avenue to understand the crash type. Staff's review found that the crash was due to an animal in the roadway.

The applicant's study did not recommend any safety mitigations as a part of this development. Staff concurs with the applicant's finding.

Based on Staff's review of the applicant's materials, no further analysis or mitigation is required. Thank you for the opportunity to comment.

David Jardin Concurrency Engineer 360-397-6118 ext. 4354

From: Frank Charbonneau [mailto:Frank@CharbonneauEngineer.com]

Sent: Friday, August 19, 2016 3:42 PM

David – As discussed this morning I am documenting the pertinent code section and the associated requirements for concurrency approval related to the intersection conditions for NE 232nd Avenue and 28th Street in Clark County.

The traffic report dated 5/25/16 prepared for the Lacamas Heights Elementary School recently copied to you determined that the subject intersection would reach LOS `F` for the year 2018 total traffic scenario unless mitigated by signalization. Code section 40.350.020(G)(1)(c) indicates that proposed developments shall not be required to mitigate their impacts in order to obtain concurrency approval unless meeting all three of the following:

- 1. The proposed development adds at least five (5) peak period trips to a failing intersection approach;
- 2. The projected volume to capacity ratio for the worst lane movement on the approach with the highest delay exceeds nine-tenths (0.9) during the peak traffic period; and
- 3. That same movement is worsened by the proposed development.

Stipulation #2 above pertaining to the volume to capacity (v/c) will not be met as the worst lane movement v/c (northbound left turn) remains below 0.9 in the peak hours. In fact the v/c equates to 0.58 for the year 2018 total traffic AM peak hour and 0.78 for the year 2018 total traffic PM peak hour. The ratios are summarized below using the LOS results contained in the traffic report for the new Lacamas Heights Elementary School.

Year 2018 Total, AM Peak Hour Year 2018 Total, PM Peak Hour

Left Turn Demand = 178 Left Turn Demand = 214 Approach Capacity = 308 Approach Capacity = 275 $v/c = 0.58 \ v/c = 0.78$

Other supporting factors to consider for not mitigating the intersection include.

- · Signalization is not warranted
- The proposed school will add only two vehicle trips to the northbound left turn movement in the AM peak hour and one trip in the PM peak hour.
- The City of Camas has identified a future TIF roadway and intersection project to install a roundabout at 232nd Avenue & 22nd Avenue. The future improvement will connecting to Ingle Road and lessen the traffic volume on the northbound approach of 232nd Avenue at 28th Street.
- The School District would have to obtain right-of-way to widen the intersection if the northbound approach were to add another travel lane.

Based on these considerations it is recommended the County not require mitigation at the intersection of NE 232nd Avenue and 28th street in conjunction with the Lacamas Heights Elementary School development project.

We would appreciate receiving your input regarding this recommendation as soon as possible. At that point we would provide the findings to the City of Camas for review.

Please do not hesitate to contact me if you have any questions.

Frank Charbonneau, PE, PTOE Charbonneau Engineering 503.293.1118