



**DATE:** August 11th, 2016

**TO:** Tirrell Black, Lisa Key, Planning Department

**FROM:** Inga Note, P.E., Street Department

**CC:** Developer Services, WSDOT

**SUBJECT:** Morningside (Windhaven) Comprehensive Plan Amendment

The purpose of this memorandum is to provide a traffic engineering and transportation planning review of the proposed 2016 Morningside Comprehensive Plan amendment. This review specifically focuses on compliance with Spokane Municipal Code section 17G.020.030(H) SEPA and 17G.020.030(I) Adequate Public Facilities. Since a comprehensive plan amendment is a non-project action, concurrency is not assessed at this time.

#### Traffic Study Review

City staff and WSDOT provided guidance to the developer's traffic engineering consultant to ensure we were in agreement on the background trips, trip distribution and traffic count methodologies used in the study. The applicant submitted two drafts of the traffic study and one final version dated 7/11/16. Areas of concern identified in the report are discussed below.

#### Indian Trail Capacity

City staff heard repeatedly from neighborhood residents during the early part of the public comment period about concerns regarding the number of lanes on Indian Trail and the congestion during peak travel hours. The City has plans to widen Indian Trail to a five lane road long term, but currently there is no funding for this project. The applicant's traffic consultant prepared a lane capacity analysis of the Indian Trail corridor that confirmed the need to provide additional lanes between Kathleen and Barnes in the near future.

**Mitigation:** The developer's traffic consultant, in working with the city, has proposed a partial widening of Indian Trail Road that could be completed at the same time as the city's asphalt overlay scheduled for 2018. This widening project would provide two continuous southbound lanes from Barnes to Francis, and two continuous northbound lanes from Francis to Pacific Park. A two-way left turn lane would be provided in the vicinity of Kathleen. The cost for the partial widening is estimated to be at least \$820,000. The developer has proposed to pre-pay the impact fees that are estimated to be owed on the apartments which the City could apply towards the cost of the partial widening project. The city may be able to utilize recently

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collected Northwest District impact fees towards the project as well. Page 44 of the Traffic Impact Analysis states that the project proponent has offered to pre-pay the capital cost of the project not covered by the City to assure the timely completion of the proposed mitigation. The report goes on to indicate that the City has assured reimbursement for these capital funds through a latecomer's contribution and/or impact fee credits provided on future development proposals located within the Northwest service area. But while these ideas can be explored as the application moves forward through the Plan Commission and City Council, at this time the City has not made any commitments regarding a latecomer agreement or any other reimbursement plan.

It should be noted that the proposed partial widening project will not include the northbound lanes between Pacific Park and Barnes. This section of roadway fronts the McCarroll's plat and right-of-way will be needed to add the lane. It is anticipated that widening the northbound lanes in this segment would be done as a later project either using impact fees or in connection with development of the adjacent property.

#### Intersection Operations

The city's level of service standards are outlined in administrative policy and procedure ADMIN 0370-08-01. The required signalized level of service is LOS E at intersections along principal or minor arterials. This represents an average LOS for all movements at the intersection. Individual movements can be at LOS F as long as the intersection average is LOS E or better. The LOS E standard applies to all signals along the Indian Trail and Francis corridors that are included in the study. The most current version of HCS (Highway Capacity Software) is required to be used for the analysis. However, the city may request the use of a different modeling software depending on the project proposal.

The traffic analysis shows that several intersections will be nearing the threshold between LOS E and F with the addition of the background trips and the Windhaven development traffic. Intersections of particular concern are Francis/Alberta during the AM and PM peaks and Francis/Maple during the PM peak. During the review of the draft traffic study both city staff and WSDOT staff expressed concern that HCS may not be adequately modeling the level of service due to uneven lane utilization and queue spillback between signalized intersections. The applicant's engineer provided additional analysis using the Simtraffic software which showed that some intersections have issues with blocking and long queues. The intersection analysis shows that Indian Trail/Pacific Park-Strong will be operating at LOS E but capacity for this intersection can be expanded with developer frontage improvements. The intersections of Francis/Maple and Francis/Alberta are operating at LOS E and have some movements operating at LOS F and/or with long queues. Drivers on Francis often require multiple cycles to get through the signals. The intersections on Francis are essentially built-out, to the point where further expansions would be very costly and offer little in the way of additional capacity. The little remaining capacity will be needed to support other development already included in the comprehensive plan.

**Mitigation:** The impact of the rezone and subsequent development can be offset by implementing Travel Demand Management (TDM) strategies, which will shift existing or proposed trips from single occupant vehicles to transit or other HOV options. This method would preserve the remaining intersection capacity for other development. TDM strategies are recognized in the city LOS policy (ADMIN 0370-01-01 Section 4.12), state law (WAC 365-196-840 (6)(a)(i)), and the SRTC Congestion Management Plan (Appendix D) as ways to mitigate

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for poor level of service. Commonly used TDM strategies include a bus pass program, vanpooling, providing bus stop amenities, establishing a park and ride, walking improvements and biking improvements. Any TDM strategies proposed for the development would need to be agreed to by the Spokane Transit Authority, WSDOT and the City. The strategies would need to specifically mitigate the 89 new PM peak trips that are added to Francis Avenue (from Alberta eastward) as a result of the additional density from the rezone.

#### Conclusions regarding SEPA

SMC 17G.020.030(H) states that a “*SEPA review must be completed on all comprehensive plan amendment proposals*”. As this is a non-project review the analysis focuses more on a big picture look at the proposed zoning change.

- The impacts of an amendment to the city’s comprehensive plan and a subsequent development on Indian Trail Road will be mitigated if the developer completes the partial widening as described in this memorandum. This project will address the most significant neighborhood concern regarding roadway capacity and will provide additional capacity for further growth in the area.
- As an overall percentage of PM peak traffic, the amount of new trips added to Francis Avenue as a result of proposed comprehensive plan amendment would be relatively small (2-3%). However, the fact that two of the Francis Avenue intersections are at or near capacity means that the new trips would have a more significant impact than they would at an intersection with substantial excess capacity. The TDM strategies identified above are appropriate to mitigate the impact of these 89 new PM peak trips on Francis.
- The mitigation projects will need to be defined in greater detail and incorporated into a development agreement that would place limitations and conditions on development of the site.

#### Conclusions regarding Adequate Public Facilities

SMC 17G.020.030(I) states that “*The amendment must not adversely affect the City’s ability to provide the full range of urban public facilities and services citywide at the planned level of service, or consume public resources otherwise needed to support comprehensive plan implementation strategies.*”

- The proposed widening of Indian Trail Road by the developer will expand the available roadway capacity allowing the city to better implement the comprehensive plan.
- The Travel Demand Management strategies identified above will mitigate the impact on the Francis Avenue intersections thereby preserving the remaining capacity for other projects already in the comprehensive plan.
- The mitigation projects will need to be defined in greater detail and incorporated into a development agreement that would place limitations and conditions on development of the site.

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