REPLINGER & ASSOCIATES LLC

TRANSPORTATION ENGINEERING

July 30, 2015

Ms. Laura Terway City of Oregon City PO Box 3040 Oregon City, OR 97045

SUBJECT: REVIEW OF TRANSPORTATION ANALYSIS LETTER – 19588 MCCORD ROAD SUBDIVISION – ZC15-02 TP15-03

Dear Ms. Terway:

In response to your request, I have reviewed the Transportation Analysis Letter (TAL) submitted for the proposed 25-lot subdivision at 19588 McCord Road. The site is located on the northeast side of McCord Road and the northwest side of Leland Road. The TAL, dated April 14, 2015 was prepared under the direction of Todd E. Mobley, PE of Lancaster Engineering.

A previous analysis associated with annexation to the city analyzed this parcel as a 21-lot subdivision. Under the proposed zoning, 25 lots are proposed. The proposal would create a new 25-lot subdivision by infilling within developed areas. Along the northwest and northeast boundaries of the site, street stubs for Anita Place, Pelican Lake Place, Joseph Way, and Villard Place will all be extended into the site. These streets are all local residential streets. Villard Place is proposed to be extended through the site to form a new intersection with McCord Road.

Overall

I find the TAL addresses the city's requirements and provides an adequate basis to evaluate impacts of the proposed subdivision.

Comments

- 1. Trip Generation. The TAL presents information on trip generation from the construction of 25 single-family dwellings on a site currently occupied by one. The trip generation rates were taken from the Institute of Transportation Engineers' *Trip Generation Manual*. The subdivision is predicted to produce 18 new AM peak hour trips; 24 new PM peak hour trips; and 228 new weekday trips.
- 2. Access Locations. Existing street stubs for Anita Place, Pelican Lake Place, Joseph Way, and Villard Place would all be extended into the site. In addition, Villard Place is proposed to be extended to form a new intersection with McCord Road. Most lots would have frontage on these new local streets. One would have frontage on Leland Road and one on McCord Road. For the parcel fronting on Leland Road, the engineer notes that no alternative access

Ms. Laura Terway July 30, 2015 Page 2

is possible for this lot and proposed that an on-site turnaround be used to provide access from this parcel. I concur. Due to the speeds on Leland Road and proximity of the lot to the 90-degree curve on Leland Road, I recommend that any lot taking direct access to Leland Road be developed such that vehicles can turn around on site instead of backing onto the street when exiting the property.

- 3. Driveway Width. The TAL does not indicate any impediments to meeting driveway width standards.
- **4.** *Intersection Spacing.* The proposal will extend several existing streets and creates three new intersections on Villard Place, including the one at McCord Road. Intersection spacing is appropriate. It continues the layout of streets already established by the development of adjacent subdivisions.
- 5. Sight Distance. The engineer measured sight distance at the proposed intersection of McCord Road and Villard Place. He found sight distance was available in excess of 500 feet to the northwest and to southeast. This is far in excess of that necessary for the statutory speed or the observed speeds in that location. He also assessed sight distance for the proposed driveway for the parcel with access to Leland Road. He found intersection sight distance to the southwest to be adequate. To the northeast, he noted vegetation somewhat limit sight distance and noted that it may be removed with subsequent development. In the interim, he found that stopping sight distance was available for the driveway. It is critical that an on-site turnaround be provided for this parcel. I concur with the engineer's analysis of sight distance.
- **6. Safety Issues.** With the exception of the sight distance issue associated with a single lot addressed above, the engineer did not identify any safety issues associated with the subdivision and notes that the traffic impacts will be negligible. I concur with the engineer's conclusion.
- 7. Consistency with the Transportation System Plan (TSP). Based on the materials submitted it appears that the streets would be developed in accordance with city standards and would be consistent with the TSP. The extension of streets from adjacent subdivisions and, especially the connection of Villard Drive to McCord Road, increase connectivity in the area and are consistent with the TSP.
- **8.** Transportation Planning Rule (TPR) Analysis. Because the applicant is proposing to rezone the property from R-10 to R-6, a TPR analysis is also included. He provided an analysis of the maximum trip generation under R-6 and concluded the impact was negligible. The engineer states that the proposal does not change the functional classification of any existing or planned transportation facility; does not alter the standards for implementing the functional classification system; and does not alter the level of travel or degrade the performance of the transportation system such that it would not meet applicable performance standards. I concur.

Ms. Laura Terway July 30, 2015 Page 3

Conclusion and Recommendations

I find that the TAL meets city requirements and provides an adequate basis upon which impacts can be assessed. The subdivision will result in minimal additional traffic. Connectivity in the vicinity is enhanced by connections with adjacent streets. The proposed rezoning is not predicted to have a significant effect as defined under the Transportation Planning Rule.

There are no transportation-related issues associated with this subdivision requiring mitigation. For the parcel that would have direct access to Leland Road, the engineer recommends an onsite turn around. I concur; I recommend that the lot with direct access to Leland Road be developed such that vehicles can turn around on site instead of backing onto the street when exiting the property.

If you have any questions or need any further information concerning this review, please contact me at <u>replinger-associates@comcast.net</u>.

Sincerely,

ohn Keplinger

John Replinger, PE Principal

Oregon City\2015\ZC15-02TP15-03

REPLINGER & ASSOCIATES LLC

TRANSPORTATION ENGINEERING

August 10, 2015

Ms. Laura Terway City of Oregon City PO Box 3040 Oregon City, OR 97045

SUBJECT: SUPPLEMENTAL TRANSPORTATION ANALYSIS – 19588 MCCORD ROAD SUBDIVISION – ZC15-02 TP15-03

Dear Ms. Terway:

In response to your request, I have reviewed Dan Neils' July 17, 2015 comments related to the proposed 25-lot subdivision at 19588 McCord Road.

Mr. Neils raises concerns about safety, the proposed access to McCord Road, and issues related to the Master Plan related to densities and additional traffic.

In light of Mr. Neils' comments, I reviewed the applicant's Traffic Analysis Letter (TAL) with particular emphasis on the sections on sight distance and trip generation.

As described in the TAL, the applicant's traffic engineer performed measurements where Villard Drive is planned to intersect McCord Road. His measurements were conducted according to standard methods. He reports sight distance is far in excess of the minimum required for the statutory speed limit on McCord Road. In fact, he reports that the available sight distance is adequate for speeds up to 45 mph. I find no reason to revise my conclusion about the adequacy of sight distance or revise my conclusion about the appropriateness of a new intersection at the proposed location on McCord Road.

Mr. Neils also suggested that Leland Road is more appropriate for additional traffic than is McCord. The TAL notes the difficulty of providing adequate sight distance on Leland Road at the location where the parcel has frontage. While adequate for a driveway, this location is not recommended as a location for a new public street intersection. The layout of the proposed subdivision, with Villard Drive intersecting McCord Road, significantly improves connectivity by reinforcing the grid system in the area. I view the increased connectivity to be one of the principals supported by the adopted Transportation System Plan. Due to the increased connectivity afforded by this subdivision, I think it is likely that Villard Drive, Anita Place, and Joseph Way will help distribute traffic to and from the subdivision resulting in minimal changes to traffic volumes on McCord Road.

As described in the TAL, a previous analysis associated with annexation to the city analyzed this parcel as a 21-lot subdivision. Under the proposed zoning, 25 lots are proposed. An increase in 4 dwellings would not prove significant from a traffic standpoint at any location.

Ms. Laura Terway August 10, 2015 Page 2

Because the proposal involves rezoning, the engineer conducted a Transportation Planning Rule analysis. He provided an analysis of the maximum trip generation under R-6 and concluded the impact was negligible. The engineer states that the proposal does not change the functional classification of any existing or planned transportation facility; does not alter the standards for implementing the functional classification system; and does not alter the level of travel or degrade the performance of the transportation system such that it would not meet applicable performance standards. In light of Mr. Neils' comments I reviewed the TPR analysis in the TAL and conclude that the engineer's analysis and conclusions were valid.

I leave it to others to comment on Mr. Neils' preference for a buffer between different zoning categories. As I stated above, the rezoning would allow four additional dwelling units above those allowed under current zoning. Four additional dwelling units will not produce a significant effect on the transportation system. As for the inadequacy of Pease Road, I see no reason to expect significant traffic from this subdivision to use Pease Road. I expect Pease Road will eventually be upgraded to appropriate standards, including the provision of sidewalks, as specified in the Transportation System Plan.

In conclusion, I did not find any arguments in Mr. Neils' comments to alter my conclusion that the TAL provides an adequate basis to assess the transportation impacts of the proposed subdivision. The proposed intersection of Villard Drive and McCord Road is appropriate and will have adequate sight distance. The subdivision will result in minimal additional traffic. Connectivity in the vicinity is enhanced by connections with adjacent streets. The proposed rezoning is not predicted to have a significant effect as defined under the Transportation Planning Rule.

There are no transportation-related issues associated with this subdivision requiring mitigation. For the parcel that would have direct access to Leland Road, the engineer recommends an onsite turn around. I concur; I recommend that the lot with direct access to Leland Road be developed such that vehicles can turn around on site instead of backing onto the street when exiting the property.

If you have any questions or need any further information concerning this review, please contact me at <u>replinger-associates@comcast.net</u>.

Sincerely,

ohn Keplinger

John Replinger, PE Principal

Oregon City\2015\ZC15-02TP15-03 2