

Countryman, Ryan

From: Tom McCormick <tommccormick@mac.com>
Sent: Monday, October 12, 2015 4:54 PM
To: Countryman, Ryan
Cc: Richard Schipanski; Gretchen Brunner; Kirk Harris; Eric Faison; Debbie Tarry
Subject: Including 3-lane Richmond Beach Road and traffic limits in the DEIS

Ryan,

Since 2005, well before BSRE acquired the Point Wells property, the City of Shoreline has planned to convert Richmond Beach Road from an a 4-lane road to a 3-lane road. See the City's 2005 Comprehensive Plan and 2005 Transportation Master Plan, excerpts reproduced below at FN1.

The City's current Comprehensive Plan and Transportation Master Plan continue the City's plans to convert Richmond Beach Road from an a 4-lane road to a 3-lane road. See the City's 2012 Comprehensive Plan and 2011 Transportation Master Plan, excerpts reproduced below at FN2.

In 2014, when the City and BSRE's consultant made presentations at the Transportation Corridor Study's open house and wrap-up meeting, they specifically addressed Richmond Beach Road, saying that it was to be converted to a 3-lane road to improve pedestrian, bicyclist, and driver safety (see the attached four slides from the 4/16/2014 presentation, showing a 3-lane road all the way east to Dayton Avenue N.).

From all of the above, it's quite clear that Richmond Beach Road is to be converted to a 3-lane road.

A 3-lane Richmond Beach Road will severely limit the amount of new Point Wells traffic that the City's roads can handle without causing LOS failures. The City has adopted a LOS D for all arterial intersections, and a supplemental 0.90 V/C standard for principal and minor arterials such as Richmond Beach Road (see FN3 below for exact language).

This email focuses on the City's 0.90 V/C LOS standard, and how it limits the amount of new Point Wells traffic that the City's roads can handle.

How much traffic can a 3-lane Richmond Beach Road handle without causing a 0.90 V/C LOS failure?

Using peak PM spare capacity data for a 3-lane Richmond Beach Road (see column 4 of the attached City-provided spreadsheet), I calculated the maximum number of new average daily trips (ADTs) to/from Point Wells that can occur without breaking the City's 0.90 V/C LOS standard.

Here is the result:

1. If Richmond Beach Road, from Richmond Beach Drive to Dayton Ave. N., is converted to 3 lanes (as proposed in the 4/16/2014 slide presentation to the public; the 2011 Transportation Master Plan, Projects 3 and 21; and Appendix 5-3 of the 2005 Transportation Master Plan), then no new trips to/from Point Wells can be allowed. The road segment already exceeds the 0.90 V/C LOS standard.
2. If a shorter segment of Richmond Beach Road (shorter than the segment in #1) is converted to 3 lanes, from Richmond Beach Drive to 3rd Ave NW, then new ADTs to/from Point Wells must be limited to roughly 575 - 700 ADTs to avoid Richmond Beach Road breaking the City's 0.90 V/C LOS standard.

3. If an even shorter segment of Richmond Beach Road (shorter than the segment in #2) is converted to 3 lanes, from Richmond Beach Drive to 8th Ave NW, then new ADTs to/from Point Wells must be limited to roughly 4,600 - 5,600 ADTs to avoid Richmond Beach Road breaking the City's 0.90 V/C LOS standard.

[City staff has advised me that a limit of 4,600 - 5,600 ADTs roughly speaking is a fair estimation. My calculations assume that 90% of the Point Wells traffic will travel via the Richmond Beach Road/8th Ave NW intersection. If instead one assumes that only 80% of the Point Wells traffic will travel via the Richmond Beach Road/8th Ave NW intersection (I believe that 80% is too low), then the maximum new ADTs to/from Point Wells would be 5,025 - 6300 ADTs.]

The 0.90 V/C LOS failures are incapable of being mitigated

In scenario #3 above (a 3-lane Richmond Beach Road, from Richmond Beach Drive to 8th Ave NW), the 0.90 V/C LOS failure is incapable of being mitigated by road improvements, because the road segment apparently cannot be widened beyond its current width. So the only other mitigation would be to reduce the volume of projected traffic to/from Point Wells. A reduction in projected traffic is accomplished primarily by reducing the number of residential units and commercial space at the proposed development.

It is uncertain whether the 0.90 V/C LOS failures in scenarios #1 and #2 above can be mitigated by road improvements.

Including traffic limits in the DEIS

I am aware that the County intends to include in the DEIS a discussion of all potential limits on the volume of traffic to/from Point Wells. I understand that the DEIS will address at least the following limits:

- The City's 4,000 ADT limit for Richmond Beach Drive
- The City's prior 8,250 ADT limit for Richmond Beach Drive
- The 11,587 ADT limit in the MOU between the City and BSRE
- LOS-related limits in the MOU between the City and BSRE
- Limits related to the Town of Woodway's LOS A for its portion of Richmond Beach Drive (per its 2015 Comprehensive Plan, its LOS A translates to a two-way major street volume of not more than 273 vehicles per hour, and applies where side streets and driveways connect to a major street like Richmond Beach Drive)
- Limits related to the City's LOS standards

When discussing the City's limits in the DEIS, I request that both the City's LOS D standard and its supplemental 0.90 V/C standard (the City's current standards) be thoroughly explained. As I understand that the County intends to apply the City's current LOS standards to its permitting decisions, this too should be explained in the DEIS.

I request also that the DEIS assume and discuss that Richmond Beach Road will be a 3-lane road. As noted above, it's quite clear that the City's plans are, and have always been, for Richmond Beach Road to be converted to a 3-lane road.

I request further that the DEIS explain that, with a 3-lane Richmond Beach Road, projected traffic to/from Point Wells needs to be significantly limited to prevent a failure of the City's 0.90 V/C LOS standard. I request that the DEIS discuss each of the three 3-lane Richmond Beach Road scenarios presented above, with the data included.

Finally, I request that the DEIS thoroughly discuss that the expected 0.90 V/C LOS failures of the 3-lane Richmond Beach Road may be incapable of being mitigated by road improvements. If road improvements are not capable of

being accomplished, then traffic reductions will be needed. A reduction in projected traffic is accomplished primarily by reducing the number of residential units and commercial space at the proposed development.

Conclusion

We have very real concerns that the projected traffic to/from the proposed Point Wells development may exceed a host of traffic limits contained in the City's Comprehensive Plan, its Transportation Master Plan, and its development regulations, in the Town of Woodway's Comprehensive Plan, and in the MOU between the City and BSRE. This email shows how one of the limits (the 0.90 V/C LOS standard) could have a severe limiting effect on the projected traffic to/from Point Wells—an effect that may be incapable of being mitigated by road improvements.

We look forward to seeing a discussion of all of the above traffic constraints in the DEIS.

Thank you.

Tom McCormick

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FN1. Excerpts from the City of Shoreline's 2005 Comprehensive Plan and 2005 Transportation Master Plan

2005 Comprehensive Plan Transportation Policy T1: "Make safety the first priority of citywide transportation planning and traffic management. Place a higher priority on pedestrian, bicycle, and automobile safety over vehicle capacity improvements at intersections."

2005 Comprehensive Plan Transportation Policy T42: "Accommodate bicycles in future roadway or intersection improvement projects."

2005 Comprehensive Plan Transportation Goal T V: "Develop a bicycle system that is connective and safe and encourages bicycling as a viable alternative method of transportation."

2005 Comprehensive Plan Transportation Element – Supporting Analysis, at page 174: "Key elements for Shoreline's bicycle system should include a Lake to Sound Trail (east-west link)—an east-west connection through the city of Shoreline that provides links with North City to the east with Richmond Beach to the west."

2005 Transportation Master Plan Appendix 5-2 (Project Evaluation Chart - Bicycle Improvements): For NW Richmond Beach Road/NW 195th St from 20th Ave NW to Dayton Ave N — "5-foot bike lanes built as part of roadway project."

2005 Transportation Master Plan Appendix 5-3 (Project Evaluation Chart - Roadway Improvements): For NW Richmond Beach Road/NW 195th St from 20th Ave NW to Dayton Ave N — "Restripe to 3 lanes and wide shoulder."

2005 Transportation Master Plan Appendix 6-2 (Evaluated Projects Cross-Reference): For NW Richmond Beach Road/NW 195th St from 20th Ave NW to Dayton Ave N — "Restriping for 5-foot bike lanes, both sides, built as part of roadway project."

FN2. Excerpts from the City of Shoreline's 2012 Comprehensive Plan and 2011 Transportation Master Plan

2012 Comprehensive Plan Transportation Goal T II: "Develop a bicycle system that is connective, safe, and encourages bicycling as a viable alternative to driving."

2012 Comprehensive Plan Transportation Policy T2: "Place a higher priority on pedestrian, bicycle, and automobile safety than vehicle capacity improvements at intersections."

2012 Comprehensive Plan Transportation Policy T18: "Implement the Bicycle System Plan included in the City's Transportation Master Plan. Develop a program to construct and maintain bicycle facilities that are safe, connect to destinations, access transit, and are easily accessible. ..."

2012 Comprehensive Plan Transportation Figure TA-2, Bike Facilities Map of Bicycle Plan Routes, identifying Richmond Beach Road as a Planned "Designated Bike Lane."

2011 Transportation Master Plan, Ch. 4, Bicycle Plan, at page 69: "One option for integration of bicycle facilities into existing roadways is rechannelization. Rechannelization can be used to change the width of travel lanes, modify how many lanes are present in the roadway or provide for different uses. A four-lane undivided road can be rechannelized into three lanes – one lane in each direction and a center turn lane for both directions of traffic. When the number of lanes is reduced, the remaining roadway can often be used to create bicycle lanes. This type of rechannelization provides improved access, mobility, quality of life and livability and can help the City meet other economic and community goals. ..."

2011 Transportation Master Plan, Ch. 4, Bicycle Plan, Implementation Strategy 7.1: "Implement the Pedestrian, Bicycle and Transit Plans developed in this Transportation Master Plan to support all users of the transportation network."

2011 Transportation Master Plan, Ch. 4, Bicycle Plan, Implementation Strategy 14.6: "Include bicycle facilities identified on the City's Bicycle System Plan as part of the City's six-year Capital Improvement Plan and Transportation Improvement Program. ..."

2011 Transportation Master Plan, Ch. 4, Bicycle Plan, Figure I, Bicycle System Plan Map identifying Richmond Beach Road as a "Designated Bike Lane."

2011 Transportation Master Plan, Ch. 4, Bicycle Plan, Figure J, Bicycle Projects Plan Map identifying Richmond Beach Road as a "Designated Bike Lane."

2011 Transportation Master Plan, Ch. 7, Master Street Plan, Implementation Strategy 38.4: "... Sidewalks should be separated from the curb by a five-foot wide amenity zone/landscaping strip. Sidewalks adjacent to single family residential development shall be a minimum of five feet wide. Require the construction of wider sidewalks (a minimum width of eight feet) adjacent to uses other than single-family residential"

2011 Transportation Master Plan, Ch. 9, Recommended Transportation Improvements, Table 9.4 (Bicycle Projects Recommended for Funding): "NW/N Richmond Beach Rd/N 185th St, from 8th Ave NW to Aurora Ave N—Construct bicycle lanes."

2011 Transportation Master Plan, Appendix I (Bicycle Projects Prioritization Matrix), Project No. 3: "NW 196th St/NW 195th St/NW Richmond Beach Rd, from Richmond Beach Drive NW to 8th Ave NW—Construct bicycle lanes. Lane reduction will be necessary to include bicycle lanes."

2011 Transportation Master Plan, Appendix I (Bicycle Projects Prioritization Matrix), Project No. 21: "NW/N Richmond Beach Rd/N 185th St, from 8th Ave NW to Aurora Ave N—Construct bicycle lanes."

FN3. The City of Shoreline's LOS standards

"The level of service standard that the City has selected as the basis for measuring concurrency is as follows: (1) LOS D at signalized intersections on arterial streets and at unsignalized intersecting arterials; or (2) A volume to capacity

(V/C) ratio of 0.90 or lower for principal and minor arterials. The V/C ratio on one leg of an intersection may exceed 0.90 when the intersection operates at LOS D or better.” SMC § 20.60.140(A).

As stated in the Transportation Element of the 2012 Comprehensive Plan:

"These Level of Service standards apply throughout the city unless an alternative LOS standard is identified in the Transportation Element for intersections or road segments, where an alternate level of service has been adopted in a subarea plan, or for Principal or Minor Arterial segments where: Widening the roadway cross-section is not feasible, due to significant topographic constraints; or Rechannelization and safety improvements result in acceptable levels of increased congestion in light of the improved operational safety of the roadway. Arterial segments meeting at least one of these criteria are: Dayton Avenue N from N 175th Street – N 185th Street: V/C may not exceed 1.10; and 15th Ave NE from N 150th Street – N 175th Street: V/C may not exceed 1.10.”

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Location	Existing PM volume - scaled up to 2030 numbers from DEA Synchro Model	Directional Capacity ¹	Spare Capacity reached (Peak)
Richmond Beach Drive / n-o 196th	29	700	60
N Richmond Beach Rd / w-o 8th (3 lane)	623	960	24
² N Richmond Beach Rd / 3rd to 8th (4 lane)	833	1600	60
N Richmond Beach Rd / 3rd to 8th (3 lane)	833	960	30
² N Richmond Beach Rd / Dayton to 3rd (4 lane)	973	1600	46
N Richmond Beach Rd / Dayton to 3rd (3 lane)	973	960	-10

¹ Capacity for Richmond Beach Drive is based on a mitigated 2 lane roadway. All others come from Shoreline Model.

² The City of Shoreline has included a project in the 2015 - 2020 CIP to convert Richmond Beach Road (24th Ave NW to Dayton Ave N) from a improved driver, pedestrian and bicyclist safety & mobility.

³ .90 is the City of Shoreline standard v/c ratio. The City has excepted this standard to a maximum of 1.10 for 2 street segments.

[T. McCormick comment: Since the 0.90 V/C LOS standard is contained in the Transportation Element of the City's Comprehensive Plan, the City must adhere to the 0.90 V/C LOS standard. State law requires that "[e]ach county and city ... shall perform its capital budget decisions in conformity with its comprehensive plan." RCW 36.70A.120.

The Transportation Element of the 2012 Comprehensive Plan provides that, "These Level of Service standards [(including the 0.90 V/C standard)] apply throughout the city unless an alternative LOS standard is identified in the Transportation Element for individual road segments" Two street segments are currently "identified in the Transportation Element" as segments excepted from the 0.90 V/C LOS standard (Dayton Avenue N and 15th Ave NE). To except Richmond Beach Road from the 0.90 V/C LOS standard would require legislative action. It would need to pass an Ordinance amending the Transportation Element of the Comprehensive Plan, adding Richmond Beach Road to the list of street segments for which an alternative LOS applies.]

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Proposed Design - Segment B (RBR)

- Richmond Beach Road – Same Curbs, 3-Lanes
 - Improves Pedestrian Safety
 - Provides buffer to traffic
 - Fewer vehicle lanes to cross
 - Improves Roadway Safety
 - Improves entering sight lines
 - Separates left turns
 - Improves Business Access
 - Provides Bicycle Facilities
 - Consistent with Neighborhood Traffic Action Plans

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Proposed Design

- 8th Ave NW

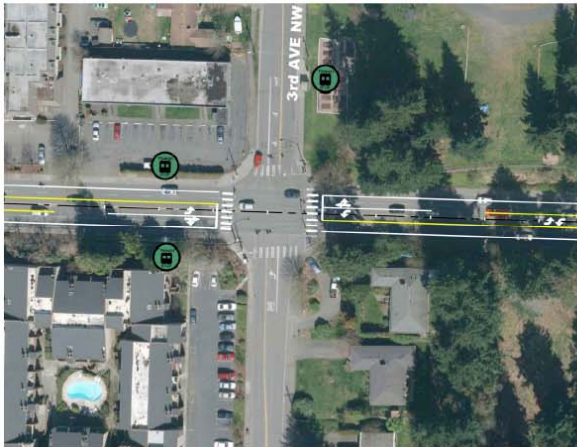


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Proposed Design - Segment B (RBR)

- 3rd Ave NW



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Proposed Design

- Dayton Ave



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