

Memorandum

Date: July 12, 2017

To: Paul MacCready, Principal Planner
Planning and Development Services

From: Mohammad Uddin, PE, PTOE, Public Work Supervisor III
Traffic Operations – TES – Public Works

Subject: File No 11 101457 LU, Point Wells Development
Traffic Impact Review of April 17, 2017 Resubmittal

MU 7/12/17

The Snohomish County Department of Public Works (DPW), has reviewed the revised application of the Point Wells development submitted on April 17, 2017, in particular to its traffic impact analysis and associated assumptions document submitted on August 2016. The following is a summary of the DPW comments/concerns regarding the proposed developments submittals.

Traffic Assumption Issues:

Internal Capture:

Snohomish County DPW, since review of the initial 2011 submittal had, and continues to have, concerns with the internal capture of trips, i.e. that residents will make frequent use of retail and commercial services on site without leaving the project area. DPW found that recent (August 2016 Traffic Analysis) results for internal capture rates are much lower than previous estimation but still believe the new numbers are not appropriate estimation for the Point Wells development, because of its location, connectivity and the ratio of residential to retail and commercial usages. According to the methods and assumptions technical memorandum dated on March 29, 2016, applicant used the National Cooperative Highway Research Report 684 (NCHRP 684) Trip Capture Estimation Tools for internal capture of trips for various land use categories (LUC) of the Point Wells Development. The procedure developed in the NCHRP 684, used survey data from six mixed used developments (MXDs) in Texas, Florida and Atlanta are quite different from the Point Wells site and developments. Each of the six survey sites or developments are in a fully developed areas, highly interconnected with roads and transit services, predominant retail and commercial usages compare to residential, have ample parking spaces and wide verity of choices for restaurants and other amenities. For example, the Mockingbird Station site in Dallas, Texas is one of the six sites bounded by a six-lane arterial on the south and US 75, the North

Central Expressway, an eight-lane freeway on the west, next to Dallas Area Rapid Transit (DART) station and transit center on 3 light-rail lines, in addition to the following land use details:

Land Use	Occupied Development Units	Percentage of Total Development
Residential	191 DU, 92,940 sq ft	36%
Retail	156,100 sq ft	29%
Office	114,600 sq ft	22%
Restaurant	28,900 sq ft	6%
Cinema	31,500 sq ft	6%
Parking	1,528 spaces	

Source: Table 3.1 Mockingbird Station Site Land Use (NCHRP Report 684)

Land Use	Occupied Development Units	Percentage of Total Development
Residential	3080 Units, 3,211,958 sq ft	96%
Retail	106,091 sq ft	1%
Commercial	32,262 sq ft	3%
Parking	xx spaces	

Source: Point Wells Development Land Use Details (Plan Sheet A-050)

Whereas, in the proposed Point Wells Development, residential usages are the majority at around 96% compare to 1% retail and 3% commercial, moreover the site is at a dead end road with no major development nearby.

It is Snohomish County DPW’s opinion following the user instruction and cautions (Page 5 of NCHRP 684 report) that internal capture estimation by direct use of NCHRP 684 procedure is not well justified nor would be a fair representation of the Point Wells development. So, for the revised traffic analysis report dated in August 2016, DPW would like to have proper justification of resemblance of the Point Wells site and its developments (all phases) with the six surveyed locations with their land use characteristics, connectivity, parking, proximity and pedestrian activity into the local weather conditions in order for direct use of NCHRP 684 developed procedure for internal trip capture estimation.

DPW believe that actual internal capture of the Point Wells development would be significantly different (likely lower value) than the forecasted data estimated by using the NCHRP 684 provided procedure. It would be appropriate to consider those variations and have a range for upper and lower limits of the internal capture and evaluate the impacts associated with that.

Trip Generate For LUC 931 and LUC 415:

LUC 931 for Quality Restaurant – According to the institute of transportation (ITE) trip generation manual (9th edition, 2012), AM peak hours (7 to 9 am) trip rate for LUC 931 is 0.81, but in the report they estimated 4.63 by using the PM peak hour rates (Source: Section 3.3 of Transportation Analysis Methods and Assumptions document, March 29, 2016). DPW believe peak use of quality restaurant is for dinner, lunch and breakfast have light use. Therefore, DPW believe that adjustment of the ITE

provided AM peak hours rate by using PM peak hours is not a conservative approach rather over estimation.

LUC 415 for Beach Park/Public Pier – Due to missing ITE trip rate for the AM peak hours, applicant used PM peak hour rate as a conservative approach, DPW believe this is outdoor recreation facility, very limited use during morning peak hours, using PM peak hour rate for AM peak hours would be over estimation not conservative.

K-Factor:

In the Transportation Analysis Methods and Assumptions document, March 29, 2016, used K-factor of 0.107 from the Highway Capacity Manual 2010 (HCM 2010), DPW believe K-factor is a site specific data (varies with location and usages of the road) should be used local data if they are available.

Peak Hour Factor and Heavy Vehicle Percentage:

In the Transportation Analysis Methods and Assumptions document, March 29, 2016, used default values of peak hour factor (PHF) and heavy vehicle (HV) percentage from HCM 2000 to analyze build operation conditions. DPW believe PHF and HV percentage are site specific data, it would be standard practice to use existing counts if it is available, default values from HCM can be used for missing data or significant changes of travel patterns or usages of existing roads.

Trip Distribution and Second Access Usages:

Trip distribution for the Point Wells development at section 2.2 of “Expanded Traffic Impact Analysis” report dated in August 2016, stated that approximately 75% of the project trips going south using Richmond Beach Drive NW and 25% going north. It is not clear whether that entire 25% would be using the second access road as proposed through the city of Woodway. Based on Appendix D & E of that document, trip distribution to the second access road varies from 4% to 15% max for AM and PM peak hours for different phases, both Urban Center and Urban Village alternatives.

DPW is concerned about the variation of traffic into the second access road and their impact to the City of Woodway’s intersections. DPW also believe that 226th ST SW and SR 104 intersection is critical and may be included into the list to evaluate potential impact of the proposed Point Wells development with current distribution of trips, more so for any variation to that distributions.

Overall DPW believe the proposed Point Wells development is a unique development in the state as well in the nation for its location, connectivity, proximity, ratio of land use categories, and pedestrian and bicycle activities in the local weather conditions. It would be more appropriate for the county, impacted cities and the state to consider substantial uncertainty/variations of future traffic and activities at the site and potential impact to local road networks.