
DATE: April 25, 2011

TO: David Casey, P.E.
City of Maple Valley

FROM: Jeff Haynie, P.E.
Transportation Engineering Northwest, LLC

RE: Preliminary Traffic Scoping Information
Wilderness Crossing – Maple Valley
TENW Project No. 4480

This memorandum includes the preliminary traffic information for the proposed Wilderness Crossing development for the purpose of establishing a scope of work for the traffic study. This memo includes a project description and trip generation estimate, along with a request for trip distribution information, identification of study intersections, recent traffic count data, and signal timing data.

We are requesting your review of this information and upon your review, a discussion regarding any additional traffic information that may be required for the traffic study.

Project Description

The project site for the proposed Wilderness Crossing development is located on the east side of Maple Valley-Black Diamond Rd SE (SR-169) in the vicinity of SE 240th Street (see **Attachment A**). The proposed project would include a 60,000 square foot (sf) supermarket, 26 senior living dwelling units, 70 congregate living dwelling units, up to 200,000 sf of retail, 28 townhome dwelling units, and 60 single-family dwelling units. Vehicular access to the site would be provided via a new intersection on SE 240th Street. For our analysis, we are assuming the project will achieve full buildout in 2020. A preliminary site plan is shown in **Attachment B**.

Trip Generation

The trip generation estimate for the proposed development was based on trip rates documented in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition. The trip generation estimate accounts for both internally captured trips between the various uses on the site and pass-by trips. The methodology used in determining internal and pass-by trips was consistent with the ITE *Trip Generation Handbook*, 2nd Edition, 2004.

It is expected that the proposed retail uses within the Wilderness Crossing project will attract many customers and/or employees from existing homes in the immediate site vicinity. This trip attraction will effectively reduce traffic impacts from these existing homes by redirecting traffic that currently uses SR-169 to travel to/from other retail uses elsewhere in Maple Valley. To account for this phenomenon, the ITE *Trip Generation Handbook* internal capture methodology was used to estimate the level of trip attraction between the proposed retail uses and the existing homes located to the south and east of the site (Note: there are approximately 500 existing homes located on the north side

of SR-169 between the site and SE 247th Street). These “captured” trips are accounted for in the trip generation estimates.

The weekday PM peak hour trip generation estimate is summarized in a table in **Attachment C**. As shown, the proposed development is estimated to generate a total of 1,135 net new PM peak hour trips (554 entering, 581 exiting).

Trip Distribution and Study Intersections

We are requesting a traffic model distribution plot of project-generated PM peak hour trips as part of the scoping process. We will use this model information to assign the 1,135 net new PM peak hour trips onto the adjacent road network. We expect this information will also be used to establish the study intersections, which we would like to confirm with you at your earliest convenience.

Requested Data

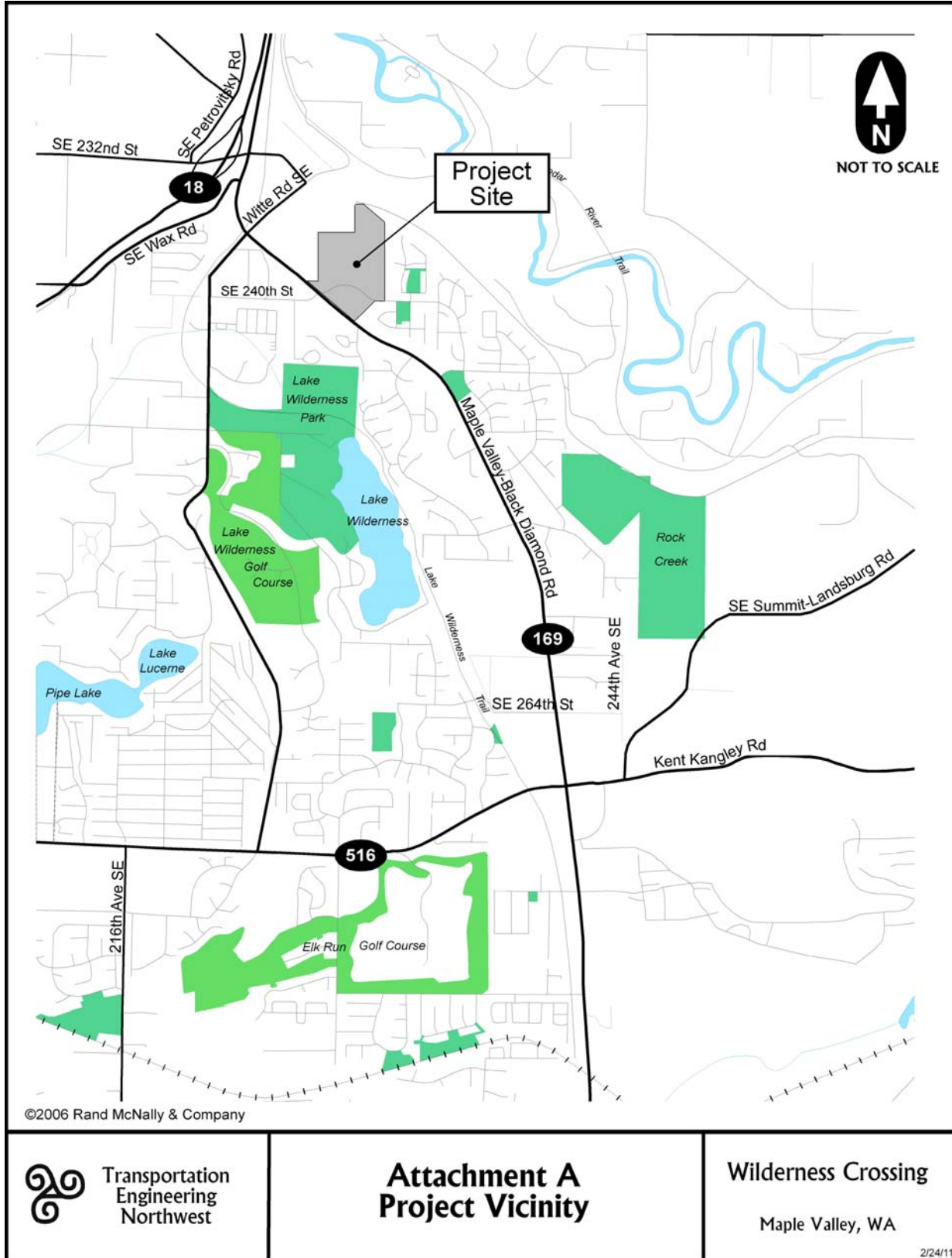
The following is a list of information we are requesting from the City for our traffic analysis.

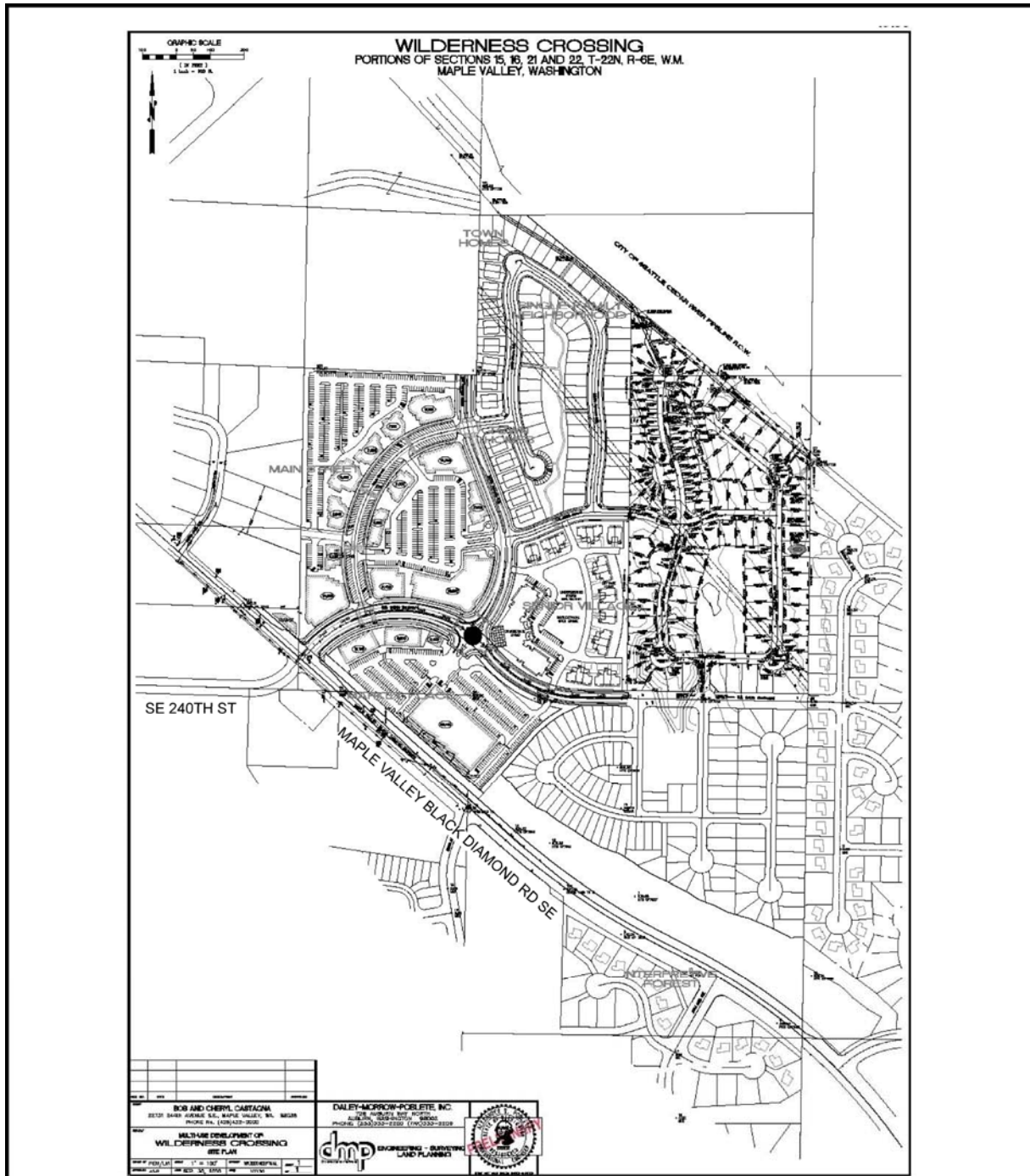
- Traffic distribution for the site – based on the City's traffic model.
- List of study intersections to be included in the traffic study for the PM peak hour.
- Any available PM peak hour turning movement counts at the study intersections.
- Signal timing information at the study intersections.

We look forward to your comments regarding this memo as well as any additional traffic information that may be required as part of the traffic study for the proposed development. If you have any questions, please feel free to contact me at (425) 531-0537 or haynie@tenw.com.

Attachments

cc: Bob Castagna, Brandt Properties, LLC
Hans Korve, DMP, Inc.





Preliminary site plan provided by DMP Inc., October 21, 2010.

 <p>Transportation Engineering Northwest</p>	<p>Attachment B Preliminary Site Plan</p>	<p>Wilderness Crossing Maple Valley, WA</p>
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ATTACHMENT C

Trip Generation Estimate

Wilderness Crossing - Maple Valley

PM Peak Hour Trip Generation

Land Use	Size	Units ¹	ITE LUC ²	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
RETAIL USES									
Supermarket (Market Place)	60,000	GFA	850	51%	49%	equation	322	309	631
Internal Trips ³							-14	-9	-23
Internal Trips (existing neighborhood) ⁴							-22	-30	-52
Pass-by Trips ³	36%						-103	-97	-200
						Subtotal =	205	203	408
Shopping Center (Market Place)	23,000	GLA	820	49%	51%	equation	117	121	238
Internal Trips ³							-5	-3	-8
Internal Trips (existing neighborhood) ⁴							-8	-12	-20
Pass-by Trips ³	60%						-62	-64	-126
						Subtotal =	50	54	104
Shopping Center (Main Street)	176,000	GLA	820	49%	51%	equation	455	474	929
Internal Trips ³							-19	-14	-33
Internal Trips (existing neighborhood) ⁴							-30	-46	-76
Pass-by Trips ³	33%						-134	-137	-271
						Subtotal =	302	323	625
RESIDENTIAL USES									
Single-Family	60	DU	210	63%	37%	equation	42	24	66
Internal Trips ³							-14	-13	-27
						Subtotal =	28	11	39
Townhouse	28	DU	230	67%	33%	equation	14	7	21
Internal Trips ³							-5	-4	-9
						Subtotal =	9	3	12
Senior Adult Living	26	DU	252	60%	40%	0.16	2	2	4
Internal Trips ³							-1	-1	-2
						Subtotal =	1	1	2
Congregate Living	70	DU	253	55%	45%	0.17	7	5	12
Internal Trips ³							-1	-2	-3
						Subtotal =	6	3	9
OFFICE									
General Office (Main Street)	27,000	GFA	710	17%	83%	equation	19	90	109
Internal Trips ³							-6	-19	-25
						Subtotal =	13	71	84
Total Gross PM Peak Hour Trips =							978	1,032	2,010
<i>Less Internal Trips =</i>							<i>-65</i>	<i>-65</i>	<i>-130</i>
<i>Less Internal Trips (existing neighborhood) =</i>							<i>-60</i>	<i>-88</i>	<i>-148</i>
<i>Less Pass-by Trips =</i>							<i>-299</i>	<i>-298</i>	<i>-597</i>
Total Net New PM Peak Hour Trips Generated =							554	581	1,135

Notes:

¹ GFA is Gross Floor Area, GLA is Gross Leasable Area, DU is Dwelling Units.

² Institute of Transportation Engineers, *Trip Generation* Manual, 8th Edition, 2008 Land Use Codes.

³ Internal and pass-by trips determined based on ITE *Trip Generation* Handbook, 2nd Edition.

⁴ Internal trips between proposed retail uses and existing neighborhood (approximately 500 lots) located southeast of project site.

Analyst CFC
 Date 3/16/2011

Multi-Use Development Trip Generation and Internal Capture Summary

Project Name Wilderness Crossing
 Time Period PM Peak Hour of Adj. Street

