

TECHNICAL MEMORANDUM

TO: PNW Properties, LLC
19860 SE Highway 212
Damascus, Oregon 97089

FROM: Michael Ard, PE

DATE: March 24, 2017

SUBJECT: Doman Professional Building
1754 Willamette Falls Drive
Trip Generation Analysis



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This memorandum is written to address the site trip generation of the Doman Professional Building, a proposed 6,000 square foot building located at 1754 Willamette Falls Drive in West Linn, Oregon. The purpose of the analysis is to confirm whether any additional traffic impact analysis is required per City of West Linn standards.

Location Description

The proposed two-story office building will be located on the north side of Willamette Falls Drive between 13th Street and 14th Street in West Linn, Oregon. The building will include 3,000 square feet of ground-floor retail space and 3,000 square feet of office space on the second floor, for a gross floor area of 6,000 square feet.

Trip Generation

To estimate the number of trips that will be generated by the proposed development, trip rate data from the *Trip Generation Manual*¹ was used. Data corresponding to land-use codes 710, *General Office*, and 820, *Shopping Center* were referenced for the proposed building based on the gross square footage of each use.

For the shopping center land use, some pass-by trips are projected. Pass-by trips occur when a vehicle that is already traveling along an area roadway stops at the site along the way to another destination. Although these trips add traffic to the site access driveway, they do not add traffic to the adjacent streets since they would have traveled on the roadway even without site development. Accordingly, such trips are reduced from the total site trip generation in order to accurately determine the number of additional trips that will travel on public roadways in the site vicinity. Based on data from the *Trip Generation Handbook, 3rd Edition*, published by the Institute of Transportation Engineers, it is projected that 34 percent of the trips patronizing the retail facilities will be pass-by trips.

¹ Institute of Transportation Engineers (ITE), *Trip Generation Manual, 9th Edition*, 2012.



The trip generation calculations indicate that the proposed development will generate a net increase of 6 trips during the morning peak hour with 5 entering and 1 exiting the site. During the evening peak hour, 11 new trips are projected, with 4 entering and 7 exiting the site. During a typical week-day, the development is projected to result in a net increase of 118 daily trips, with half entering and half exiting the site.

The trip generation estimates are summarized in the following table. Detailed trip generation calculations are also included in the technical appendix to this memorandum.

	ITE		AM Peak Hour			PM Peak Hour			Weekday
	Code	Size	In	Out	Total	In	Out	Total	Total
General Office	710	3,000 sq ft	4	1	5	1	3	4	34
Shopping Center	820	3,000 sq ft	2	1	3	5	6	11	128
Pass-by Trips (34%)			-1	-1	-2	-2	-2	-4	-44
Total Site Trips			6	2	8	6	9	15	162
Primary Site Trips			5	1	6	4	7	11	118

Conclusions

Based on the trip generation projections for the proposed development which fall well below 250 average daily trips, no further traffic analysis is required by the City of West Linn.

If you have any questions or need any further information, please don't hesitate to call.

APPENDIX



TRIP GENERATION CALCULATIONS

Land Use: General Office Building
Land Use Code: 710
Variable: 1000 Sq Ft Gross Floor Area
Variable Value: 3.0

AM PEAK HOUR

Trip Rate: 1.56

	Enter	Exit	Total
Directional Distribution	88%	12%	
Trip Ends	4	1	5

PM PEAK HOUR

Trip Rate: 1.49

	Enter	Exit	Total
Directional Distribution	17%	83%	
Trip Ends	1	3	4

WEEKDAY

Trip Rate: 11.03

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	17	17	34

SATURDAY

Trip Rate: 2.46

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	4	4	8



TRIP GENERATION CALCULATIONS

Land Use: Shopping Center
Land Use Code: 820
Variable: 1,000 Sq Ft Gross Leasable Area
Variable Value: 3.0

AM PEAK HOUR

Trip Rate: 0.96

	Enter	Exit	Total
Directional Distribution	62%	38%	
Trip Ends	2	1	3

PM PEAK HOUR

Trip Rate: 3.71

	Enter	Exit	Total
Directional Distribution	48%	52%	
Trip Ends	5	6	11

WEEKDAY

Trip Rate: 42.7

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	64	64	128

SATURDAY

Trip Rate: 49.97

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	75	75	150