WCE

Whipple Consulting Engineers, Inc.

21 S. Pines Road Spokane Valley, WA 99206 Ph 509-893-2617 Fax 509-926-0227

TECHNICAL MEMORANDUM

TO:	Inga Note			1	N	N. P.
FROM:	Todd R. Wl	hipple, P.E.,	Michael Remer, E.I.T	1	X.	12
DATE:	February 13	3, 2023			2	\
PROJECT NO:	21-3109	NAME:	Beard Addition to	Wes	Py.	BNI
REGARDING:	Trip Genera	ation update			1	Silver

This memo is intended and should be considered as an addendum to the January 9th, 2023 Trip Generation and Distribution Letter. This memo is intended to identify the increase in anticipated trips from 192 lots to the current preliminary plat (Figure 2) with 199 lots. Note the changes in Table 1 from the original trip generation and the difference shown in Table 2.

Table 1-Trip Generation Rates for LUC # 210 – Single-Family Detached Housing (Update)

	AM Peak Hour Trips			PM Peak Hour Trips				
Dwelling Units			ctional ibution	Vol. @ Fitted Curve	Directional Distribution			
Onits	Equation / Unit	26% In	74% Out	Equation / Unit	63% In	37% Out		
199	140	36	104	190	120	70		
Ave	Average Daily Trip Ends (ADT)			Fitted Curve Equation				
Units			ADT	AM - Ln(T) = 0.91 Ln(x) + 0.12 $PM - Ln(T) = 0.94 Ln(x) + 0.27$				
199	-		1,901	ADT – Ln(T) = 0.94 Ln(x) + 0.27 ADT – Ln(T) = 0.92 Ln(x) + 2.68 T = Trips/units, x = Dwelling Units				

Table 1-Trip Generation Rates for LUC # 210 – Single-Family Detached Housing (Original)

	AM Peak Hour Trips			PM Peak Hour Trips				
Dwelling Units	Vol. @ Fitted Curve	Directional Distribution		Vol. @ Fitted Curve	Directional Distribution			
Onits	Equation / Unit	26% In	74% Out	Equation / Unit	63% In	37% Out		
192	135	35	100	184	116	68		
Average Daily Trip Ends (ADT)			Fitted Curve Equation					
Units	Fitted Curve Equation		ADT	AM - Ln(T) = 0.91 Ln(x) + 0.12 PM - Ln(T) = 0.94 Ln(x) + 0.27				
192	-		1,839	ADT – Ln(T) = 0.94 Ln(x) + 0.27 ADT – Ln(T) = 0.92 Ln(x) + 2.68 T = Trips/units, x = Dwelling Units				

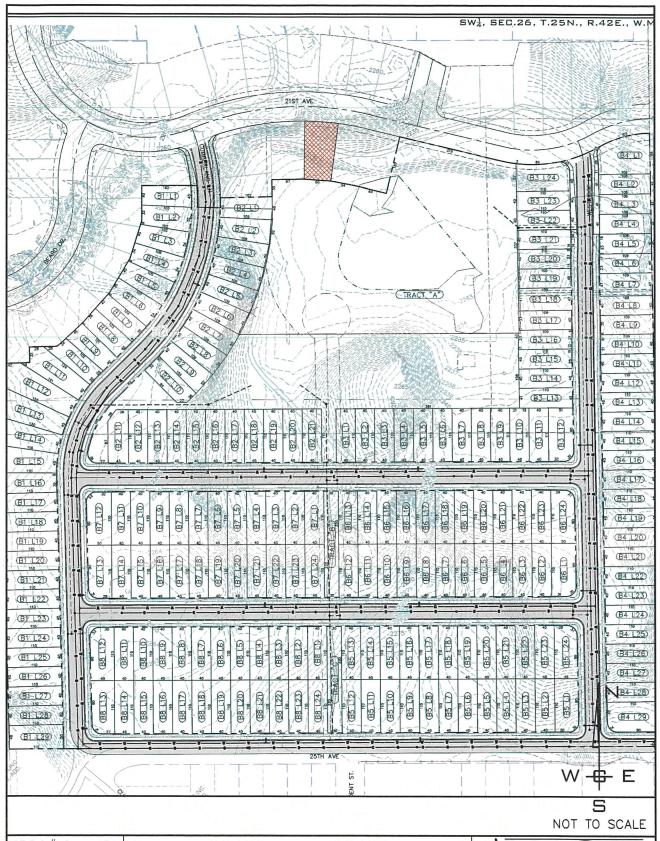
Table 2 - Trip Generation Difference

	AM Peak Hour			PM Peak Hour			
Land Use Code (LUC)	Vol.	Directional		Vol.	Directional		
Land Ose Code (LOC)	per	Distribution		per	Distribution		
	LUC	In	Out	LUC	In	Out	
LUC 210 Single Family Residential	140	26	104	100	120	70	
(Update)	140	36	104	190	120	70	
LUC 210 Single Family Residential	<135>	<35>	<100>	~104 <u>></u>	<11(s	-(O>	
(Original)	<133/	<33>	<100>	<184>	<116>	<68>	
Difference (7 Additional Lots)	5	1	4	6	4	2	
Average Daily Trip End	ls (ADT)			<> indicates Subtraction			
Land Use Code (LUC)	Rate	ADT		of number			
LUC 210 Single Family Residential	1.001						
(Update)		1,901					
LUC 210 Single Family Residential	<1.920>						
(Original)		<1,839>					
Difference (7 Additional Lots)	T	62		1			

As shown in Table 3, based upon ITE Trip Generation Manual, the additional 7 lots are anticipated to generate 5 additional trips in the AM peak hour with 1 additional trip entering the site and 4 additional trips exiting the site. In the PM peak hour, the proposed project is anticipated to generate 6 additional trips with 4 additional trips entering the site and 2 additional trips exiting the site. The proposed project is anticipated to generate 62 additional average daily trips to/from the project.

CONCLUSIONS AND RECOMMENDATIONS

Given the small number of additional trips, we do not believe that the analysis provided will change beyond what was reported. We request that this memo be attached to the January 9th, 2023, TGDL for circulation.



PROJ #: 21-3109 DATE: 02/13/23 DRAWN: MTR APPROVED: TRW TRIP GENERATION & DISTRIBUTION BEARD ADDITION TO WEST BLUFF CUMBERLAND LANE & 21ST AVENUE SPOKANE, WASHINGTON

FIGURE 2

PRELIMINARY SITE PLAN

WCE

WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
21 SOUTH PINES ROAD
SPOKANE VALLEY, WASHINGTON 99206
PH: 509-893-2617 FAX: 509-926-0227