CHARBONNEAU
ENGINEERING LLC

MEMORANDUM

Date: March 2, 2020

To: Mike Odren, RLA
Associate Principal
Olson Engineering, Inc.
222 East Evergreen Blvd
Vancouver WA 98660

From: Frank Charbonneau, PE, PTOE

Subject: Trip Generation Assessment FL2024
Minit Management Development
NW Paradise Park Road, La Center

This memo will serve as the trip generation assessment documenting the number of vehicular trips that will be produced by the proposed Minit Management development. The four acre site at address #2814 NW 319th Street is located in the northeast quadrant of NW La Center Road and the I-5 northbound on-ramp.

The development project will demolish the existing convenience store and gas station facilities and construct several new buildings consisting of 11,600 square feet of general retail, fast foot restaurant with drive-through totaling 2,800 square feet, convenience market with coffee drive-through totaling 4,510 square feet, and a 101 unit hotel. Parking on the site for 184 spaces will be provided, including eight ADA parking stalls. A copy of the project's site plan is attached to this memo.

The site we be served by three driveway accesses connecting to the perimeter road (NW Paradise Park Road) on the property's north and east sides. The nearest major intersections include NW La Center Road at the I-5 northbound off-ramp which is configured as a round-about and NW Paradise Park Road at NW La Center Road. This intersection is controlled by stop signing on the northbound Paradise Park Road approach and on the southbound Paradise Road approach.

The City of La Center issued a pre-application conference report (2019-018-PAC) dated June 11, 2019 documenting the application's process and requirements. The staff report detailed that the development agreement between the City and Minit Management LLC dated March 2016 vested a total of 199 PM peak hour trips for the site. As a result it was necessary to submit a trip generation assessment to verify the trip projection.

The number of trips were calculated based on the proposed building uses and sizes. Trip credits were applied for the existing facilities that will be demolished including the convenience market and gas station and a cardlock fueling station. The trip calculations were determined for the weekday average daily traffic (ADT) and the weekday AM and PM peak hours.

The analysis used the ITE Trip Generation manual (10th edition, year 2017).

For the proposed site uses several ITE land use categories were applied including #310 (Hotel), #820 (shopping center), #852 (convenience market), #934 (fast food restaurant with drive-through), and #938 (coffee drive-through). For the existing uses ITE code #853 for convenience market was used and historical rates for Pacific Pride Cardlock were applied for the cardlock fueling station.

A summary of the site's trip generation is provided in the following tables. Table 1 provides the trip generation for the site's existing uses. Table 2 provides the trip generation for the proposed site uses. Table 3 lists the net site trips for the development.

Table 1 Existing Land Uses Trip Generation Summary

ITE Land Use	Units	Weekday						
		ADT	AM Peak Hour			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Convenience Mkt with Gas (#853)								
Generation Rate [1]	6 fueling posiitons	322.50	20.76	50%	50%	23.04	50%	50%
Total Driveway Trips		**1,935**	**125**	63	62	**138**	69	69
Pass-By Trips [2] (AM Peak=63%; PM Peak=66%)			79	40	39	91	46	45
New Site Trips			**46**	23	23	**47**	23	24
Cardlock Fueling Station								
Generation Rate [3]	12 fueling positions		4.44	50%	50%	2.96	50%	50%
Total Driveway Trips		**1445**	**53**	27	26	**36**	18	18
Pass-By Trips [2] (AM Peak=58%; PM Peak=42%)			31	16	15	15	8	7
New Trips			**22**	11	11	**21**	10	11
Total Site Trips			**178**	90	88	**174**	87	87
Pass-by Trips			**110**	56	54	**106**	54	52
New Trips [4]		**3,380**	**68**	34	34	**68**	33	35

[1] Source: *Trip Generation*, 10th Edition, ITE, 2017, average rates.

[2] Pass-by percentage based on *Trip Generation Handbook, 3nd Edition*, ITE, 2017.

[3] Source: Independent surveys at Tarr Inc. Pacific Pride. AM trip rate = 1.5x calculated PM trip rate, ADT = 70% of ITE #944 Gas Station Rate

[4] New Trips = Total Trips - Internal Trips - Pass-by Trips.

Table 2 Proposed Land Uses Trip Generation Summary

ITE Land Use	Units	Weekday						
		ADT	AM Peak Hour			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Convenience Mkt [Open 15-16 hours] (#852)	4,410 sq. ft.							
Generation Rate [1,2]		345.70	31.02	50%	50%	34.57	49%	51%
Total Driveway Trips		**1,525**	**137**	69	68	**152**	74	78
Internal Trips [3] (AM Peak=16%; PM Peak=36%)			22	11	11	55	27	28
Pass-By Trips [4] (AM Peak=63%; PM Peak=66%)			72	36	36	64	31	33
New Site Trips		**1,525**	**43**	22	21	**33**	16	17
Shopping Center (#820)	11,600 sq. ft.							
Generation Rate [2]		37.75	0.94	62%	38%	3.81	48%	52%
Total Driveway Trips		**438**	**11**	7	4	**44**	21	23
Internal Trips [3] (AM Peak=16%; PM Peak=36%)			2	1	1	16	8	8
Pass-By Trips [4] (AM Peak=N/A; PM Peak=34%)						10	5	5
New Site Trips [4]		**438**	**9**	6	3	**18**	8	10
Hotel (#310)	101 rooms							
Generation Rate [2]		8.36	0.47	59%	41%	0.60	51%	49%
Total Driveway Trips		**844**	**47**	28	19	**61**	31	30
Internal Trips [3] (AM Peak=16%; PM Peak=36%)			8	4	4	22	11	11
New Site Trips			39	24	15	39	20	19
Fast-Food with Drive-Through (#934)	2,800 sq. ft.							
Generation Rate [2]		470.95	40.19	51%	49%	32.67	52%	48%
Total Driveway Trips		**1,319**	**113**	58	55	**91**	48	43
Internal Trips [3] (AM Peak=16%; PM Peak=36%)			19	10	9	33	17	16
Pass-By Trips [4] (AM Peak=49%; PM Peak=50%)			46	24	22	29	15	14
New Trips			**48**	24	24	**29**	16	13
Coffee/Donut Shop with Drive-Through & No Indoor Seating (#938)	100 sq. ft.							
Generation Rate [2]		2000.00	337.04	50%	50%	83.33	50%	50%
Total Driveway Trips		**200**	**34**	17	17	**8**	4	4
Internal Trips [3] (AM Peak=16%; PM Peak=36%)		0	6	3	3	3	2	1
Pass-By Trips [4,5] (AM Peak=83%; PM Peak=83%)		166	23	12	11	4	2	2
New Site Trips		**34**	**5**	2	3	**1**	0	1
Total Site Trips		**4,326**	**342**	179	163	**356**	178	178
Internal Trips			**57**	29	28	**129**	65	64
Pass-by Trips			**141**	72	69	**107**	53	54
New Trips			**144**	78	66	**120**	60	60

[1] ADT trip rate estimated as ten times the PM peak hour trip rate.

[2] Source: *Trip Generation*, 10th Edition, ITE, 2017, average rates.

[3] Internal capture calculated with unconstrained internal capture rates presented in the Center for Urban Transportation Research (CUTR) *Trip Internalization in Multi-Use Developments*, April 2014, FDOT.

[4] Pass-by percentage based on Trip Generation Handbook, 3nd Edition, ITE, 2017.

[5] The weekday PM peak pass-by rate used to calculate the daily and weekday AM peak pass-by trips.

[6] New Trips = Total Trips - Internal Trips - Pass-by Trips.

Table 3 presents the net trip generation results (proposed site trips – existing site trips) for the development project. When the new facility is developed it is projected that the site will generate a net of 76 trips in the AM peak hour 52 trips in the PM peak hour. The ADT is projected to increase by 946 trips per day.

Table 3 Net New Trips

Site Uses	Weekday Peak Hour						Weekday ADT
	AM Peak Hour			PM Peak Hour			
	Total	Enter	Exit	Total	Enter	Exit	
Proposed Site [1]	**144**	78	66	**120**	60	60	4,326
Existing Site [2]	**-68**	-34	-34	**-68**	-33	-35	3,380
Net New Trips [3]	**76**	44	32	**52**	27	25	946

[1] Refer to Table 2.

[2] Refer to Table 1.

[3] Net New Trips = Proposed Site Trips - Existing Site Trips.

It is recommended that the City of La Center support the proposed development without the application of traffic impact fees as the projected number of site trips falls below the vested number of peak hour trips (199 trips) identified in the City's development agreement with Minit Management.

If you should need any additional traffic engineering support on this project or if there are any further questions, please contact Frank Charbonneau, PE, PTOE at 503.293.1118 or email Frank@CharbonneauEngineer.com.

Attachment

- Site Plan