

December 3, 2020

Project #: 25754

Shane Witham, Interim Director
City of Keizer Community Development Department
PO Box 21000
Keizer, OR 97307

RE: Keizer Station Chick-fil-A Trip Generation Compliance Documentation

Dear Mr. Witham,

Chick-fil-A is proposing a new restaurant within the previously approved Keizer Station “Jughandle” Portion of Area D. This letter provides site trip generation estimates for the proposed restaurant and documents trip compliance with the prior master planning for the property. As concluded herein, trips associated with the proposed Chick-fil-A can be debited from the overall site vesting and no additional Transportation Impact Analysis is required. In addition to the trip assessment, anticipated drive-through queuing documentation is provided for informational purposes based on other Chick-fil-A sites in the Portland area. As discussed below, based on this data the proposed drive-through configuration is sufficient.

PRIOR TRIP VESTING

The impact of trips allocated to the Keizer Station “Jughandle” Portion of Area D has previously been studied and mitigated¹. As such, future development proposals for the property need to demonstrate either 1) their trip generation is less than or equivalent to what was previously approved or 2) conduct additional transportation impact analysis assessment and reporting if their trip generation exceeds the number of trips previously approved.

PROPOSED SITE PLAN

The proposed Chick-fil-A site plan is included as Appendix 1. In addition to the 5,199 square foot Chick-fil-A currently proposed, the additional uses are anticipated within the Keizer Station “Jughandle” Portion of Area D:

- A 3,043 square-foot convenience market and gas station with 12 fueling positions (to be applied for and developed separately by others); and
- A quick lubrication vehicle shop with 2 servicing positions (to be applied for and developed separately by others).

¹ Refer to the 2004 *Keizer Station Master Plan Transportation Impact Analysis* and the April 6, 2020 *Keizer Station Area D: Jughandle Development Trip Generation Compliance* report.

TRIP GENERATION ESTIMATE

Trip generation estimates for the proposed Chick-fil-A restaurant and the other assumed land uses within the “Jughandle” Portion of Area D² were prepared using trip rates cited in the *Trip Generation Manual, 10th Edition* (Reference 1). Pass-by and trip internalization rates were developed based on guidance in the *Trip Generation Handbook, 3rd Edition* (Reference 2).

The estimated trips is summarized in Table 1.

Table 1. Trip Generation Estimate for “Jughandle” Portion of Keizer Station Area D with Chick-fil-A

Land Use	ITE Code	Size	Weekday PM Peak Hour		
			Total Trips	In	Out
Proposed Chick-fil-A					
Fast-Food Restaurant with Drive-Through Window	934	5,199 sq. ft.	170	88	82
Internal (35%)			-59	-26	-33
Pass-By (50%)			-56	-31	-25
Other Assumed Site Uses					
Super Convenience Market/Gas Station	960	3,043 sq. ft.	211	106	105
Internal (26%)			-55	-30	-25
Pass-By (56%)			-87	-43	-44
Quick Lubrication Vehicle Shop	941	2 Servicing Positions	10	6	4
Internal (40%)			-4	-3	-1
Total Trips			391	200	191
Less Internal Trips			-118	-59	-59
Less Pass-By Trips			-143	-74	-69
Net New Primary Trips			130	67	63
Vested Net New Primary Trips (2004 Master Plan)			147	75	72
Proposed Net New Primary Trips – Vested Net New Primary Trips			-17	-8	-9

As shown in Table 1, the combination of the proposed Chick-fil-A and the other assumed site uses is projected to generate fewer trips than were previously assumed for the “Jughandle” portion of the approved Area D Master Plan. Accordingly, Area D can accommodate the proposed Chick-fil-A and maintain consistency with the analysis and assumptions contained within the 2004 *Keizer Station Master Plan TIA*.

DRIVE THROUGH QUEUING

The site has been designed to maximize on-site queueing space available for customers using the drive-through. Two order lines are provided, with the drive-through queue merging to one lane before the pick-up window (the second lane continues past the proposed building and can be used to exit the drive through area if needed for emergency reasons). The proposed drive-through is expected to accommodate approximately 28 vehicles within the designated drive though area (based on the size and spacing of typical customer vehicles) with additional storage available on-site.

² All uses beyond the Chick-fil-A will be proposed and constructed by others as part of a separate site plan application process at some future date.

Drive-through queuing data was collected at the Hillsboro and Clackamas Oregon Chick-fil-A sites in March 2018 to assess the adequacy of the drive-through queue storage (note that two Chick-fil-A sites have opened in Beaverton since the data was collected in 2018; however, no queuing data is available for these newer sites). The observed queues are shown in Table 2.

Table 2. Chick-fil-A Drive Through Queueing Summary

Chick-fil-A Location	Movement	Weekday MIDDAY	Weekday PM	Saturday MIDDAY
Hillsboro, OR	Average Queue (vehicles)	20	8	17
	95 th Percentile Queue (vehicles)	26	13	25
	Maximum Queue (vehicles)	27	15	28
Clackamas, OR	Average Queue (vehicles)	12	8	13
	95 th Percentile Queue (vehicles)	17	15	17
	Maximum Queue (vehicles)	19	18	18
Average of Both Sites	Average Queue (vehicles)	16	8	15
	95 th Percentile Queue (vehicles)	22	14	21
	Maximum Queue (vehicles)	23	17	23

Based on the available data, the proposed on-site drive through queue storage is expected to adequately serve demand given the available queue storage accommodates both the maximum observed queue when averaging the two sites and the maximum observed queue at the individual sites³.

³ Note the queuing analysis is predicated on pre-COVID-19 pandemic conditions when the restaurant is able to provide order-in, dine-in, and drive-thru service. Longer queues can be expected when order-in and/or dine-in options are not available.

SUMMARY

Trips associated with the proposed Chick-fil-A have previously been accounted for and no new traffic impact analysis is necessary to support the proposed site development. Further, anticipated drive-through queues can be accommodated on-site based on queuing measured at other Chick-fil-A sites in Oregon.

Please contact us if you have any questions regarding our analysis findings or recommendations.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Chris Brehmer, PE
Senior Principal Engineer

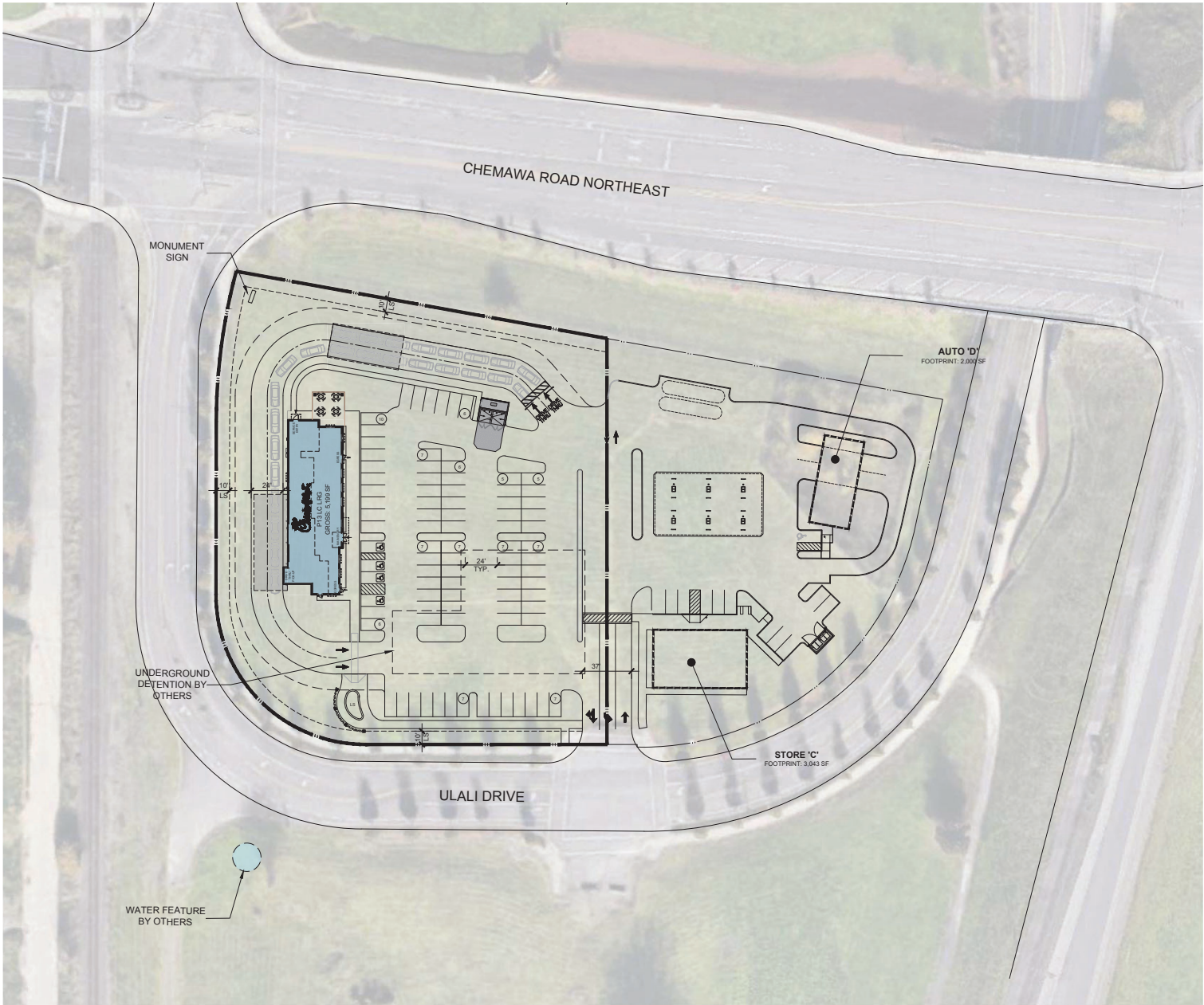


Julia Kuhn, PE
Senior Principal Engineer

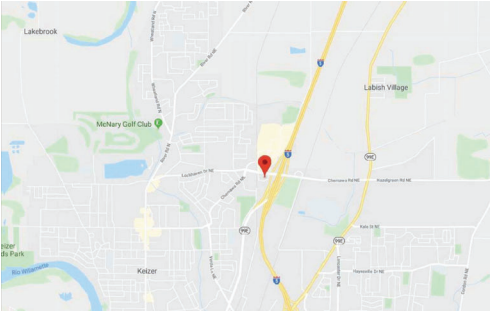
REFERENCES

- 1) Institute of Transportation Engineers. *Trip Generation Manual*, 10th Edition. 2017.
- 2) Institute of Transportation Engineers. *Trip Generation Manual*, 3rd Edition. 2017.





PROJECT DATA:	
SITE AREA:	
GROSS:	2.14 AC
	93,331 SF
CHICK-FIL-A	5,199 SF
COVERAGE:	
GROSS:	6%
PARKING PROVIDED:	
AUTO:	88 STALLS
	@7.72/1000 SF
REQ. ACCESSIBLE	4 STALLS



This conceptual design is based upon a preliminary review of as-delineated requirements and on unconfirmed and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.