



SM ROCHA, LLC

TRAFFIC AND TRANSPORTATION CONSULTANTS

April 30, 2021

John Loughrey
R&R Engineers & Surveyors, Inc.
1635 W 13th Avenue, Suite 310
Denver, CO 80204

**RE: Jackson Gap Fairfield Inn & Suites / Traffic Generation Study
Aurora, Colorado**

Dear John,

SM ROCHA, LLC is pleased to provide traffic generation information for the Jackson Gap Fairfield Inn & Suites. This development is located on E 68th Street south of E 68th Avenue in Aurora, Colorado.

The intent of this analysis is to present traffic volumes likely generated by the proposed development, provide a traffic volume comparison to previous land use assumptions approved for the development site, and consider potential impacts to the adjacent roadway network.

The following is a summary of analysis results.

Site Description and Access

Land for the development is currently vacant and surrounded by a mix of commercial and open space land uses. The proposed development is understood to entail the new construction of a Fairfield Inn & Suites hotel building with 123 rooms.

Proposed access to the development is provided at the following location: one full-movement access onto future Private Drive (referred to as Site Access).

General site and access locations are shown on Figure 1.

A conceptual site plan, as prepared by R&R Engineers & Surveyors, Inc. is shown on Figure 2. This plan is provided for illustrative purposes.

Comments: 06/02/2021

By: Kyle Morris (BHI)

Checked By: Brianna Medema

1. It seems that the trip gen comparison is to the total Porteos MTIS (04/2017). It would be more appropriate to provide a comparison to PA-3-6 (part of TAZ-1) from the PA-3 specific TIS (02/2020).

2. Provide site circulation plan showing intersection stop control and permissible movements.

3. Provide site staging/phasing plan.

4. See comments throughout.

SM ROCHA RESPONSE:

1. Noted. Trip generation comparison has been updated pursuant to reference TIS provided.

2. Noted. Site circulation plans not included as part of traffic analysis letter. Please refer to site Civil.

3. Noted. Site staging/phasing plans not included as part of traffic analysis letter. Please refer to site Civil.

4. See responses throughout.



Not to Scale



JACKSON GAP FAIRFIELD INN & SUITES
Traffic Generation Analysis

SM ROCHA, LLC
Traffic and Transportation Consultants

Figure 1
SITE LOCATION

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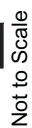
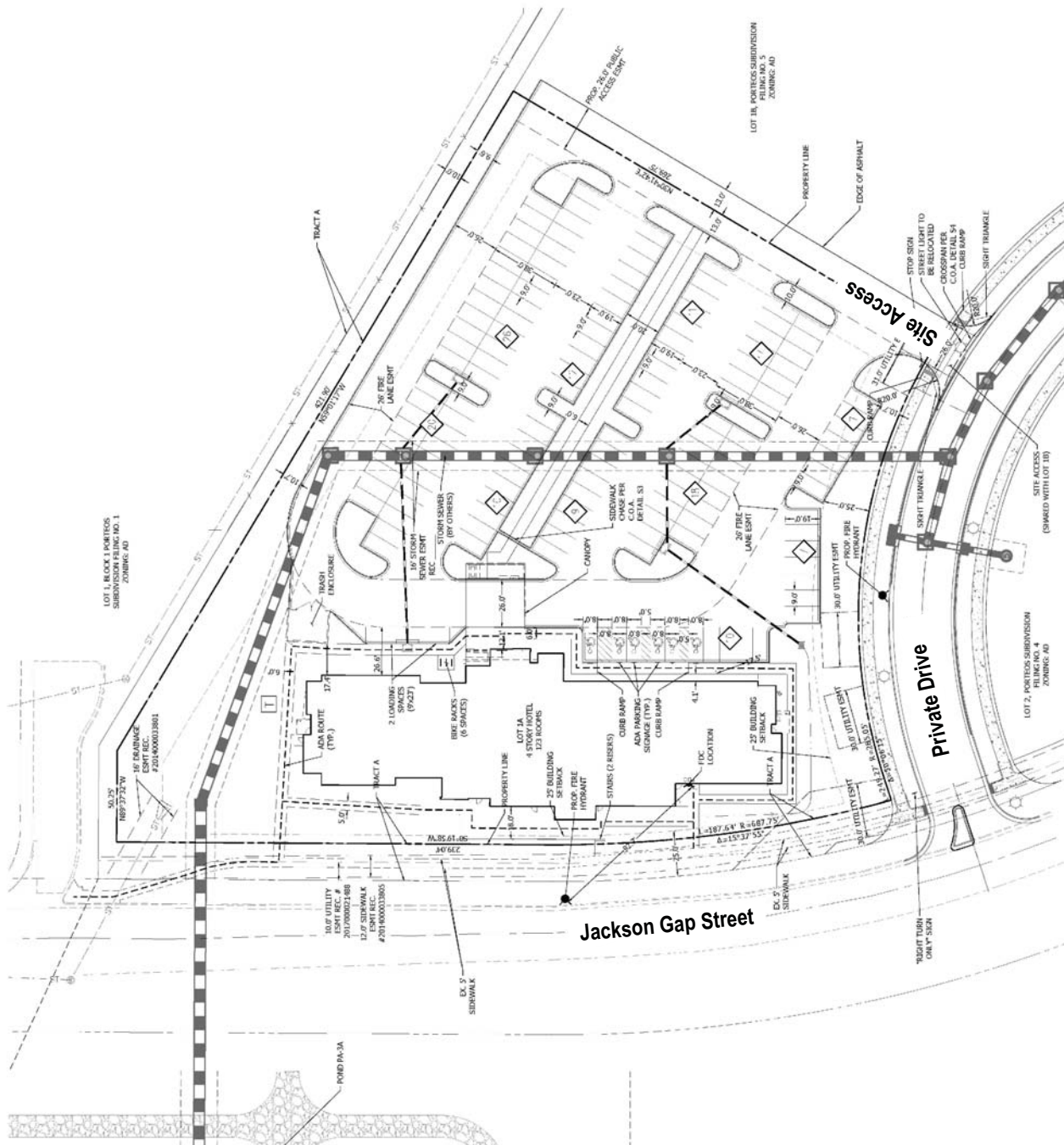


Figure 2 SITE PLAN

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Vehicle Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 10th Edition, were applied to the previously approved and proposed land use in order to estimate the average daily traffic (ADT) and peak hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from point of origin to point of destination.

The approved traffic study¹ for overall Porteos Development (Planning Area 3 (PA-3)) used previous versions of ITE's Trip Generation Manual and included a "Hotel" land use in the same development area as currently proposed with this project. The previous study assumed a maximum density of up to 1,000 rooms for hotel uses within the overall PA-3 area.

Table 1 presents average trip generation rates for the previously approved land use and for the development area proposed. Use of average trip generation rates presents a conservative analysis. ITE land use code 310 (Hotel) was used for analysis because of its best fit to the previously approved and proposed land use.

Table 1 – Trip Generation Rates

ITE CODELAND USEUNIT			TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
310	Hotel	RMS	8.36	0.28	0.19	0.47	0.31	0.29	0.60

Key: RMS = Number of Rooms.

Note: All data and calculations above are subject to being rounded to nearest value.

Table 2 summarizes the projected ADT and peak hour traffic volumes likely generated by the land use area proposed and provides comparison to traffic volume estimates for the previously approved land use.

¹ Porteos Traffic Impact Study Update, Felsburg Holt & Ullevig, April 2017.

Table 2 – Trip Generation Summary

ITE CODELAND USESIZE				TOTAL TRIPS GENERATED						
				24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
					ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
<u>Site Development - Previously Approved</u>										
310	Hotel	1,000 RMS	8,360	277	193	470	306	294	600	
Previously Approved Total:				8,360	277	193	470	306	294	600
<u>Site Development - Proposed</u>										
310	Hotel	123 RMS	1,028	34	24	58	38	36	74	
Proposed Total:				1,028	34	24	58	38	36	74
Difference Total:				-7,332	-243	-169	-412	-268	-258	-526

Note: All data and calculations above are subject to being rounded to nearest value.

As Table 2 shows, the proposed development area has the potential to generate approximately 1,028 occurring during the morning peak hour and 74 during the afternoon peak hours. Proposed development traffic volumes do not exceed those of the previously approved development (PA-3) traffic study.

Please provide a more direct comparison. The previously approved Hotel usage accounted 50% of PA-3. The currently proposed site appears to be much less than 50% of PA-3. A more appropriate comparison would be to the PA-3-6 shown in the PA-3 TIS (02/2020, by FHU), see Table 1 of TIS.

See previous response. Trip generation comparison updated pursuant to more recent analysis.

Trip Generation Rates

The proposed development is not likely to attract trips from within area land uses nor pass-by or through the adjacent roadway system, therefore no trip reduction was taken in this analysis.

Comparison & Development Impacts

The proposed development does not exceed traffic volumes approved for the area. The proposed development is within the projected volumes of the overall development area. These volumes are not likely to negatively impact operations of Jackson Gap Street nor other adjacent roadways or intersections.

Conclusion

This analysis assessed traffic generation for the Jackson Gap Fairfield Inn & Suites development, provided a traffic volume comparison to previous land use assumptions approved for the development site, and considered potential impacts to the adjacent roadway network.

It is our professional opinion that the proposed site-generated traffic is expected to create no negative impact to traffic operations for the surrounding roadway network and existing site access, nor at the Jackson Gap Street intersection with E 68th Avenue and is in compliance with the Porteos Development (PA-3) Traffic Impact Study.

We trust that our findings will assist in the planning and approval of the Jackson Gap Fairfield Inn & Suites development. Please contact us should further assistance be needed.

Sincerely,

SM ROCHA, LLC

Traffic and Transportation Consultants



Stephen Simon, EIT
Traffic Engineer



Fred Lantz, PE
Traffic Engineer