



SM ROCHA, LLC

TRAFFIC AND TRANSPORTATION CONSULTANTS

July 15, 2022

Matt Adams
Proof Civil
600 Grant Street, Suite 210
Denver, CO 80203

**RE: Honey Bucket Yard / Traffic Generation Analysis
Aurora, Colorado**

Dear Matt,

SM ROCHA, LLC is pleased to provide traffic generation information for the development entitled Honey Bucket Yard. This development is located to the southeast of the intersection of E 48th Avenue with Hudson Road in Aurora, Colorado.

The intent of this analysis is to present traffic volumes likely generated by the proposed development 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 open space, agricultural, utilities, and light industrial land uses. The proposed development is understood to entail the new construction of a storage facility and maintenance yard for portable restrooms and supporting equipment with an approximate 8,400 square foot light industrial building.

Proposed access to the development is provided at the following locations: two full-movement accesses onto Hudson Road (referred to as Access A and Access B).

General site and access locations are shown on Figure 1.

A site plan, as prepared by Powers Brown Architecture, is shown on Figure 2. This plan is provided for illustrative purposes only.



Not to Scale



E 48th Avenue

Development Site

Hudson Road

E 26th Avenue

E Colfax Avenue

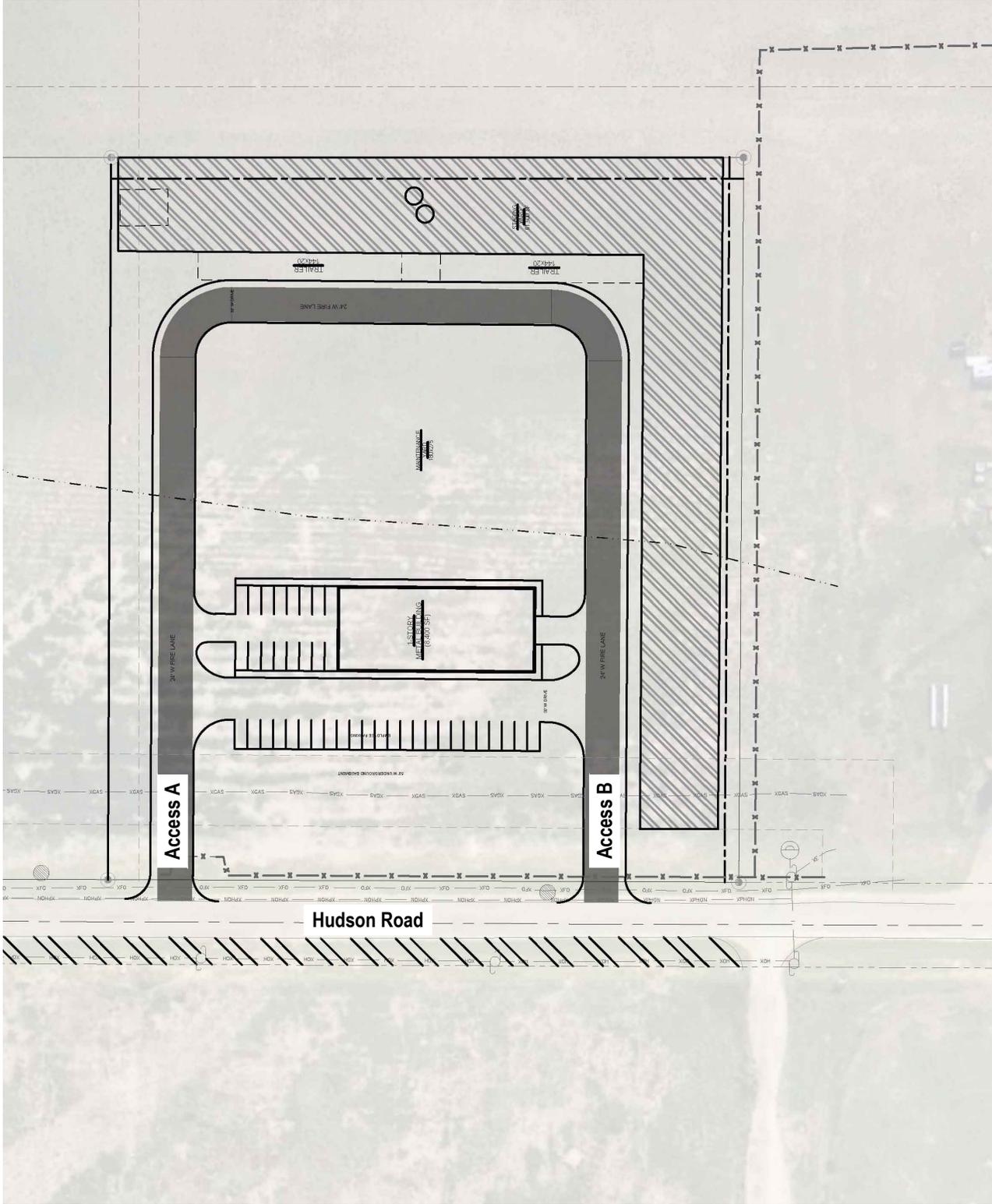
Interstate 70

HONEY BUCKET YARD
Traffic Generation Analysis



SM ROCHA, LLC
Traffic and Transportation Consultants

Figure 1
SITE LOCATION



Vehicle Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11th Edition, were applied to the 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.

Table 1 presents average trip generation rates for the development area proposed. Use of average trip generation rates presents a conservative analysis. It is noted that ITE's Trip Generation Manual does not provide traffic generation information specific to the land use proposed. However, based on proposed facility operations, as described by the developer, ITE land use code 180 (Specialty Trade Contractor) was used for analysis because of its conservative rates and best fit to the proposed land use. ITE's description of a Specialty Trade Contractor includes "industrial supply" services which may be comparable to the portable restroom supply, maintenance, and storage operations of the business proposed.

It is further noted that trip generation estimates based on employee count and truck traffic was provided by the developer and included an estimated 24 employee vehicles and 19 trucks. The 24 employees would include drivers for the 19 trucks. This results in a potential for 48 trips from employee vehicles entering and exiting the site, and 38 trips from truck traffic for a maximum total ADT of approximately 86 trips and is comparable to the average trip generation rates for a Specialty Trade Contractor. It is understood that not all employees will necessarily be present on-site during all weekdays depending on variations in business operations.

Table 1 – Trip Generation Rates

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
180	Specialty Trade Contractor	KSF	9.82	1.23	0.43	1.66	0.62	1.31	1.93

Key: KSF = Thousand Square Feet Gross Floor Area.

Table 2 summarizes the projected ADT and peak hour traffic volumes likely generated by the additional land use area proposed.

Table 2 – Trip Generation Summary

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
180	Specialty Trade Contractor	8.4 KSF	82	10	4	14	5	11	16
		<i>Total:</i>	82	10	4	14	5	11	16

Key: KSF = Thousand Square Feet Gross Floor Area.

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

As Table 2 shows, the development area has the potential to generate approximately 82 daily trips with 14 of those occurring during the morning peak hour and 16 during the afternoon peak hour.

Adjustments to Trip Generation Rates

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

Development Impacts

As Table 2 shows, the increase in peak hour traffic volumes anticipated for the proposed development is considered minor. These minor volumes are not likely to negatively impact operations of Hudson Road or other adjacent roadways or intersections.

Conclusion

This analysis assessed traffic generation for the Honey Bucket Yard development and 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 proposed site accesses. Analysis of site-generated traffic concludes that proposed development traffic volumes are minor.

We trust that our findings will assist in the planning and approval of the Honey Bucket Yard 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