Provide PCD File No. SF2326 and County signature block

August 21, 2023

Elizabeth Nijkamp, PE El Paso County Department of Public Works 2880 International Circle Colorado Springs, Colorado 80910

RE: Flying Horse North Filing 3 Site Traffic Generation and Traf

Dear Elizabeth,

The traffic study for the Sketch plan is a Master TIS that provides a general sense of the overall impacts to the transportation system and large scale improvements needed. Per ECM B.2.4.A "with each phase of the project a new individual site TIS specific to that phase (filing) would be prepared. This new study would verify the accuracy of the original traffic projections, both on site and background, and check the criteria identified for infrastructure improvements and other pertinent information."

Provide a traffic memo specific to this filing and identify any improvements that are triggered with this filing.

SM ROCHA, LLC is pleased to submit vehicle traffic generation information for the proposed subdivision and residential development located near the terminus of Quartz Creek Drive in El Paso County, Colorado.

This letter also serves as an amendment to the previously approved Traffic Impact Study<sup>1</sup> prepared for the overall Sketch Plan, pursuant to Section B.1.3 of El Paso's County's Engineering Criteria Manual (ECM)2.

## **General Site Description**

The proposed development entails a new subdivision plat for the construction of 50 single-family dwelling units. Land for the development is vacant and surrounded by a mix of residential and recreational land uses.

Primary access to the development is generally provided via the extension of Quartz Creek Drive and Allen Ranch Road.

Address all site-specific issues including proposed gates and islands, the knuckle at Waterhole and Quartz Creek, switching from ditch to curb and gutter and any other deviations.

<sup>&</sup>lt;sup>1</sup> Flying Horse North: Master Traffic Impact Study, SM ROCHA, LLC, October 2022.

<sup>&</sup>lt;sup>2</sup> El Paso County Engineering Criteria Manual, El Paso County, October 2020.

## **Site Generated Traffic**

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation, 11<sup>th</sup> Edition, were applied to the previously approved and proposed land uses in order to estimate average daily traffic (ADT), AM peak hour, and PM peak hour vehicle trips for the development site. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

Trip generation rates used for analysis are presented in Table 1.

**Table 1 – Trip Generation Rates** 

			TRIP GENERATION RATES						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.53	0.71	0.59	0.53	1.12

Key: DU = Dwelling Units.

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.

The previously approved traffic study for the overall Sketch Plan for Flying Horse North assumed 49 single-family detached dwelling units in the same development area as currently proposed with this project.

Table 2 – Trip Generation Summary

			TOTAL TRIPS GENERATED						
ITE	ITE		24	AM PEAK HOUR		PM PEAK HOUR			
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Site Development - Previously Approved									
210	Single-Family Detached Housing	49 DU	462	9	26	35	29	26	55
	Previously App	roved Total:	462	9	26	35	29	26	55
Site De	velopment - Proposed								
210	Single-Family Detached Housing	50 DU	472	9	27	36	30	27	56
Proposed Total:		472	9	27	36	30	27	56	
	Difference Total:		9	0	1	1	1	1	1

Key: DU = Dwelling Units.

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

As Table 2 illustrates, the proposed development has the potential to generate approximately 9 additional daily trips with 1 of those occurring during the AM Peak Hour and 1 during the PM Peak Hour.

## **Traffic Impact Study Compliance**

Section B.1.3 of El Paso County's ECM describe that an approved traffic impact study may be revised or updated if the following conditions are met:

An approved TIS that has been prepared in the last three years may be revised or updated where a proposed access is changed or a change in the proposed action may result in new trip generation that exceeds the original trip generation estimates. An amendment letter addressing the changes may be accepted provided the letter adequately addresses: (1) an estimate of site trip generation, (2) existing site trip generations, (3) the differences between anticipated estimates and existing trip generation, and (4) changes to the bicycle or pedestrian facilities. If the original TIS is older than three years, an entirely new TIS shall be prepared.

The proposed development is considering 1 additional lot than that previously assumed. As a result, and as shown in Table 2, Section B.1.3 of the County's ECM is believed to be met.

## Conclusion

It is our professional conclusion that the site generated traffic volumes presented by the proposed residential development will create no discernable impact to operations of the adjacent roadway and roadway intersections.

It is trusted that information provided within the amendment letter will assist in the review and approval of the proposed residential development. We remain available should additional assistance be needed.

Sincerely,

**SM ROCHA, LLC** 

Traffic and Transportation Consultants

Mike Rocha, Principal Zac Trotter, EIT Traffic Engineer

Address whether this final plat warrants any of these improvements, include signal warrant analyses.

IMPROVEMENT	TYPE	TIMING	RESPONSIBILITY		
Signalization of State Highway 83 / Stagecoach Road	Traffic Signal	When Warranted	Applicant / Developer		
Signalization of Black Forest Road / Old Stagecoach Road	Traffic Signal	When Warranted	Applicant / Developer		
Construct southbound right turn lane along Black Forest Road at Old Stagecoach Road	Auxiliary Lane	With Final Plat Application(s) / Site Development	Applicant / Developer		
Construct northbound left turn lane along Black Forest Road at Old Stagecoach Road	Auxiliary Lane	With Final Plat Application(s) / Site Development	Applicant / Developer		
Construct dual westbound left turn lane along Hodgen Road at State Highway 83	Auxiliary Lane	With Final Plat Application(s) / Site Development	Applicant / Developer		