



**SM ROCHA, LLC**

TRAFFIC AND TRANSPORTATION CONSULTANTS

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May 14, 2024

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 Traffic Impact Study Compliance Letter  
PCD File No. SF2326**

Dear Elizabeth,

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 serves as an update to the previously submitted Flying Horse North Preliminary Plan Master Traffic Impact Study<sup>1</sup> prepared for the overall PUD/Preliminary Plan application, pursuant to Section B.1.3 of El Paso's County's Engineering Criteria Manual (ECM)<sup>2</sup>.

### **General Site Description**

Land for the development is vacant and surrounded by a mix of residential and recreational land uses.

The proposed development entails a new subdivision plat for the construction of 50 single-family dwelling units, consistent with that assumed within the Flying Horse North Preliminary Plan Master Traffic Impact Study.

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

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<sup>1</sup> Flying Horse North Preliminary Plan: Master Traffic Impact Study, SM ROCHA, LLC, March 2024.

<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 assumed 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**

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK 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.

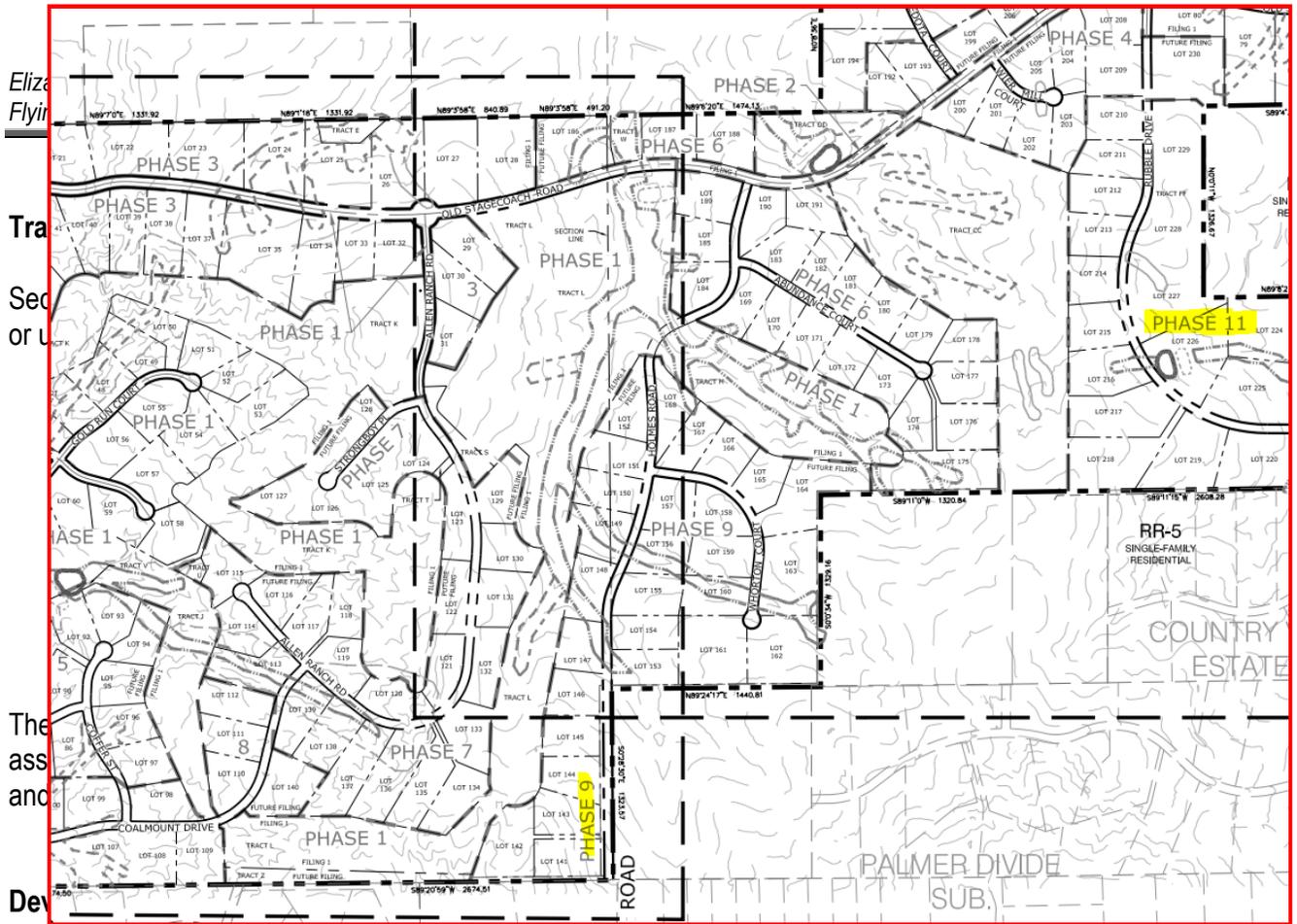
Table 2 summarizes the projected ADT and peak hour traffic volumes likely generated by the land use area proposed and provides comparison to traffic volume estimates for the previously assumed land use.

**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	
<u>Site Development - Previously Assumed</u>										
210	Single-Family Detached Housing	50 DU	472	9	27	36	30	27	56	
<i>Previously Assumed Total:</i>			472	9	27	36	30	27	56	
<u>Site Development - Proposed</u>										
210	Single-Family Detached Housing	50 DU	472	9	27	36	30	27	56	
<i>Proposed Total:</i>			472	9	27	36	30	27	56	

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 472 daily trips with 36 of those occurring during the morning peak traffic hour and 56 during the afternoon peak traffic hour.



As Table 2 shows, there is no change in estimated peak hour traffic volumes anticipated for the proposed plat filing when compared to the latest Flying Horse North Preliminary Impact Study.

per FHN preliminary plan pcd file SP17012, phase 11 is outside of this filing 3 area (see snippet). Please remove

### Recommended Improvements – Previously Assumed

Pursuant to the previous Flying Horse North Updated Traffic Impact Analysis<sup>3</sup> prepared for the previous Flying Horse North PUD dated 2016, the development area proposed with this plat application was previously assumed as part of Phases 5, 7, and 11 of development. Table 3 of the referenced traffic analysis shows how auxiliary lane improvements to the Stagecoach Road intersections with State Highway 83 and Black Forest Road were recommended upon completion of Phases 3 and 7, respectively. Paving of Holmes Road was also recommended as part of completion of development Phase 9.

A recent site visit of the study area concludes how auxiliary lane improvements to the Stagecoach Road and State Highway 83 intersection have already been implemented.

Previous trip generation estimates and recommended improvement information from the 2016 Flying Horse North Updated Traffic Impact Analysis is provided for reference in Attachment A.

remove. see comment below.

<sup>3</sup> Flying Horse North: Updated Traffic Impact Analysis, LCS Transportation Consultants, Inc., July 21, 2016.

An updated traffic analysis<sup>4</sup> for the previously proposed 2016 PUD was provided to analyze impacts caused by development of Phase 1/Filing 1 of Flying Horse North. In review of the updated traffic analysis, auxiliary lane improvements were recommended as part of Phase 1/Filing 1 (instead of Phase 3 previously identified by the 2016 Flying Horse North Updated Traffic Impact Analysis).

It is emphasized that, upon a recent site visit of the study area, auxiliary lane improvements to the Stagecoach Road and State Highway 83 intersection have already been completed.

Previous trip generation estimates and recommended improvement information for Filing 1 is provided for reference in Attachment B.

### **Recommended Improvements - Proposed**

The latest Flying Horse North Preliminary Plan Master Traffic Impact Study was prepared for the currently proposed PUD/preliminary plan. The master traffic study provides updated analyses and summary tables describing recommended intersection and roadway improvements to support the overall preliminary plan.

In review of the latest information prepared within the referenced master traffic study, it is concluded that construction of a northbound left turn deceleration lane along Black Forest Road at Stagecoach Road (as described in the 2016 Flying Horse North Updated Traffic Impact Analysis) is not warranted with the subdivision plat of the 50 single-family dwelling units being proposed with this application.

Consistent with recommended improvements illustrated within the 2016 Flying Horse North Updated Traffic Impact Analysis, paving of Holmes Road along the property frontage is expected to be completed as part of this proposed plat in order to meet cross-section requirements defined within the County's ECM.

As described within the recent master traffic study, Allen Ranch Road is currently classified as a rural local roadway and accommodates approximately 790 trips/day. Review of Table 2-5 of the County's ECM suggests that rural local roadways have a design ADT of 750 trips/day. This indicates that Allen Ranch Road already meets requirements for the County's urban local roadway classification and cross-section.

Per the recent master traffic study, intersection operations and roadway capacities analyzed for all conditions and scenarios suggest Allen Ranch Road is able to accommodate future traffic growth under its current cross-section. Therefore, the need to improve the roadway is assumed to be triggered with any new development along the roadway, from a vehicle-volume perspective only.

Connection to Holmes road is not proposed with this filing and therefore traffic from this development would not impact this roadway. Please remove as Holmes road is to be connected to the future PUDSP area.

<sup>4</sup> Flying Horse North Filing No. 1: Updated Traffic Impact Analysis, LCS Transp  
2018.

As such, considering how the master traffic study projects efficient and acceptable intersection operations and roadway capacities for Allen Ranch Roach, a request to defer Allen Ranch Road improvements to later stages of development is proposed (i.e., development of the resort hotel or fitness center).

## 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.

In review of previous traffic analyses prepared for the overall and filing-specific development areas, no intersection improvements to the existing public roadway network are warranted nor recommended with this subdivision plat. Additionally, due to acceptable traffic operations and roadway capacities, a request to defer Allen Ranch Road improvements to later stages of development is proposed.

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*



Brandon Wilson, EIT  
Project Manager



Zac Trotter, EIT  
Traffic Engineer

**Traffic Engineer's Statement**

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



\_\_\_\_\_  
Fred Lantz, P.E. #23410

05/14/2024

\_\_\_\_\_  
Date

**Developer's Statement**

I, the Developer, have read and will comply with all commitments made on my behalf within this report.



\_\_\_\_\_  
Drew Balsick  
Flying Horse Development  
2138 Flying Horse Club Drive  
Colorado Springs, CO 80921

05/14/2024

\_\_\_\_\_  
Date

**ATTACHMENT A**

**2016 Flying Horse North Updated Traffic Impact Analysis**

**Table 2**  
**Trip Generation Estimate**  
**Flying Horse at Shamrock Ranch East**

Phase	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates <sup>(1)</sup>						Total Trips Generated					
				Average Weekday Traffic		Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic		Morning Peak Hour		Afternoon Peak Hour	
				In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
<b>1-2</b>	210	Single-Family Detached Housing	43 DU <sup>(2)</sup>	9.52	0.19	0.56	0.63	0.37	0.37	409	8	24	27	16	
<b>1-6</b>	210	Single-Family Detached Housing	136 DU	9.52	0.19	0.56	0.63	0.37	0.37	1,295	26	77	86	50	
	430	Golf Course	18 holes	35.74	1.63	0.43	1.49	1.43	1.43	643	29	8	27	26	
										<b>1,938</b>	<b>55</b>	<b>84</b>	<b>112</b>	<b>76</b>	
<b>Buildout</b>	210	Single-Family Detached Housing	283 DU	9.52	0.19	0.56	0.63	0.37	0.37	2,694	53	159	178	105	
	430	Golf Course	18 holes	35.74	1.63	0.43	1.49	1.43	1.43	643	29	8	27	26	
										<b>3,337</b>	<b>82</b>	<b>167</b>	<b>205</b>	<b>130</b>	

**Notes:**

(1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE)

(2) DU = dwelling unit

Source: LSC Transportation Consultants, Inc.

**Table 3**  
**Recommended Improvements**  
**Flying Horse at Shamrock Ranch East**

<b>Intersection/Road</b>	<b>Improvement</b>	<b>Lane Length (ft)</b>	<b>Taper Length (ft)</b>	<b>Phase When Required</b>
SH 83/Stagecoach	Northbound Right-Turn Deceleration Lane	378	222	3
	Northbound Right-Turn Acceleration Lane	738	222	3
	Southbound Left-Turn Lane	418	222	3
	Southbound Left-Turn Acceleration Lane	738	222	3
Hogden/Full-Movement Site Access	No Auxiliary Lanes Required			
Hogden/Black Forest (West)	No Additional Auxiliary Lanes Required			
Black Forest/Stagecoach	Northbound Left-Turn Lane	340	240	7
Black Forest/Site Access Points	No Auxiliary Lanes Required			
Holmes Road	Pave	N/A	N/A	9

*Source: LSC Transportation Consultants, Inc.*

**ATTACHMENT B**

**Flying Horse North Filing No. 1 Updated Traffic Impact Analysis**

**Table 2**  
**Trip Generation Estimate**  
**Flying Horse North Filing No. 1**

Phase	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates <sup>(1)</sup>						Total Trips Generated					
				Average Weekday Traffic		Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic		Morning Peak Hour		Afternoon Peak Hour	
				In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
<b>Filing No. 1</b>															
1	210	Single-Family Detached Housing	80 DU <sup>(2)</sup>	9.52	0.19	0.56	0.63	0.37	762	15	45	50	30		
	430	Golf Course	18 holes	35.74	1.63	0.43	1.49	1.43	643	29	8	27	26		
		<b>Total Phase 1/Filing No. 1</b>							<b>1,405</b>	<b>44</b>	<b>53</b>	<b>77</b>	<b>56</b>		
<b>Future Filings</b>															
2	210	Single-Family Detached Housing	55 DU	9.52	0.19	0.56	0.63	0.37	524	10	31	35	20		
		<b>Total Phases 1 and 2</b>	<b>135 DU</b>						<b>1,929</b>	<b>55</b>	<b>84</b>	<b>112</b>	<b>76</b>		
3	210	Single-Family Detached Housing	35 DU	9.52	0.19	0.56	0.63	0.37	333	7	20	22	13		
4	210	Single-Family Detached Housing	23 DU	9.52	0.19	0.56	0.63	0.37	219	4	13	14	9		
5	210	Single-Family Detached Housing	28 DU	9.52	0.19	0.56	0.63	0.37	267	5	16	18	10		
6	210	Single-Family Detached Housing	20 DU	9.52	0.19	0.56	0.63	0.37	190	4	11	13	7		
7	210	Single-Family Detached Housing	37 DU	9.52	0.19	0.56	0.63	0.37	352	7	21	23	14		
8	210	Single-Family Detached Housing	5 DU	9.52	0.19	0.56	0.63	0.37	48	1	3	3	2		
		<b>Total Phases 5-8</b>	<b>148 DU</b>						<b>1,409</b>	<b>28</b>	<b>83</b>	<b>93</b>	<b>55</b>		
		<b>Buildout</b>	<b>283 DU</b>						<b>3,337</b>	<b>82</b>	<b>167</b>	<b>205</b>	<b>131</b>		

Notes:  
(1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE)  
(2) DU = dwelling unit  
Source: LSC Transportation Consultants, Inc.

**Table 3  
Recommended Improvements  
Flying Horse North Filing No. 1**

<b>Intersection/Road</b>	<b>Improvement</b>	<b>Lane Length (ft)</b>	<b>Taper Length (ft)</b>
	Northbound Right-Turn Deceleration Lane	378	222
SH 83/Stagecoach	Northbound Right-Turn Acceleration Lane <sup>(1)</sup>	738	222
	Southbound Left-Turn Lane	428	222
	Southbound Left-Turn Acceleration Lane	738	222
<b>Notes:</b>			
(1) A northbound right-turn acceleration lane would not be required with Filing 1; however, the applicant may choose to construct this lane with the other auxiliary turn lanes required.			
<i>Source: LSC Transportation Consultants, Inc.</i>			