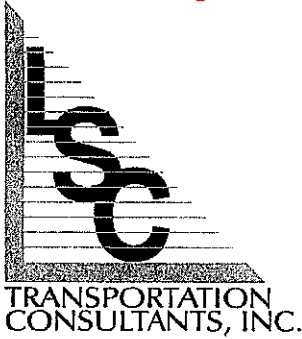


LSC Responses to PCD Engineering Division TIS Redlines

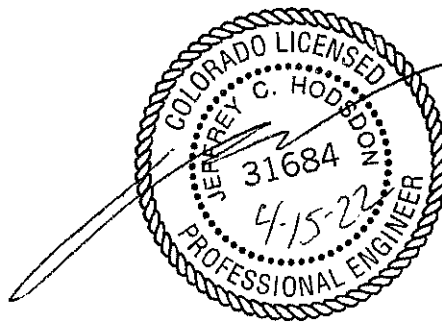


LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

Homestead North at Sterling Ranch Filing No. 2 Traffic Technical Memorandum (LSC #204383) April 15, 2022

Traffic Engineer's Statement

This 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.



Developer's Statement

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


A handwritten signature in black ink, appearing to read 'Sam S. Morley', written over a horizontal line.

5/5/2022
Date


SF-22-018 ¹

LSC Responses to PCD Engineering Division TIS Redlines

Page: 1

 Number: 1 Author: CDurham Subject: Text Box Date: 6/2/2022 5:12:55 PM

[SF-22-018](#)

 Author: kdferrin Subject: Sticky Note Date: 6/13/2022 9:20:23 AM

LSC Response: The additional information has been added as requested



LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

April 15, 2022

Mr. Jim Morley
Morley-Bentley Investments, LLC
20 Boulder Crescent, 1st Floor
Colorado Springs, CO 80903

RE: Homestead North at
Sterling Ranch Filing No. 2
Traffic Technical Memorandum
El Paso County, CO
LSC #204383

Dear Mr. Morley:

LSC Transportation Consultants, Inc. has prepared this traffic technical memorandum for the Homestead North at Sterling Ranch Filing No. 2 residential development. As shown in Figure 1, the site is located east of Vollmer Road and north of the future extension of Briargate Parkway in El Paso County, Colorado. LSC recently prepared a traffic impact study (TIS) for Homestead North at Sterling Ranch Phase 1 (SP-20-008) dated January 11, 2022 that included trips by the currently-proposed filing. This memorandum is intended as a site-specific, final plat traffic report.

REPORT CONTENTS

This report presents:

- A description of Sterling Ranch filings that are currently under review, currently proposed, and planned for the future;
- Trip-generation estimates for Homestead North at Sterling Ranch Filing No. 1, based on the currently-proposed land use;
- The recommended street classifications for the internal streets within the currently-proposed Homestead North at Sterling Ranch Filing No. 1;
- Improvements needed with Homestead North at Sterling Ranch Filing No. 1; and
- The project's obligation to the County roadway improvement fee program.


Revise to Filing No. 2 ¹

A blue arrow originates from the revision note and points to the first bullet point, which describes the current filings under review.


²

³


⁴

 Number: 1 Author: CDurham Subject: Callout Date: 6/2/2022 1:10:31 PM


[Revise to Filing No. 2](#)

 Author: kdferrin Subject: Sticky Note Date: 6/13/2022 9:20:41 AM


LSC Response: Revised as requested

 Number: 2 Author: CDurham Subject: Highlight Date: 6/2/2022 1:10:37 PM

No. 1

 Number: 3 Author: CDurham Subject: Highlight Date: 6/2/2022 1:10:41 PM

No. 1;

 Number: 4 Author: CDurham Subject: Highlight Date: 6/2/2022 1:10:44 PM

No. 1;

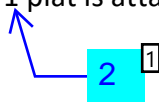
RECENT TRAFFIC REPORTS

- LSC prepared a traffic impact study (TIS) for Homestead North at Sterling Ranch Phase 1, dated January 11, 2022 that included the currently-proposed Filing No. 2 area. LSC also completed a memorandum for Filing No. 1 dated January 11, 2022.
- The LSC TIS report for the entire Sterling Ranch development was dated June 5, 2008.
- LSC also prepared a traffic impact analysis for the first phase of the Sterling Ranch development, dated March 16, 2015; a memorandum for Phases 1-3, dated October 2, 2017; and a traffic impact analysis for the *Sterling Ranch Phase 2 Preliminary Plan*, dated December 20, 2018.
- The following site-specific, final-plat traffic reports have also been prepared:
 - *Branding Iron at Sterling Ranch Filing No. 1 and Homestead at Sterling Ranch Filing No. 1*, dated December 19, 2017
 - *Sterling Ranch Filing No. 2*, dated April 3, 2018
 - *Homestead at Sterling Ranch Filing No. 2*, dated March 3, 2020
 - *Branding Iron at Sterling Ranch Filing No. 2*, dated March 31, 2020 (revised May 6, 2020)
 - *Copper Chase at Sterling Ranch*, dated December 14, 2021
- LSC prepared a TIS for the Retreat at TimberRidge, located just north of the Homestead North at Sterling Ranch development, dated January 25, 2018. LSC also prepared transportation memoranda for the Retreat at TimberRidge Preliminary Plan dated June 29th, 2018 and the Retreat at TimberRidge Filing No. 1 dated April 3, 2020.

LAND USE AND ACCESS


Homestead North Phase 1 is planned to include 147 lots for single-family homes. The recently approved Homestead North at Sterling Ranch Filing No. 1 includes 73 of those lots and the currently-proposed Filing 2 includes the remaining 74 lots within Phase 1. The Filing No. 2 site plan is consistent with the land use and access assumed in the Phase 1 TIS. A copy of the Homestead North at Sterling Ranch Filing 1 plat is attached.

TRIP GENERATION




Homestead North at Sterling Ranch Filing No. 2 site-generated vehicle trips have been estimated using the nationally-published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). Table 1 shows the trip-generation estimate.

Homestead North at Sterling Ranch Filing No. 2 is expected to generate 699 vehicle trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 14 vehicles would enter and 41 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 46 vehicles would enter and 27 vehicles would exit the site.

 Number: 1 Author: CDurham Subject: Callout Date: 6/2/2022 1:12:47 PM

2

 Author: kdferrin Subject: Sticky Note Date: 6/13/2022 9:20:52 AM

LSC Response: Revised as requested

Taken from the *Homestead North Updated Traffic Impact Study* January 11, 2022 with Updates added on February 2, 2022 as part of Filing 1 and April 6, 2022 as part of the currently proposed Filing 2.

Table 3
(page 1 of 3)

Homestead North

Roadway Segment Improvements








Segment ID ⁽¹⁾	Improvement Description	Timing	Design ADT (vpd)	Projected Short-Term ADT (vph)	Projected 2040 ADT (vpd)	Responsibility
Adjacent Roadway Improvements						
V4	Improve Vollmer Road from Sterling Ranch boundary south of Dines Boulevard to Briargate Parkway to a standard 4-Lane Urban Minor Arterial Cross Section ⁽²⁾	Short-Term Future (With Homestead North) Fil 1	20,000	8,110	17,480	Sterling Ranch (With Homestead North)
V5	Improve Vollmer Road from Briargate Parkway to Sam Bass Drive to a standard 4-Lane Urban Minor Arterial Cross Section ⁽²⁾	Short-Term Future (With Homestead North) 2	20,000	7,145	11,805	Sterling Ranch (With Homestead North)
V6	Widen the east side of Vollmer Road in the vicinity of Poco Road to the rural standard (32' wide interim total including 8' of pavement and 2' gravel shoulder)	Short-Term Future (With Retreat at TimberRidge Fils 1 & 2)	10,000	7,010	10,580	Retreat at TimberRidge Fil 1
	Improve Vollmer Road between Sam Bass Drive and Poco Road to a 4-lane Urban Minor Arterial but with necessary lane transitions, redirect tapers, etc. south of Poco to adequately transition between the 4-Lane Urban Minor Arterial Cross Section and the 2-Lane Rural Arterial Cross Section north of Poco Road	Short-Term Future (With Homestead North) Future Filings	20,000			Sterling Ranch (With Homestead North)
B1	Construct the south half section of Briargate Pkwy (4-Lane Principal Arterial) between Vollmer Road and Wheatland Dr	Short-Term Future (With Homestead at Sterling Ranch Fil 2) 4	20,000	1,190	36,150	Sterling Ranch
	Construct the north half section of Briargate Pkwy (4-Lane Principal Arterial) between Vollmer Road and Wheatland Dr	Long-Term Future	40,000			Sterling Ranch

Notes:

- (1) See Figure 13
- (2) Adequate transition/redirect tapers would be needed between the various cross sections on Vollmer Road. Based on the criteria contained in Table 2-29 of the *El Paso Engineering Criteria Manual* an appropriate taper ratio for a roadway with a design speed of 40 mile per hour is 20:1
- (3) Source: *Table 20 Road Impact Fee Study Updated* November 16, 2016
- (4) Source: *The Ranch Sketch Plan Master Traffic Impact Study* by LSC Transportation Consultants, Inc. July 9, 2019 PCD File No. SKP-18-006

Source: LSC Transportation Consultants, Inc. (October 2021) w/notes added April 6, 2022

April 6, 2022
from Briargate Parkway to Jane Kirkham Drive with Fil 1 and to Sam Bass Drive with Fil 2

	Number: 1	Author: kdferrin	Subject: Text Box	Date: 4/15/2022 12:46:58 PM
	Taken from the <i>Homestead North Updated Traffic Impact Study</i> January 11, 2022 with Updates added on February 2, 2022 as part of Filing 1 and April 6, 2022 as part of the currently proposed Filing 2.			
	Number: 2	Author: kdferrin	Subject: Text Box	Date: 1/14/2022 5:30:32 PM -06'00'
	Fil 1			
	Number: 3	Author: kdferrin	Subject: Highlight	Date: 1/14/2022 5:23:57 PM -06'00'
	Number: 4	Author: kdferrin	Subject: Text Box	Date: 1/14/2022 5:30:58 PM -06'00'
	Future Filings			
	Number: 5	Author: jchodsdon	Subject: Text Box	Date: 4/15/2022 12:45:00 PM
	w/notes added April 6, 2022			
	Number: 6	Author: jchodsdon	Subject: Text Box	Date: 4/15/2022 12:45:41 PM
	April 6, 2022			
	Number: 7	Author: kdferrin	Subject: Callout	Date: 4/6/2022 3:21:36 PM
	from Briargate Pakway to Jane Kirkham Drive with Fil 1 and to Sam Bass Drive with Fil 2			

