

LSC Responses to TIS Redline Comments



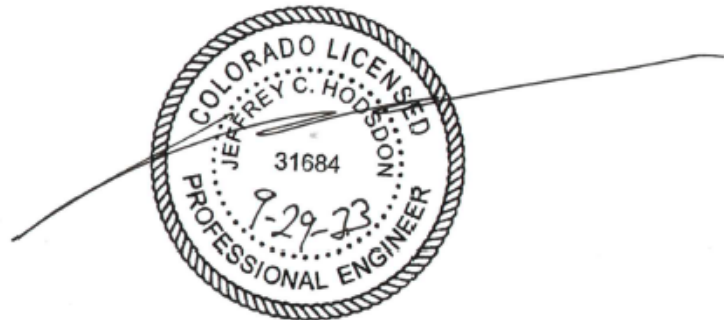
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Sterling Ranch Sketch Plan 2023 Amendment & Rezone Traffic Technical Memorandum (LSC #S224441) September 28, 2023

Add "PCD Filing No. SKP235, P239, P2310, and P2311" ¹

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.

[Handwritten Signature]

9/28/23 ²


Date

LSC Responses to TIS Redline Comments

Page: 1

 Number: 1 Author: Carlos Subject: Text Box Date: 11/2/2023 8:54:24 AM -06'00'

[Add "PCD Filing No. SKP235, P239, P2310, and P2311"](#)

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:37:29 AM
LSC Response: Added as requested.

Number: 2 Author: Date: 9/28/2023 2:28:04 PM -06'00'

number of residential dwelling units for Sterling Ranch is capped at 4,800. No change to the maximum number of residential dwelling units is proposed as part of the 2023 Sketch Plan Amendment. However, the currently proposed plan includes a rezone of the parcels north of Briargate Parkway to allow for higher residential densities.

The 2022 MTIS assumed the Sterling Ranch development would be built with the maximum allowable number of residential units. As many of the residential parcels within Sterling Ranch were either existing, approved, under review, or in the preliminary planning stages, and therefore had a known number of dwelling units, the MTIS assumed that the areas north of Briargate Parkway and east of Sterling Ranch Road where detailed plans had not yet been made would be developed with the number of dwelling units needed to reach the maximum of 4,800 dwelling units for the overall development even though that number was greater than what was allowed by the zoning for those parcels. This area was included in the MTIS as Traffic Analysis Zones (TAZ) 30, 34, 35, 36 (which are located just north of Briargate Parkway), and TAZ 101 (currently proposed to be rezoned). Table 1 shows the number of residential dwelling units assumed in the MTIS for each TAZ in this area and the number of dwelling units that would be allowed based on the currently proposed plan. As shown in Table 1, the MTIS assumed 1,302 single-family residential dwelling units in this area (TAZs 30, 34, 35, 36, and 101). The currently-proposed plan would allow between 894 and 1,438 residential single-family residential dwelling units. As the total number of allowable residential dwelling units in the overall Sterling Ranch development has **not** been increased, the 1,302 dwelling units shown for this area in the MTIS is likely still a reasonable assumption. If up to 1,418 dwelling units are constructed in the area north of Briargate Parkway and east of Sterling Ranch Road, the number of dwelling units in other areas of Sterling Ranch Sketch Plan area that have not yet been developed would need to be reduced by at least 116 dwelling units (so the overall Sterling Ranch dwelling unit cap is not exceeded).

Study-Area Access Plan

No changes to the access plan are proposed as part of this Sketch Plan Amendment.


TRIP GENERATION

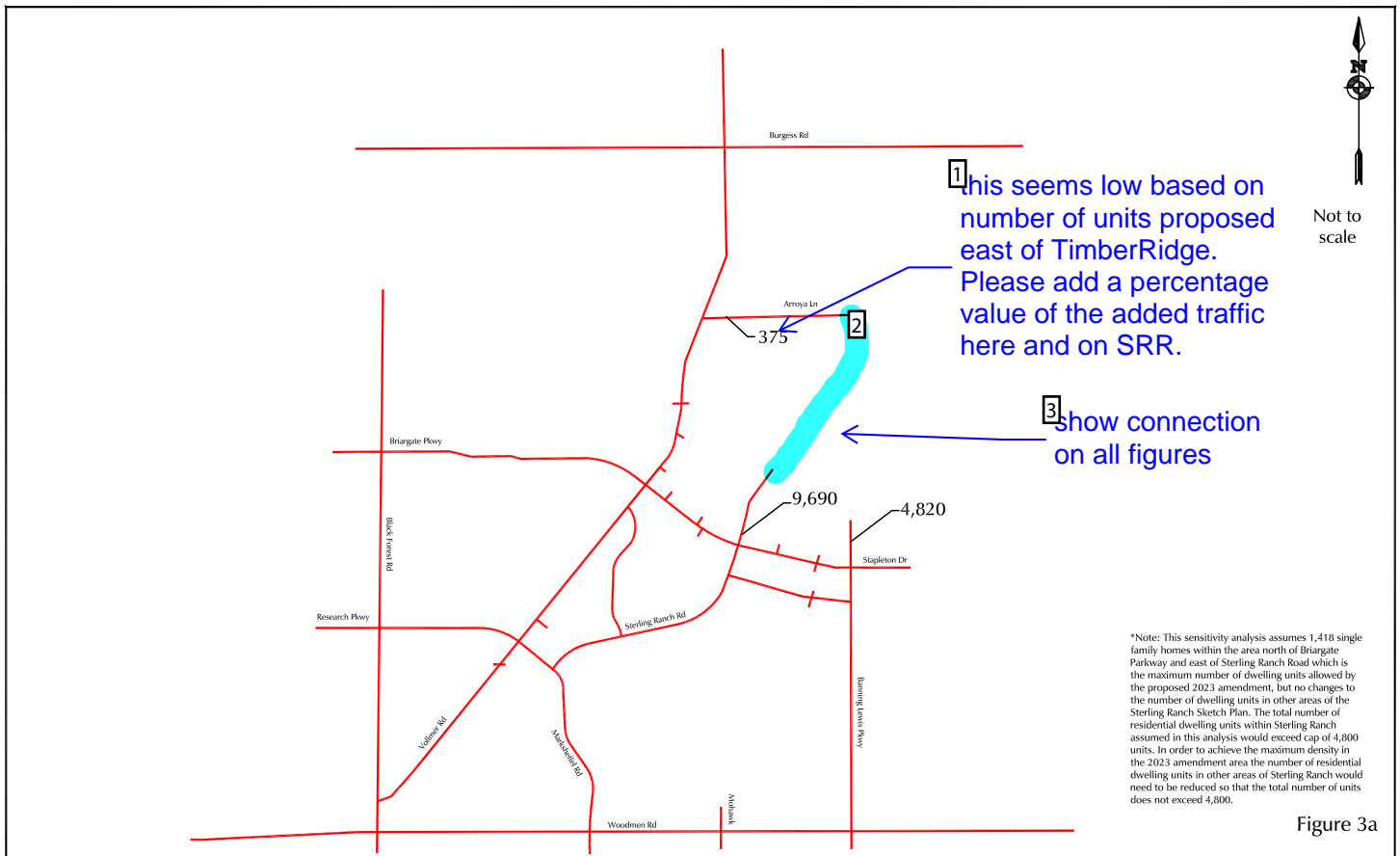
Table 2 shows the trip-generation estimate for the areas north of Briargate Parkway and east of Sterling Ranch Road (TAZs 30, 34, 35, 36 and 101) should they be developed with 1,418 residential dwelling units, which is the maximum number of units based on the currently-proposed zoning. The trip generation was estimated using the nationally-published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). Note that the trip generation for the **overall** Sterling Ranch Master Plan is not anticipated to change from what was assumed in the March 2023 MTIS as the maximum number of residential units for the overall sketch plan area is capped at 4,800 dwelling units. Should 1,418 residential dwelling units be constructed within the area north of Briargate Parkway and east of Sterling Ranch Road currently-proposed amendment area, the number of units in other areas of the Sterling Ranch

Address how Sterling Ranch Road will be connected to Arroya Lane and the anticipated classification of Arroya, and with the additional density in this area how this increases the possibility of the ultimate east-west connection of Arroya Lane along the north side of Sterling Ranch (if the property to the north subdivides).

Number: 1 Author: Jeff Rice - EPC Engineering Review Subject: Callout Date: 11/1/2023 2:17:35 PM -06'00'

Address how Sterling Ranch Road will be connected to Arroya Lane and the anticipated classification of Arroya, and with the additional density in this area how this increases the possibility of the ultimate east-west connection of Arroya Lane along the north side of Sterling Ranch (if the property to the north subdivides).

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:37:39 AM
LSC Response: The additional information has been added as requested.



1. This seems low based on number of units proposed east of TimberRidge. Please add a percentage value of the added traffic here and on SRR.

2.

3. show connection on all figures

*Note: This sensitivity analysis assumes 1,418 single family homes within the area north of Briargate Parkway and east of Sterling Ranch Road which is the maximum number of dwelling units allowed by the proposed 2023 amendment, but no changes to the number of dwelling units in other areas of the Sterling Ranch Sketch Plan. The total number of residential dwelling units within Sterling Ranch assumed in this analysis would exceed cap of 4,800 units. In order to achieve the maximum density in the 2023 amendment area the number of residential dwelling units in other areas of Sterling Ranch would need to be reduced so that the total number of units does not exceed 4,800.

Figure 3a

LEGEND:


XXX = Average Weekday Traffic (AWT)(vehicles per day)

Sterling Ranch Sketch Plan-Generated Average Weekday Traffic


Assuming Maximum Density in the 2023 Amendment Area*

Sterling Ranch Sketch Plan - 2023 Amendment and Rezone (LSC# S224441)




 Number: 1 Author: Jeff Rice - EPC Engineering Review Subject: Callout Date: 11/1/2023 2:08:12 PM -06'00'

this seems low based on number of units proposed east of TimberRidge. Please add a percentage value of the added traffic here and on SRR.

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:37:48 AM

LSC Response: The additional information has been provided as requested.

 Number: 2 Author: Jeff Rice - EPC Engineering Review Date: 11/1/2023 2:06:37 PM -06'00'

 Number: 3 Author: Jeff Rice - EPC Engineering Review Subject: Callout Date: 11/1/2023 2:08:14 PM -06'00'

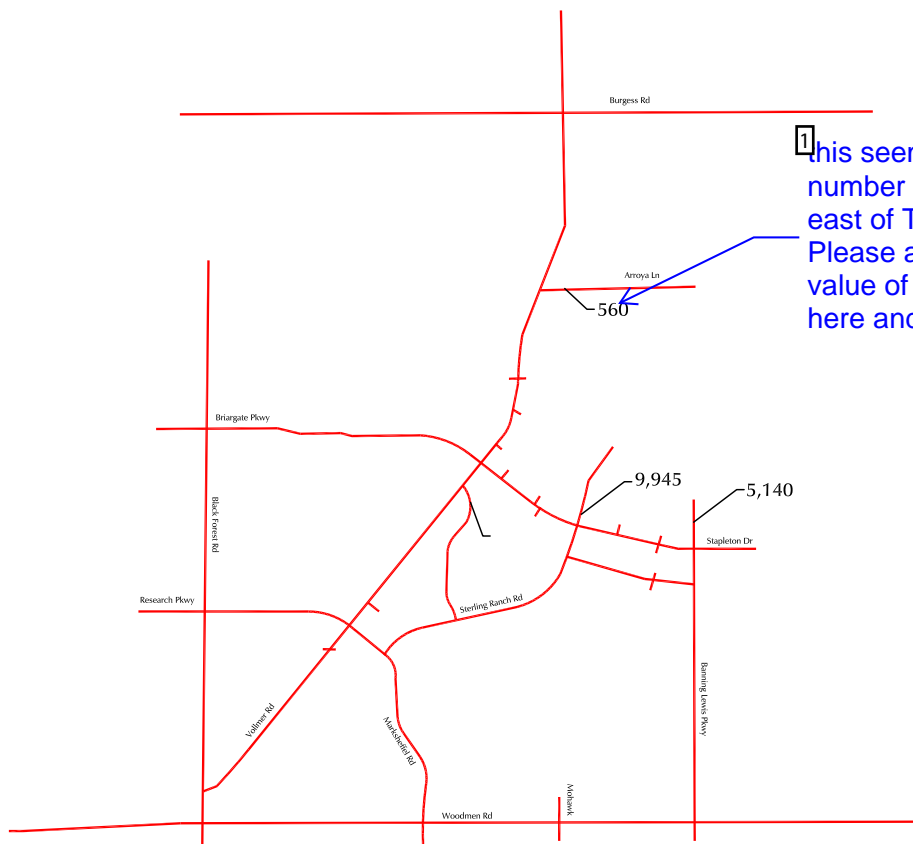
show connection on all figures

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:37:56 AM

LSC Response: The figures have been updated as requested.



Not to scale



1 This seems low based on number of units proposed east of TimberRidge. Please add a percentage value of the added traffic here and on SRR.

*Note: These volumes are the sum of the Sterling Ranch Sketch Plan generated traffic volumes assuming maximum density in the area north of Briargate Parkway and east of Sterling Ranch Road (from Figure 3a) plus the 2042 baseline traffic volumes taken from Figure 6a of the Sterling Ranch Sketch Plan Amendment Master Traffic Impact Study (MTIS), by LSC Transportation Consultants, March 2023. These volumes should be compared to the corresponding impacted street segment volumes shown on Figure 10a of the March 2023 MTIS.

LEGEND:

XXX = Average Weekday Traffic (AWT)(vehicles per day)

Rezone Area Sensitivity Analysis* Average Weekday Traffic


Sterling Ranch Sketch Plan - 2023 Amendment and Rezone (LSC# S224441)



Figure 4a

Number: 1 Author: Jeff Rice - EPC Engineering Review Subject: Callout Date: 11/1/2023 2:10:20 PM -06'00'

this seems low based on number of units proposed east of TimberRidge. Please add a percentage value of the added traffic here and on SRR.

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:38:05 AM
LSC Response: The additional information has been provided as requested.

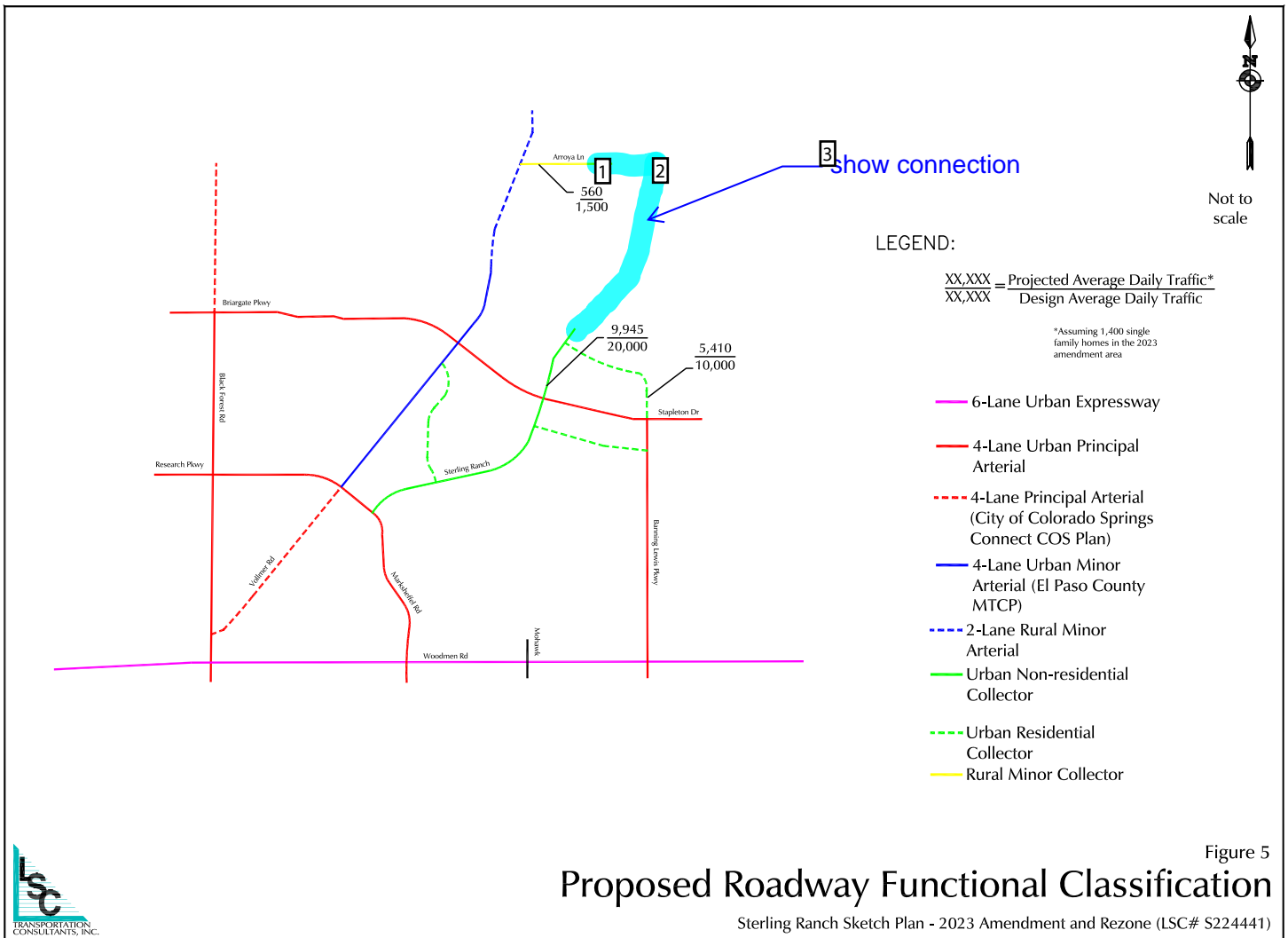





Figure 5
Proposed Roadway Functional Classification

Sterling Ranch Sketch Plan - 2023 Amendment and Rezone (LSC# S224441)




 Number: 1 Author: Jeff Rice - EPC Engineering Review Date: 11/1/2023 2:05:26 PM -06'00'

 Number: 2 Author: Jeff Rice - EPC Engineering Review Date: 11/1/2023 2:05:22 PM -06'00'

 Number: 3 Author: Jeff Rice - EPC Engineering Review Subject: Callout Date: 11/1/2023 2:05:36 PM -06'00'

[show connection](#)

 Author: kdferrin Subject: Sticky Note Date: 12/15/2023 9:38:10 AM
LSC Response: The figures have been updated as requested.
