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New Breed Ranch
Filing No. 3
Transportation Memorandum
(LSC #S224230)
July 16, 2023

Add PCD File No. SF247 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.




17 July 23
Date

LSC Responses to EPC TIS Redline Comments

Page: 1

 Number: 1 Author: Daniel Torres Subject: Text Box Date: 4/22/2024 13:30:07

[Add PCD File No. SF247](#)

 Author: jchodsdon Subject: Sticky Note Date: 9/25/2024 08:30:21
LSC Response: Added as requested.

intersection

1

With the 30-mph posted speed limit/design speed on Meadow Run Circle, the *ECM*-prescribed entering sight distance, as shown in *ECM* Table 2-21, is 335 feet to the east and west along Meadow Run Circle.

ROAD AND TRAFFIC CONDITIONS AND MTCP CLASSIFICATION

Figure 1 shows the roads adjacent to and in the vicinity of the site. Adjacent roads serving the site are identified below followed by a brief description of each:

Shoup Road is a two-lane paved rural Minor Arterial that extends east-to-west route through the Black Forest area. The posted speed limit in the vicinity of the Shoup Road/New Breed Drive intersection is 45 miles per hour (mph). An eastbound left-turn deceleration lane exists on Shoup Road approaching New Breed Drive as it was previously constructed.

New Breed Drive is a Rural Local roadway extending north-to-south for 600 feet between Shoup Road Meadow Run Circle. The posted speed limit along this paved road is 30 mph. The southbound approach at Shoup Road is stop-sign controlled and the northbound approach at Meadow Run Circle is yield-sign controlled.

Meadow Run Circle is a Rural Local roadway extending generally east-to-west for 0.6 miles between Oak Cliff Way (to the west) and its terminus to the east. The speed limit along this paved road is assumed 30 mph, as this is the speed limit for this roadway classification. The overall New Breed Ranch Preliminary Plan shows Meadow Run Circle ultimately extended from each end to form a loop road serving the entire New Breed Ranch development.

Existing Traffic Volumes

Vehicular turning-movement counts were conducted at the intersection of Shoup Road/New Breed Drive. Raw count data are attached, for reference.

PEDESTRIAN AND BICYCLE FACILITIES


New Breed Drive and Meadow Run Circle do not currently have sidewalks or separate, striped, on-street bicycle lanes. This is consistent with the Rural Local criteria. Sidewalks would **not** be required along any study-area roadways following site buildout. The proposed subdivision road will also be a Rural Local roadway and, per *ECM* criteria, would not require sidewalks or separate bicycle lanes.

TRIP GENERATION

Estimates of the vehicle trips projected to be generated by the proposed New Breed Ranch Filing No. 3 residential subdivision have been made using the nationally published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE).

 Number: 1 Author: Daniel Torres Subject: Callout Date: 4/22/2024 13:33:17

[intersection](#)

 Author: jchodsdon Subject: Sticky Note Date: 9/25/2024 08:30:10
LSC Response: Modified as requested.

 Number: 2 Author: Daniel Torres Subject: Line Date: 4/22/2024 13:33:24

LOS values have been included in each figure for each turning movement/approach during the weekday morning and afternoon peak hours for the proposed site-access intersections and off-site intersections in the study area:

- Figure 3: 2022 Existing Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 6: 2022 Existing + Site Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 7: 2042 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 8: 2042 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

LOS calculations for long-term scenarios were based upon the recommended lane geometries and traffic controls outlined in the figures above.

Shoup Road/New Breed Drive

All movements at this intersection currently operate at and are projected to remain at LOS C or better during both peak hours with the addition of site-generated traffic. No modifications would be required to this intersection.

Please identify if these LOS are also for the long-term conditions

1

Meadow Run Circle/New Breed Drive

All movements at this intersection currently operate at and are projected to remain at LOS A during both peak hours with the addition of site-generated traffic. No modifications would be required to this intersection.

ROADWAY IMPROVEMENTS

Auxiliary Turn Lanes

A design speed of 50 mph has been assumed for Shoup Road.

The existing turn lane does not appear to be stripped for this length per GIS aerials. It appears that the stripping may need to be lengthened.

2

Eastbound Left-Turn Deceleration Lane

According to the El Paso County *Engineering Criteria Manual (ECM)*, exclusive left-turn lanes shall be provided for any access on a Minor Arterial with a projected peak-hour ingress turning volume of 25 vehicles per hour (vph) or greater. The existing eastbound left-turn lane on Shoup Road approaching New Breed Drive is about 864 feet, consisting of about 425 feet of full-width deceleration length plus a 140-foot taper. This exceeds the *ECM*'s 435-foot (plus storage) requirement for a left-turn deceleration lane. As such, no modifications would be required to this existing left-turn deceleration lane.

Westbound Right-Turn Deceleration Lane

According to *ECM*, exclusive right-turn lanes shall be provided for any access on a Minor Arterial with a projected peak-hour ingress turning volume of 50 vehicles per hour (vph) or greater. The projected right-turn volume at Shoup/New Breed is **not** expected to exceed the 50-vph minimum

Number: 1 Author: Daniel Torres Subject: Callout Date: 4/22/2024 14:25:31

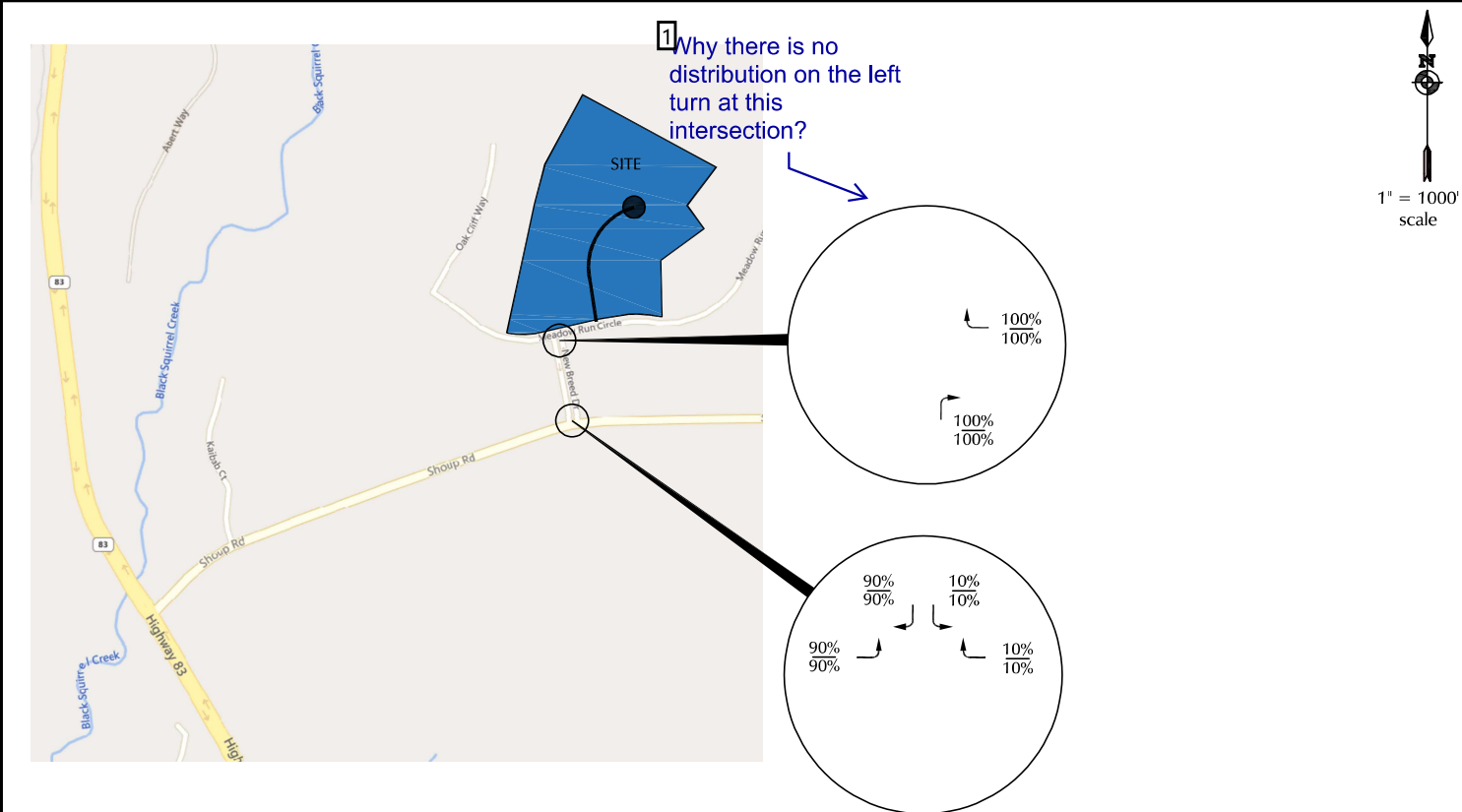
Please identify if these LOS are also for the long-term conditions

Author: jchodsdon Subject: Sticky Note Date: 9/25/2024 08:29:55
LSC Response: Updated as requested.

Number: 2 Author: Daniel Torres Subject: Callout Date: 4/22/2024 14:25:44

The existing turn lane does not appear to be striped for this length per GIS aerials. It appears that the striping may need to be lengthened.

Author: jchodsdon Subject: Sticky Note Date: 9/25/2024 08:29:47
LSC Response: This paragraph has been revised. Also please refer to the striping exhibits that have been added to the report. The striping does not require lengthening. This has been verified through field measurements and the striping exhibits. The lane, as striped in the field, has a shortened transition taper stripe and longer gap than normal. The current striping is not problematic, but LSC has prepared a striping exhibit for use at such time the County repaves and restripes Shoup or otherwise refreshes pavement markings with regular maintenance.



1" = 1000' scale




XX = % of AM Weekday Peak-Hour Traffic
 XX = % of PM Weekday Peak-Hour Traffic
 X,XXX = Average Daily Traffic (Vehicles/Day)

Figure 4
Directional Distribution
 New Breed Ranch (LSC# S224230)

Number: 1 Author: HaoVo Subject: Callout Date: 4/18/2024 15:16:56

[Why there is no distribution on the left turn at this intersection?](#)

 Author: jchodsdon Subject: Sticky Note Date: 9/25/2024 08:29:36
LSC Response: This has been corrected in the updated TIS.
