

- Figure 8: 2044 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 9: 2044 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. Regarding peak-hour factors used in the analysis, please refer to Appendix A. For specific delay values, please refer to the attached Synchro reports.

### Judge Orr Road/Proposed East Site Access

All individual turning movements and approaches are projected to operate at LOS B or better through the long term with the addition of site-generated traffic.

### Judge Orr Road/Curtis Road

#### *Short Term*

Short-term analysis assumes two-way stop-sign control (TWSC) at Judge Orr/Curtis. The northbound-left turning movement is projected to operate at LOS E during the 2030 Baseline + Site AM peak hour with the addition of site-generated traffic. However, its volume-to-capacity (v/c) ratio would be well below 1.0 despite operating at LOS E. All other individual turning movements are projected to operate at LOS D or better during both 2030 peak hours, with or without the addition of site-generated traffic.

#### *Long Term*

Assuming the intersection of Judge Orr/Curtis is converted from TWSC to a two-lane roundabout in the future, all individual turning movements would operate at LOS C or better during both peak hours of the long-term buildout scenario. This intersection improvement was previously recommended in the *Saddlehorn Ranch* traffic study. Additionally, eastbound and westbound approaches on Judge Orr Road and the southbound approach on Curtis Road are assumed to be two through lanes in each direction (per the 2040

### US Highway 24/Stapleton Road

#### *Short-Term*

Currently, the intersection of US Hwy 24/Stapleton is two-way stop-sign-controlled (TWSC). The following turning movements currently operate at LOS E or worse, with or without the addition of site-generated traffic: northwest-bound left, northwest-bound through, southeast-bound left, and southeast-bound through.

Please provide your response from the response letter in your narrative regarding the escrow for the signal that would be provided, that it is not practical to implement an interim solution and warrants are already met for this intersection etc.

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# LSC Responses to TIS Redline Comments


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 Number: 1      Author: Daniel Torres      Subject: Callout      Date: 5/31/2024 11:11:44 PM

Please provide your response from the response letter in your narrative regarding the escrow for the signal that would be provided, that it is not practical to implement an interim solution and warrants are already met for this intersection etc.

 Author: Jeff Hodsdon      Subject: Sticky Note      Date: 7/31/2024 1:01:17 PM  
LSC Response: This has been added to the updated report as requested.

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