

Meadowlake Industrial Park Filing No. 1 Preliminary Plan Traffic Impact Study

Prepared for:
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NOVEMBER 15, 2024

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EPC PCD File No.: SP236
LSC #S234040




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LSC Responses to TIS Redline Comments

Page: 1

 Number: 1 Author: Daniel Torres Subject: Text Box Date: 12/4/2024 20:47:33

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 Author: jchodsdon Subject: Sticky Note Date: 1/10/2025 08:36:07
LSC Response: Provided with this resubmittal.

ROADWAY SEGMENT IMPROVEMENTS

Curtis Road

72' to match the
prelim plan and
Saddlehorn project

1

Please refer to Table 4 for details regarding roadway improvements. Curtis Road should ultimately be improved to a two-lane, Principal Arterial. Dedication of right-of-way for one-half of a two-lane Principal Arterial (78 feet from centerline) with ROW reservation for additional width of 90 feet from centerline for four-lane Principal Arterial corridor preservation would be required. Table 4 calls out specific recommended short-term improvements to Curtis Road, between the south property line and the south terminus of the Saddlehorn Filing No. 1 improvements.

Falcon Highway

This report does not recommend any Falcon Highway roadway **segment** improvements associated with this Filing 1 Preliminary Plan application. However, Table 4 includes Falcon Highway **intersection-related** items under Nos. 5.1, 6.1, and 8.1 through 8.5.

DEVIATIONS AND WAIVERS

The following deviation is included with this submittal.

Curtis Road/ Falcon Highway Intersection - Eastbound Left-Turn Lane Lengthening


A deviation to allow continued use of the existing lane and tapers and defer this improvement (based on short-term turning volumes/associated queue length). There is a drainage channel just to the west. The development would contribute a fair-share escrow amount toward a future improvement.

The future improvement would encompass bringing the existing turn lane up to *ECM* standards. The *ECM* criteria for turn lanes require elements of deceleration distance plus stacking distance plus taper length. On a roadway with a 60-mph design speed (55 posted), the required full-width, left-turn lane length is 290 feet plus left-turn stacking/queuing distance. The required transition taper is 240 feet. For this turn lane, the stacking requirement would be 50 feet (100 feet based on long-term projections) and the resulting total prescribed turn-lane length would be 580 feet. Redirect tapers as a ratio of 55:1 would also need to be part of the design.

Please refer to the deviation form included with this submittal for additional detail and justification.

Number: 1 Author: Daniel Torres Subject: Callout Date: 12/6/2024 12:56:56

[72' to match the prelim plan and Saddlehorn project](#)

 Author: Jack Subject: Sticky Note Date: 1/8/2025 13:40:59

LSC Response

Report has been updated to say 72' instead of 78'

Table 4
(page 2 of 3)
Meadowlake Industrial Park
Filing No. 1 Preliminary Plan
Roadway Improvements

El Paso County Off-Site Intersections			
Item #	Improvement	Timing	Responsibility
Falcon Highway/Meridian Road Intersection			
6.1	Short Term Westbound right-turn deceleration lane	Currently warranted by ECM	Escrow portion toward improvement with Filing No. 1 final plat (fee program credit per fee program provisions)
Judge Orr/Curtis Road Intersection			
7.1	Short Term Eastbound right-turn deceleration lane	Currently warranted by the ECM; construct this improvement with this preliminary plan.	Applicant
7.2	Short Term - Traffic Control This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario.	This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario.	N/A
7.3	Long Term (or Prior to 2040) - Traffic Control This intersection is likely an eligible intersection for future signalization within the fee program. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term. Master Study: Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary.	Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario.	The applicant will pay fee program traffic impact fees. This intersection is likely an eligible intersection for future signalization within the fee program. Additionally, any required improvements due to future development of the overall Meadowlake Industrial Park plan.
7.4	Long Term (if signalized in the future, or w/TWSC if Stop-sign orientation switched to eastbound/westbound) Potential future need to lengthen northbound left-turn deceleration lane - provide pro-rata share escrow toward potential future lengthening of lane. Master Study: Lengthen northbound left-turn deceleration lane.	Lane lengthening not currently needed with this Preliminary plan Master Study: As needed based on future speed limit and turning volume/stacking length criteria.	Applicant - Escrow Pro-rata share for potential future lane lengthening. Master Study: Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions).
Adjacent & Access Intersections			
Curtis Road/Falcon Highway			
Item #	Improvement	Timing	Responsibility
8.1	From Master Study (for Reference) Short Term/Long Term Change to AWSC traffic control as necessary. Participate on a pro-rata basis with a fair share contribution toward upgrade the intersection, potentially including new traffic control, to mitigate substandard level of service, as necessary. Significant improvements may be needed in the short term if rapid site buildout and area growth occurs. Otherwise, intermediate term.	From Master Study (for Reference) Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.	From Master Study (for Reference) The applicant will pay fee program traffic impact fees and any required intersection improvements (or participation) may be fee-program eligible for credit based on the program guidelines. This intersection is likely an eligible intersection for future signalization
8.1a	Short Term This TIS indicates the intersection would operate at LOS F/E (AM/PM) on the northbound approach with the current TWSC based on the in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. Consideration for interim conversion to AWSC.	Consider traffic-control change to interim AWSC once warrants for AWSC control are met.	Applicant
8.1b	Long Term (or Prior to 2040) This intersection is likely an eligible intersection for future signalization within the fee program. See above item 8.1a relative to the Short Term. A roundabout may also be considered. Master Study (for reference): Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary.	Once LOS of AWSC control (interim change to AWSC in the short term) drops below acceptable levels and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.	Applicant and/or other developments
8.2	Short Term Unless the intersection control is changed to AWSC in the short term, construct a southbound-right-turn lane on Curtis Road approaching Falcon Highway with the addition of site-generated traffic from this preliminary plan's development, as it would result in a better LOS for some movements. Potentially, a southbound right-turn "stacking" lane, rather than the full-length deceleration-plus-stacking lane, could potentially be an interim improvement, provided the approach remains stop-sign controlled. Long Term: ONLY needed in the case of a future signalized intersection or reverse of the TWSC stop-sign traffic control	Unless the intersection control is changed to AWSC in the short term, install with this preliminary plan. Full-length deceleration lane only required upon signalization or reversal of the stop-sign traffic control orientation, or as needed in the future for acceptable operations. See footnote below. If the intersection control is changed to AWSC in the short term, escrow funds with site development plans/plats under this Preliminary plan toward this potential future improvement.	Applicant - Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared; if lane is constructed, recovery from any escrowed funds may apply.
8.3	Short Term MASTERY STUDY: Short Term (if planned to be signalized in the future)	Previously recommended "trigger" from Saddlehorn Ranch: once projected queue (95th percentile) exceeds existing lane and taper (based on short term total turning volumes/associated queue length). Deviation is included with this submittal. Note: EPC comments on Saddlehorn Filing No. 4 indicate "construct with Filing 4 if warranted based on 50' queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved.	Escrow for pro-rata share of future improvement. Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared.
8.4	Short Term WB right-turn deceleration lane on Falcon Highway approaching Curtis Road. From Master Study (for Reference) Construct WB right-turn deceleration lane on Falcon Highway approaching Curtis Road. This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. Escrow toward the cost of future WB right-turn deceleration lane on Falcon Highway approaching Curtis Road.	This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume.	Escrow for pro-rata share of improvement
8.5	From Master Study Long Term (if planned to be signalized in the future) Lengthen northbound left-turn deceleration lane This Preliminary Plan is not projected to add to this northbound left turn lane in the short term as no access is planned for Falcon Highway with the Filing No. 1 Preliminary Plan.	N/A with this Preliminary Plan As needed based on future speed limit and turning volume/stacking length criteria	N/A with this Preliminary Plan Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions)


see comments on deviation submitted

please fix so that it is visible

2

Number: 1 Author: Daniel Torres Subject: Callout Date: 12/6/2024 12:08:39

[see comments on deviation submitted](#)


 Author: jchodsdon Subject: Sticky Note Date: 1/10/2025 08:36:50

LSC Response

Comment noted. See LSC responses to deviation comments.

Number: 2 Author: Daniel Torres Subject: Cloud+ Date: 12/6/2024 12:07:19

[please fix so that it is visible](#)

 Author: Jack Subject: Sticky Note Date: 1/8/2025 13:33:05

LSC Response

Row formatting has been updated to show previously-hidden text:

"Construct SB right-turn lane on Curtis Road approaching Falcon Highway."