

## **Planning and Community Development Department** 2880 International Circle Colorado Springs, Colorado 80910

Updated: 6/26/2019

**DEVIATION REQUEST** 

AND DECISION FORM

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### PROJECT INFORMATION

Project Name: Meridian Ranch Sports Center PPR Date: 7/24/2024 Rev. 8/20/2024

Schedule No.(s): 4220303009 and 4220303093

Legal Description: TR C ROLLING HILLS RANCH FIL NO 1 AT MERIDIAN RANCH

TR B MERIDIAN RANCH FIL NO 8

#### **APPLICANT INFORMATION**

Company: Meridian Service Metro District

Name:

Mailing Address: Colorado Springs, CO 80906

Phone Number: FAX Number: Email Address:

## **ENGINEER INFORMATION**

Company: LSC Transportation Consultants, Inc.

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Mailing Address: 2504 E. Pikes Peak Ave

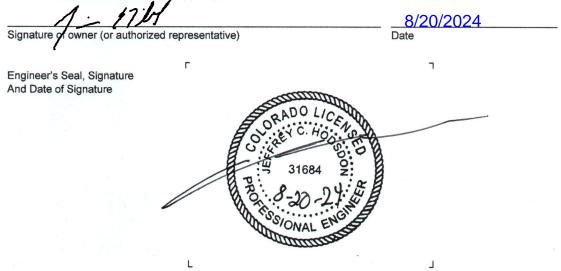
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Colorado Springs, CO 80909

Phone Number: 719-633-2868 FAX Number: 719-633-5430 Email Address: jeff@LSCtrans.com

#### OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.



**DEVIATION REQUEST** (Attach diagrams, figures, and other documentation to clarify request)

Exclusive Right Turn Lanes Required (7/23/2024; Rev. 8/20/2024): A deviation from the standards of or in Section 2.3.7.D.2 of the Engineering Criteria Manual (ECM) is requested. The request is NOT to add right-turn lanes for southbound and westbound approaches at the intersection of Londonderry/Rainbow Bridge intersection. Although the turn-volume threshold is met, the intersection is an all-way, stop-sign-controlled intersection and that is not likely to change.

Deviation Exhibit No. 1 shows the subject intersection location, Deviation Exhibit No. 2 graphically summarizes the request, and Deviation Exhibit No. 3 provides an excerpt from the TIS.

Identify the specific ECM standard which a deviation is requested:

2.3.7.D.2 Turn Lanes Required, Exclusive Right- Turn Lanes Required.

State the reason for the requested deviation:

The deviation is requested as the turn lanes are not necessary, would have negative implications, and the existing conditions represent the superior design when compared to an altered design with the turn lanes added.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The deviation request is to waive the requirement for adding the westbound and southbound right-turn lanes. Based on the **existing and future** traffic volumes shown in TIS Figure 5 and11 (Please refer to the attached Deviation No. 3, which is an annotated copy of Figure 11) and the following criteria contained in the *ECM*, these turning movements have projected turning volumes which fall above the threshold requiring auxiliary lanes.

ECM Standard: 2. Exclusive right-turn lanes shall be provided wherever right-turn lanes are specified as being needed by an approved TIS, identified in the MTCP, required by the ECM or determined to be warranted by the ECM Administrator. Information in the TIS shall be used to determine whether an exclusive right-turn lane is warranted. Warrant determinations shall also be based on this chapter, which include:

Minor Arterials (State Highway Access Code Designation - RB for Rural and NR-B for Urban) and Lower Classifications Right-Turn Lane: A right-turn lane is required for any access with a projected peak-hour right turning volume of 50 VPH or greater. An acceleration lane is generally not required.

Not Needed as "Speed Change Lanes" for mitigation of turning vehicle "speed differential"

General Background: The auxiliary turn-lane criteria in the *ECM* was derived from the *Colorado State Highway Access Code* (the *ECM* criteria even reference the State Highway Access Code designation). The auxiliary turn-lane requirements in the Access Code are for the purposes of mitigating "speed-change differential" between through traffic on a major road (with a free-flowing condition or periodic free-flowing condition – i.e., without a full-time stop condition) and turning traffic from the major road onto a minor road.

The following are references from the Colorado State Highway Access Code:

- (75) "Speed change lane" means a separate lane for the purpose of enabling a vehicle entering or leaving a roadway to increase or decrease its speed to a rate at which it can more safely merge or diverge with through traffic. Acceleration and deceleration lanes are speed change lanes.
- (29) "Deceleration lane" means a speed-change lane, including tapered areas, for the purpose of enabling a vehicle that is to make an exit to turn from a roadway to slow to the safe speed on the ramp ahead after it has left the mainstream of faster-moving traffic. [§ 42-1-102(23), C.R.S.]

The following CDOT criteria are comparable to the *Colorado State Highway Access Code* for comparison, although the intersecting roadways of Londonderry and Rainbow Bridge are Urban Major Collector Streets (EPC) with posted speeds not greater than 40 mph.

#### 3.11 CATEGORY NR-B - Non-Rural Arterial

Auxiliary Lane Requirements

- (4) Auxiliary turn lanes shall be installed according to the criteria below.
- (b) A right-turn lane with storage length plus taper is required for any access with a projected peak-hour right-ingress turning volume greater than 50 vph... [remainder of criteria (b), is not applicable]

As defined above, the intent is for the volume-threshold criteria to be applied to determine the need for "speed change" lanes. However, the subject turning movements are not currently and will not likely ever function as speed change lanes given site-specific conditions.

- Auxiliary turn lanes for purposes of mitigating speed differential are not necessary at this intersection, as it is all-way, stop-sign controlled and all vehicles approaching the intersection decelerate to a stop.
- It is very unlikely they will go back to a TWSC or convert to a signalized intersection in the future (not shown in the Master TIS report). Therefore, it is reasonable to assume that the AWSC control will remain.

## Conformance with the Master TIS Report

- The current laneage and traffic control matches the Master TIS.
- The projected total entering volume at the intersection is lower than the sketch plan report dated October 17, 2017, with
  more balanced approach volumes than the sketch plan, which showed more east/west and less north/south volumes. The
  Sketch Plan report showed AWSC for the Long Term.

#### LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☑ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☐ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

#### Provide justification:

Please refer to the section above, which describes the site-specific situation and why the underlying **intent and purpose** of the *ECM* standard is inapplicable to this particular situation.

Negatives To Unnecessarily Widening the Street for Additional Vehicle Lanes:

- The widening of the street would detract from the streetscape and established pedestrian corridor along the roadway. This community
  roadway intersection would become more auto-centric at the expense of the established pedestrian "space" along the roadway.
- It is not recommended to unnecessarily tear out some of the walking paths and space for pedestrians adjacent the subject street approaches.
- Auxiliary turn lanes would make the AWSC more "driver workload intensive" with more lanes of approach traffic.
- · Auxiliary turn lanes would result in longer crossing distances for pedestrians, which could negatively impact safety.

#### CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is <u>not based exclusively on financial considerations</u>. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with <u>all of the following criteria</u>:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The existing laneage and intersection configuration, without additional turn lanes, will have a comparable result and is already a superior design and quality of improvement. For the reasons already identified in the sections above.

The deviation will not adversely affect safety or operations.

- Auxiliary turn lanes for purposes of mitigating speed differential are not necessary at this intersection, as it is all-way, stop-sign controlled and all vehicles approaching the intersection decelerate to a stop.
- Mitigation for speed differential would otherwise be needed if the intersection reverted back to TWSC control or convert to a signalized intersection in the future. However, it is very unlikely they either change would occur. Neither is shown for the future in the Master TIS report. Therefore, it is reasonable to assume that the AWSC control will remain and all approach traffic will continue to be required to decelerate to a stop at the intersection (so no speed differential would apply).
- Auxiliary turn lanes would make the AWSC more "driver workload intensive" with more lanes of approach traffic.
- Auxiliary turn lanes would result in longer crossing distances for pedestrians, which could negatively impact safety.

#### Additionally,

- The LOS is projected to remain acceptable with the existing laneage and AWSC traffic control.
- Projected queues aren't anticipated to overspill the existing left-turn bays or result in upstream queuing and blocking issues.

The deviation will not adversely affect maintenance and its associated cost.

The deviation would not adversely affect maintenance and associated cost. However, **without** the deviation (if turn lanes were required to be installed), the maintenance cost **would be** adversely affected. Expanding the pavement for turn lanes would only add pavement surface and pavement markings to maintain, and additional pavement width needing snow removal. Additional impervious surface would also be introduced.

The deviation will not adversely affect aesthetic appearance.

The deviation would not adversely affect aesthetic appearance, However, **without** the deviation (if turn lanes were required to be installed), the aesthetic appearance **would be** adversely affected. Expanding the pavement for turn lanes would remove landscaping and negatively alter the streetscape.

The deviation meets the design intent and purpose of the ECM standards.

The turn-lane criteria in the *ECM* was derived from the *Colorado State Highway Access Code* and auxiliary turn-lane requirements in the Access Code are for the purposes of mitigating "speed-change differential" between through traffic on a major road (with a free-flowing condition or periodic free-flowing condition – i.e., without a full-time stop condition) and turning traffic from the major road onto a minor road. The intent is for the volume-threshold criteria to be applied to determine the need for "**speed change lanes.**" The subject turning movements are not currently and will not likely ever function as "speed change lanes" given site-specific conditions.

The deviation meets the control measure requirements of Part I.E.3 and Part I.E.4 of the County's MS4 permit, as applicable.

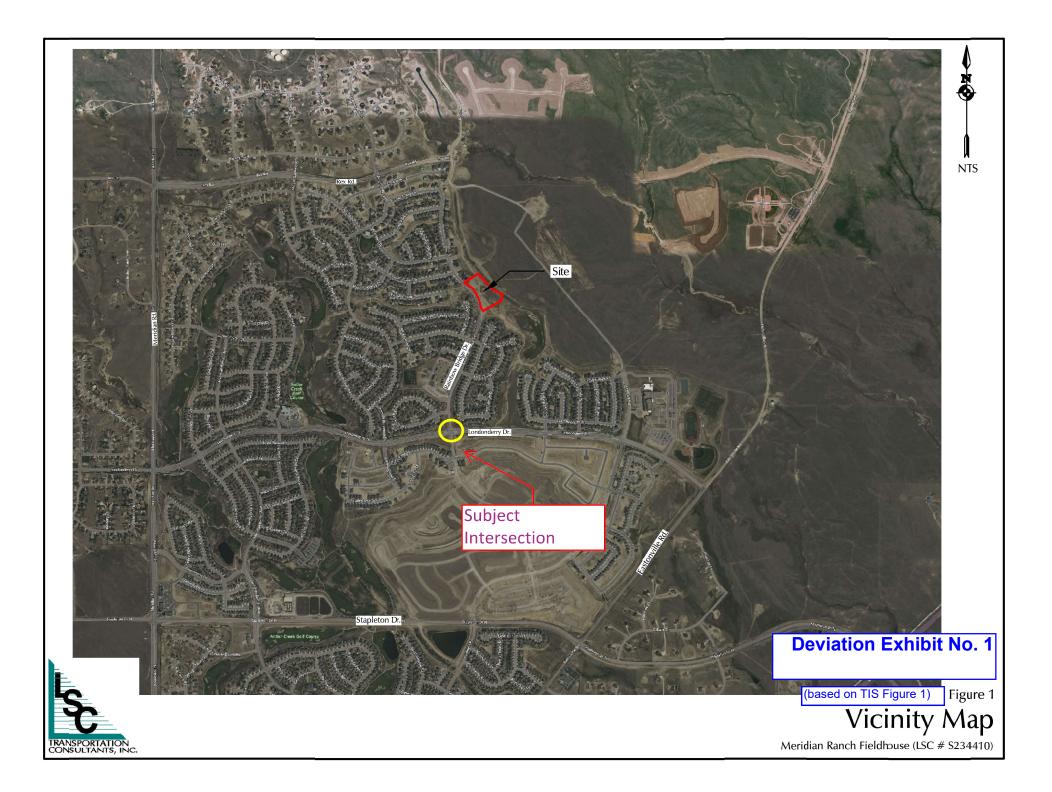
The requested deviation meets control measure requirements of Part I.E.3 and Part I.E.4 of the MS4 Permit.

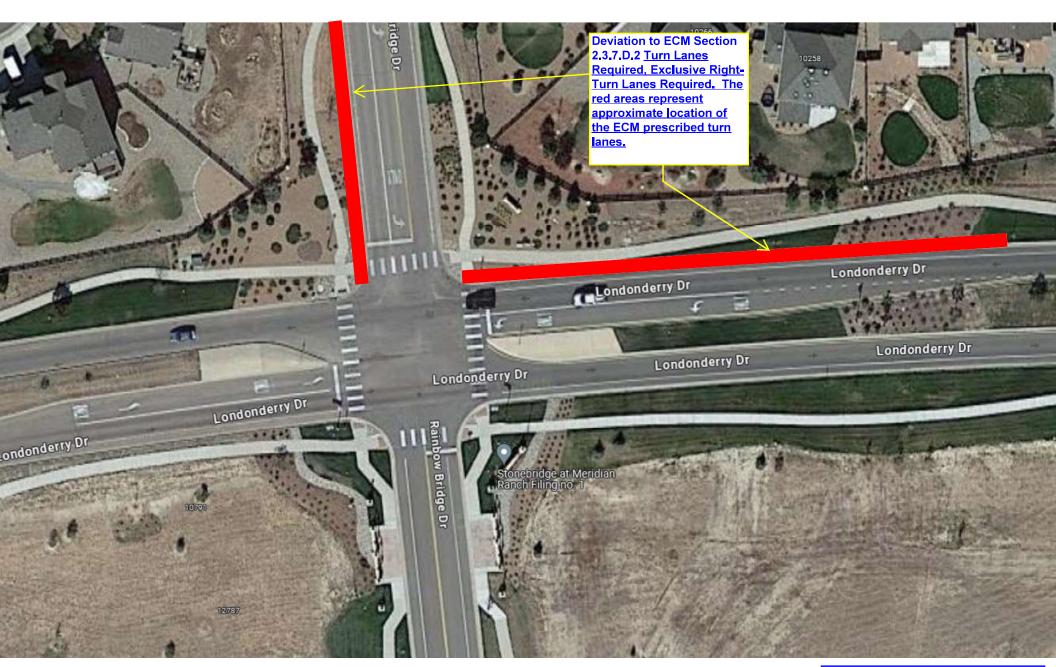
# **REVIEW AND RECOMMENDATION:**

Approved by the ECM Administrato This request has been determined to hereby granted based on the justificati	have met the criteria for approval. A deviation from Section $ extstyle 2$	2.3.7.D.2 of the ECM is
Γ	Г	
L	T	
Denied by the ECM Administrator This request has been determined not to he	ave met criteria for approval. A deviation from Section	of the ECM is hereby denied.
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ECM ADMINISTRATOR COMMENTS/COI	NDITIONS:	

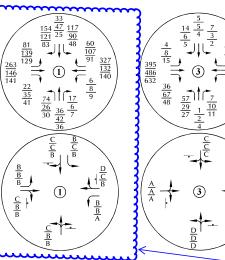
# **Deviation Exhibits**

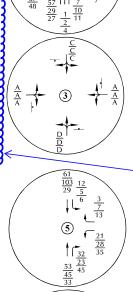


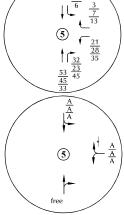




Deviation Exhibit No. 2
Requested Deviation











#### LEGEND:

AM Individual Movement Peak-Hour LOS 3:00-4:00 PM Individual Movement Peak-Hour LOS PM Individual Movement Peak-Hour LOS

AM Weekday Peak-Hour Traffic (Veh/Hour)
3:00-4:00 PM Weekday Peak-Hour Traffic (Veh/Hour)

 $\overline{XX}$ PM Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

**Deviation Exhibit No. 3** 

(based on TIS Figure 11) Figure 11

2043 Total Traffic, Lane Geometry, Traffic Control, and Level of Service

Meridian Ranch Fieldhouse (LSC # S234410)

