

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

A deviation from the standards of or in Sections 1.2.2, 1.5, 1.3, 2.5.3, 2.7, and 4.1 of the Drainage Criteria Manual (DCM) is requested.

Identify the specific standard which a deviation is requested:

- DCM 1.2.2 - Drainage Basin Planning Study
- DCM 1.5 - Storm Water Runoff Detention
- DCM 1.3 - Financial Responsibility
- DCM 2.5.3 - (Volume and Release Requirements) (as modified with the DCM Update)
- DCM 2.7 - Floodplains
- DCM 4.1 - Drainage and Erosion Control Reports and Plans

State the reason for the requested deviation:

All Deviation requests are based on the fact that the proposed five lot subdivision is designed to allow all homesites to be constructed outside of the 100-year floodplain. The development of the 5 lots will have zero impact to the floodplain and the impact of the increase in runoff is de minimis. As such, each deviation request is built on the accepted facts of the previous request.

- DCM 4.1 – This proposed 5 lot subdivision will have limited development related construction activity. The only planned construction is the installation of utility services to the 5 lots. 3 of the 5 lots will be accessed from the existing Woodmoor Water and Sanitation District road. The remaining two lots will be accessed off of Deer Creek Road. With the limited construction activity there is no need for Erosion Control Plans. In the same vane, the developed runoff from these 5 lots will sheet flow across a well vegetated grassy field. Said field will provide water quality in a form consistent with a “Grass Buffer.” Additionally, the need to prepare a drainage report is not warranted due to the limited development and negligible increase in runoff from the site.
- DCM 1.3 and DCM 2.5.3 – The DBPS defines a series of grade control structures within the floodway to control storm flows and stabilize the channel. The loosely defined channel on site shows no signs of erosion or degradation. I believe this is due to a series of upstream, non-flood control designed attenuation basins. Upstream runoff is conveyed through the site in an existing 24” culvert. Very little, if any, storm runoff is conveyed overland. This is based on field observations immediately following the June 2023 storm events wherein no erosion was observed. Hydraulic modeling completed for the site from previous designs showed channel velocities ranging from 4.4 ft/sec to 6.8 ft/sec. These velocities, for cohesive soils like what exist for the majority of the site, are still non-erosive according to the City of Colorado Springs and Mile High Flood District criteria - both allow a maximum channel velocity of 7.0 ft/sec for erosion resistant soils with vegetation. The County’s criteria appears outdated and unclear, with maximum allowable channel velocities for native grasses ranging from 2.5 ft/sec to 7 ft/sec. The existing shear stresses range from 0.61 lb/sf to 1.44 lb/sf (average shear stress is 1.0 lb/sf). Vegetation present at the site is estimated to be classified as long native grass, which has a typical permissible shear stress range from 1.2 lb/sf to 1.7 lb/sf. With this in mind, it is obvious that the grade control structures defined in the DBPS are not required. Furthermore, the development of these five lots will not impact the floodplain or change the storm flow patterns in any way.
- DCM 1.5 - Storm Water Runoff Detention – Due to the layout of the site (carved in two by the existing floodplain) any sort of common detention pond is not practicable. Individual on lot detention is generally undesired due to the reporting, maintenance and inspection requirements. Additionally, developed runoff from this site, albeit de minimis, will immediately enter Lake Woodmoor and be attenuated, if not fully stored.
- DCM 2.7 – All lots are designed to allow homesites to be constructed outside of the FEMA floodplain. Utility services will be installed either in the existing Woodmoor Water and Sanitation District road or from Deer Creek Road. Notes will be placed on entitlement documents directing homebuilders to ensure that their respective lowest floor is a minimum one foot above the one hundred year water surface elevation with no changes to the floodplain.
- DCM 1.2.2 – A Drainage Basin Planning Study (DBPS), or amendment, is required when no study has been previously prepared or whenever major changes within the drainage basin are proposed. Since this development is not proposing to alter the floodplain in any way no DBPS amendment should be necessary.

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

There is not a proposed alternative, per se. The deviation request(s) is to allow the proposed five lot subdivision to proceed without preparing a Grading and Erosion Control Plan, Final Drainage Report, Channel Grade Control Structure Plans, DBPS Amendment, and CLOMR/LOMR. The requested deviation is justified by the absence of changes to the floodplain, de minimis increase in developed runoff, zero evidence of erosion in the existing overland storm conveyance and limited construction activity.

LIMITS OF CONSIDERATION

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

- The ECM standard is inapplicable to the particular situation.
- 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:

The requested deviation is justified by the absence of changes to the floodplain, de minimis increase in developed runoff, zero evidence of erosion in the existing overland storm conveyance and limited construction activity.

CRITERIA FOR APPROVAL

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

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

The intended result, per the approved DBPS is channel grade control structures, processing of a CLOMR/LOMR, and preparation of standard subdivision construction drawings/reports. Approval of this deviation request(s) will result in none of these being completed and no alternative is proposed. Approval of this deviation request will result in zero change to what is currently considered detrimental to public safety or surrounding property.

The deviation will not adversely affect safety or operations.

The proposed addition of 5 homes off Deer Creek Road will not adversely affect safety or operations. The impact of this increase in home population is insignificant and, as such, will not have a noticeable effect.

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

There is no proposed roadway with this five-lot subdivision and no proposed improvements to existing roads. As such maintenance requirements and costs will remain unchanged from their current condition.

The deviation will not adversely affect aesthetic appearance.

The development site is currently an open grassy field. With the development of five lots the floodplain view corridor will remain open and natural. The homes will likely be custom or semi-custom which will add to the surrounding beauty.



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

The purpose of the ECM is to set standards for designing, constructing, locating, maintaining, choosing materials for, repairing, reconstructing and using public improvements and guiding design and construction of common development improvements in El Paso County (County).

There are no proposed El Paso County public improvements with this five lot subdivision. Utility services will be provided and installed in conformance with the utility provider. With no proposed El Paso County Improvements, there is no opportunity to meet the intent or purpose of the ECM.

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.

Part I.E.3.B.2 and Part I.E.4.i.E provide for a specific exclusion for Large lot single family development. The proposed development site is 7.2 acres and will be subdivided into five single family residential lots. This equates to an average lot size of 1.4 acres. Land development activities will be limited to installation of utility services.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2. BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3. APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4. APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, 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.

1.5. TECHNICAL GUIDANCE

The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

1.6. LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

1.7. REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC.