

EL PASO COUNTY
DEVIATION REQUEST AND DECISION FORM

Updated: 6/26/2019

PROJECT INFORMATION	
PCD File No.	SF2514
Project Name	Monument Ridge East Filing No. 1
Schedule No.(s)	7102200006, 7102200008, 7102200010, 7102200013, 7102201001, 7102201014
Applicant	Monument Ridge East, LLC (Donald Cannella, Manager)
Engineer	Whitehead Engineering, LLC (David J. Whitehead, P.E. #25118)
Deviation Requested	DCM Section 11.2.2 - Pond No. 4 Maintenance Access

DEVIATION REQUEST

A deviation from Section 11.2.2, Detention Facility Construction, of the El Paso County Drainage Criteria Manual (DCM) is requested for Pond No. 4.

Identify the specific DCM standard which a deviation is requested:

Section 11.2.2, Detention Facility Construction, requires maintenance access from a public roadway to the bottom of the detention facility and specifies a maximum access-road grade of 12%. A deviation is requested for Pond No. 4 to allow the designated maintenance access route to terminate above the pond bottom. From that point, maintenance access to the pond bottom will continue over the stabilized vegetated pond embankment at grades exceeding 12%.

State the reason for the requested deviation:

Site constraints associated with Pond No. 4 prevent extension of the designated maintenance access route to the pond bottom while maintaining the maximum 12% grade. The pond configuration is constrained by the detention volume required for the tributary watershed, adjacent subdivision improvements, and the jurisdictional wetland. The designated maintenance access route provides access to the upper portion of the pond. From its termination, access to the pond bottom and pond facilities will continue over the stabilized vegetated embankment. The embankment provides pedestrian access for routine inspection and minor maintenance and can be traversed, when necessary, by appropriate compact maintenance equipment suitable for the proposed slope.

Explain the proposed alternative and compare it to the DCM standards:

The DCM standard provides for a maintenance access road extending to the pond bottom with a maximum grade of 12%. The proposed alternative provides the designated maintenance access route from the public roadway to the upper portion of Pond No. 4, after which maintenance access to the pond bottom continues over the stabilized vegetated pond embankment at grades exceeding 12%. All other applicable detention-facility access criteria will be met. The vertical transition from the termination of the designated access route to the pond bottom is approximately 7 feet. Routine inspection and minor maintenance may be performed by pedestrian access. When equipment access to the pond bottom is required, appropriate compact maintenance equipment, such as a skid steer or similar equipment suitable for the proposed slope, can traverse the embankment. This alternative maintains practical access to the pond and its facilities while avoiding additional grading and disturbance associated with extending a maximum-12%-grade access road to the pond bottom.

LIMITS OF CONSIDERATION

☒ 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:

Pond No. 4 is constrained by the required detention volume, adjacent subdivision improvements, and the jurisdictional wetland. Extending a maintenance access road to the pond bottom at a maximum grade of 12% would require additional horizontal distance, grading, and disturbance within this constrained area. The proposed alternative provides designated maintenance access to the upper portion of the pond and practical access from that point to the pond bottom over the stabilized vegetated embankment. The approximately 7-foot vertical transition can be accessed by pedestrians for routine inspection and minor maintenance and by appropriate compact maintenance equipment when equipment access is required. Requiring extension of the maximum-12%-grade access road to the pond bottom would therefore impose additional site impacts and construction constraints with little corresponding maintenance or public benefit.

CRITERIA FOR APPROVAL

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

The proposed alternative achieves the intended maintenance-access objective by providing designated maintenance access to the upper portion of Pond No. 4 and practical access from that point to the pond bottom over the stabilized vegetated embankment. Routine inspection and minor maintenance can be performed by pedestrian access, while appropriate compact maintenance equipment can access the pond bottom when necessary. All other applicable detention-facility access criteria will be met.

The deviation will not adversely affect safety or operations.

The deviation will not adversely affect safety or operation of Pond No. 4. The designated maintenance access route provides a stable approach to the pond, and the limited embankment transition to the pond bottom can be traversed by pedestrians and appropriate maintenance equipment. The deviation does not affect the hydraulic operation, detention volume, outlet structure, emergency overflow, or other functional components of the detention facility.

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

The deviation will not adversely affect maintenance or associated costs because the designated access route provides access to the upper portion of the pond, while the short embankment transition provides practical access to the pond bottom for routine inspection and maintenance activities. Appropriate compact maintenance equipment may traverse the stabilized embankment when equipment access to the pond bottom is required. The facility will be owned and maintained by the Metropolitan District; therefore, the deviation does not create additional County maintenance responsibility or cost.

The deviation will not adversely affect aesthetic appearance.

No adverse aesthetic impacts will result. The proposed access arrangement is incorporated into the Pond No. 4 grading and stabilized vegetated embankment and does not require additional grading solely to extend a maximum-12%-grade access road to the pond bottom.

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

The proposed alternative meets the design intent of Section 11.2.2 by providing reasonable and practical access for inspection, maintenance, and repair of Pond No. 4. Although the designated maintenance access route will not extend completely to the pond bottom at a maximum 12% grade, the combination of designated access to the upper portion of the pond and the short stabilized embankment transition provides functional access to the detention facility without compromising its operation or maintainability.

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.

This deviation does not eliminate or reduce any applicable stormwater quality, detention, or MS4 requirements and does not alter the hydraulic or water-quality functions of Pond No. 4.

REVIEW AND RECOMMENDATION

Approved / Denied by ECM Administrator (To be completed by El Paso County).