

**El Paso County Planning & Community Development** 2880 International Circle, Suite 110 Colorado Springs, CO 80910-3127 Attn: Len Kendall

RE: Woodmen Hills Metropolitan District Lift Station #1 Replacement Administrative Plot Plan – Drainage Letter Please add street address in the title.

Dear Mr. Kendall:

## August 28, 2018

Revise the letter to address all items listed in DCM volume 1, chapter 4, section 4.5 to include a drainage plan. Also include the evaluation of the 4-step process as outlined in ECM appendix I.

There is an existing pond shown on the GEC that is to be filled. What is it's current use and how did it get there. Address this in your report.

The purpose of this drainage letter is to satisfy requirements of the El Paso County Planning and Community Development division pertaining to the proposed Administrative Plot Plan for the project referenced above.

## **Property Description:**

Assessors office shows as 12050. Please confirm and revise as needed.

The site for Lift Station #1 is located at 12048 Falcon Highway, Peyton, Colorado, in the Southwest 1/4 of Section 7, Township 13 South, Range 64 West of the 6<sup>th</sup> Principle Meridian, El Paso County, Colorado (El Paso County Parcel #: 4307300006).

An existing lift station exists on the site within a 0.33-acre easement on Falcon School District 49 property. It currently consists of a holding tank for wastewater and a steel structure that houses pumping equipment. Both the holding tank and steel structure are buried, with the only above-grade infrastructure consisting of access hatches, electrical/control equipment, and a diesel generator.

Existing native vegetation and about 1,000 square feet of gravel cover the site. The gravel provides vehicular access for operation and maintenance by the Woodmen Hills Metropolitan District (WHMD, the District).

The site borders Falcon Highway to the south and a drainage way owned by the El Paso County Parks Department to the west.

#### **Existing Drainage Characteristics:**

Existing drainage sheet-flows to the south and west into the drainage way mentioned above. There are no existing drainage facilities (storm pipes, inlets, culverts, etc.) on the site.

Most of the site drains directly to the drainage way to the west, while a small portion drains into a roadside ditch on the north side of Falcon Highway, and eventually west into the drainage way.

#### **Proposed Drainage Characteristics:**

Provide quantity of impervious area added.

The proposed drainage from the site will generally remain the same as the existing drainage. The addition of a 600 square-foot above-grade building will add some impervious area to the site. However, detention facilities are not proposed for this project.

Add PCD File No. PPR1841

# CONSULTANTS, INC.

In order to offset the additional impervious area and avoid detention facilities, we are proposing to install permeable material around the building in lieu of the typical gravel driveway.

The permeable material will consist of over 3,300 square feet of 5-inch thick base course, and a 1-inch "permeable paver" with 3/8-inch gravel at finished grade. This system will allow storm water to infiltrate almost immediately and filter into the sandy soils beneath instead of flowing offsite. Although the

There are multiple reasons that detention is not desired for this project, including:

- Lack of area
  - The lift station and buried infrastructure take up most of the site
- Proximity to existing drainage way, 100-year floodplain, and wetlands
  - A detention pond serving the facility would have to be constructed in existing guality for the site. 0 and wetlands, disturbing the wetlands and potentially impacting existing floo capture volume of for elevations.

the permeable pavement system.

disturbance of the site

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quality is not

#### Summary

Proposed drainage characteristics will generally remain the same as existing, with additional impervious area offset by permeable material placed on site in lieu of gravel driveway. No detention is proposed as impacts to stormwater runoff will be almost negligible.

Respectfully, JDS-Hydro Consultants, Inc.



Ryan Mangino, P.E.



Provide El Paso County standard signature blocks per uploaded checklist provided.

Please call out in the text what drainage basin you are in.

Is there any previous drainage reports for the site?

# Markup Summary

Daniel Torres (9) Subject: Text Box Page Label: 1 as the existing drainage. The addition Lock: Unlocked s area to the site However detention Author: Daniel Torres Add PCD File No. PPR1841 Date: 10/2/2018 8:07:20 AM ADO SPRINGS, CO 80903 Color: Subject: Callout te drainage way mentioned above. There are no tc.) on the site. Page Label: 1 west, while a small portion drains into a Lock: Unlocked the drainage way. Provide quantity of impervious area added. Author: Daniel Torres the same as the existing drainage. The addition mpervious area to the site. However, detention Date: 10/3/2018 4:49:48 PM Color: , COLORADO SPRINGS, CO 80903 Subject: Callout nent n – Drainage Letter Page Label: 1 Lock: Unlocked r is to satisfy requirements of the El Paso County Planning and n pertaining to the proposed Administrative Plot Plan for the no Author: Daniel Torres Date: 10/4/2018 1:11:41 PM Color: Colorado Springs, CO 80910-3127 Attn: Len Kendall Subject: Text Box Page Label: 1 Woodmen Hills Metropolitan District Lift Station #1 Replacement Administrative Plot Plan – Drainage Letter Please add street address in the title. RE-Lock: Unlocked Author: Daniel Torres Date: 10/4/2018 1:12:01 PM Dear Mr. Kendall: The purpose of this drainage letter is to satisfy requirement Community Development division pertaining to the propos referenced above. Color: Property Description: Subject: Text Box Page Label: 1 Lock: Unlocked here is an existing pond shown on le GEC that is to be filled. What is it's urrent use and how did it get there. ddress this in your report. Author: Daniel Torres Date: 10/4/2018 1:20:43 PM ents of the El Paso County Planning and posed Administrative Plot Plan for the project Color: ..... Subject: Text Box Page Label: 2

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August 28, 2018 ise the letter to address all items d in DCM volume 1, chapter 4, ion 4.5 to include a drainage plan, include the evaluation of the ap process as outlined in ECM Lock: Unlocked Author: Daniel Torres Date: 10/4/2018 1:30:01 PM Color:

Subject: Text Box Page Label: 1 Lock: Unlocked Author: Daniel Torres Date: 10/4/2018 1:31:26 PM Color:

Add PCD File No. PPR1841

Provide quantity of impervious area added.

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Provide El Paso County standard signature blocks per uploaded

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signature blocks per uploaded checklist provided. Subject: Text Box Page Label: 2 Lock: Unlocked Author: Daniel Torres Date: 10/4/2018 1:32:39 PM Color:

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Provide El Paso County standard signature blocks per uploaded checklist provided.

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Although the disturbance of the site is less than acre(therefore water quality is not necessary) you are providing water quality for the site. Please quantify the capture volume of for the permeable pavement system.

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