



Falcon Highlands

Wastewater Disposal Report

Owner/Developer

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Appendices

Appendix A – Land Use and Proposed Tie-In Exhibit

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1.0 INTRODUCTION

The purpose of this report is to provide an update to prior Wastewater Disposal Reports for the Falcon Highlands Metropolitan District (FHMD, the District) and address the specific needs of the proposed Falcon Highlands Filing no. 1 (The Site), using up to date standards and specifications.

2.0 PROJECTED LAND USE

The Site is located within Section 12, Township 13 South, Range 65 West of the Sixth Principal Meridian, County of El Paso, State of Colorado. The Site is bounded by Antelope Meadows to the south, Bridal Vail Way to the west. Falcon Highlands Filing No. 2 is located to the north of the site.

The overall area consists of approximately 23.59 acres that is proposed to be developed into 24 single-family residential units, roadways, and open space. The site lies in Falcon Highlands Metro District, but wastewater services are provided by Woodman Hills Metro District (WHMD) via an inter-governmental agreement (IGA). The IGA allows for up to 750 single-family equivalents (SFE's) to be developed within the FHMD boundary.

Refer the land use and points of tie in exhibit, for lotting and wastewater tie-in connections.

3.0 WASTEWATER PROJECTIONS

3.1 Projected Wastewater Calculations

Wastewater flows for WHMD were based in the benchmark of an average daily flow (ADF) of 163 gallons per day (GPD) per SFE, and 172 GPD/SFE for average daily-maximum month flow (ADMMF). The propose 24 SFE's in The Site will result in additional 3,912 GPD based on the ADF and 4,128 GPD based on the ADMMF.

The IGA allows for up to 750 SFE's in the district, there are 423 existing SFE's in the FHMD currently connected to the WHMD wastewater system, leaving 327 SFE's available under the current terms of the IGA.

Adding the 24 SFE's from the Site there will be 447 SFE's, leaving 303 SFE's available under the current terms of the IGA. See table 1 below.

Table 1

| Existing SFE's | Proposed SFE's | Total Available SFE's per IGA | Remaing SFE's post Development |
|----------------|----------------|-------------------------------|--------------------------------|
| 423 | 24 | 750 | 303 |

3.2 Treatment Facilities

Woodmen Hills Metro District recently constructed a new regional wastewater treatment facility which was brought online in the spring of 2019. The new plant is an advanced wastewater treatment plant with a hydraulic capacity of 1.3 million gallons per day (MGD). The facility has adequate capacity for the additional flows proposed.

3.3 Collection and Existing Pumping Facilities

The Site will install a gravity system for the proposed sanitary sewer infrastructure in accordance with WHMD standards and specifications. The proposed infrastructure will connect to the existing sanitary sewer infrastructure owned and operated by WHMD.

There is an existing lift station that the proposed wastewater will flow to. The existing lift station is permitted for 64,000 GPS and is currently seeing flows of 38,000 GPD, leaving 26,000 GPD available at the current capacities. Currently the site will add roughly 4,000 GPD. See table 2 below. Based on projections the existing lift station will see flows of 42,000 GPS, leaving 22,000 GDP available.

Table 2

| Proposed SFE's | ADF/SFE (GPD/SFE) | ADF (GPD) | ADMMF/SFE (GPD/SFE) | ADMMF (GPD) |
|----------------|-------------------|-----------|---------------------|-------------|
| 24 | 163 | 3,912 | 172 | 4,128 |

APPENDIX A