



FINAL DRAINAGE REPORT

FALCON MEADOWS AT BENT GRASS FILING NO. 3

El Paso County, Colorado

PREPARED FOR:
Challenger Communities
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Colorado Springs, CO 80920

PREPARED BY:
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Colorado Springs, CO 80920

DATE:
June 24, 2022

PCD Filing No.: SF2216



XIII. Wetlands Mitigation

No wetlands are located on site.

XIV. Floodplain Statement

A portion of the project site lies within Zone AE Special Flood Hazard Area as defined by the FIRM Map number 08041C0553G effective December 7, 2018. A copy of the FIRM Panel is included in Appendix A.

The portion of channel that has a floodplain designation is only the RWT210 and RWT204 portions of the channel. It is unknown why the western channel, RWT202 is unmapped since it is the larger contributor regarding flow rates. Discussions have occurred with PPRBD and a no rise certificate will be required for the existing channel. Models have been obtained from FEMA which show that the FEMA discharges are higher than the DBPS. Therefore, the culvert crossing at Bent Grass Meadows Parkway was sized per the FEMA flows and not the DBPS. The no rise certification will be provided under a separate report, when channel improvements are addressed with future filings.

XV. Drainage/Bridge Fees and Credits/Reimbursements

The site lies within the Falcon Drainage Basin. The DBPS was approved in 2013 and has drainage and bridge fees associated with the basin.

The project site has a total area of 12.76 acres. The tracts account for a total of 0.66 acres, 49 residential lots are 9.50 acres and 2.60 acres of right-of-way. The following calculations for the imperviousness of this development have been computed as follows:

Average Residential lot size: 9.50 acres / 49 lots = 8,445 sf/lot

Average lot imperviousness = 8,445 sf x 43% = 3,631 sf

Average Residential imperviousness: 3631/8445 = 43.0%

ROW area is 100% impervious
Open Space is 0% impervious

please update to 43%
per calculation above

Average imperviousness for develop
(0.2368 x 9.50) + (1.0 x 2.60) + (0 x 0

UPDATED FEE CALCULATIONS. LOTS WILL
CHANGE ON THE FINAL PLAT TO 42 LOTS.
UPDATED THIS SECTION TO MATCH

12.76 acres x 52.39% = 6.685 Imper

The following calculations are based on the 2021 Falcon Basin drainage/bridge fees:

Drainage Fees

\$34,117 x 6.685 Imp. Acres = \$228,072.14

Bridge Fees

\$4,687 x 6.685 Imp. Acres = \$31,332.60

Per discussions with El Paso County the fees will be offset by drainage improvements. The tables below provide a tabular summary of previous fees and offsets for the overall Bent Grass development.

Drainage Report - Final_v2 redlines.pdf Markup Summary 7-25-2022

Daniel Torres (1)

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please update to 43% per calculation above

Charlene_Durham (26)

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WALL CAPACITY FOR ONE-HALF OF STREET (Minor & Major)
For the Engineering Station for Maximum Allowable Flow Capacity and Depth
Partial Retention in Wall Capacity From 11' Existing Inlet Capacity
DP 51 - 30' Cap

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DP 41 - 24' Cap

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For the Engineering Station for Maximum Allowable Flow Capacity and Depth
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DP 44 - 24' Cap

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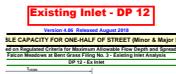
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