

# CCES Responses

with a 100 yr. upstream storage elevation of 6495.3. The 2007 DBPS Amendment Map is included in the Appendix for easy reference. In accordance with BOCC conditions of approval of the Preliminary Plan, maintenance on this existing structure was to take place in conjunction with the Hannah Ridge at Feathergrass Filing 3 improvements. As such, specified improvements were included in the approved construction drawings for Filing 3 (Sheet 31). These improvements included concrete surface repairs within the box culvert, wingwall reconditioning and addition of rip-rap aprons. To date, these improvements have been completed by Classic Homes with the development of Filing 3 and inspected by El Paso County. The City of Colorado Springs is aware of the recent improvements and is scheduled to inspect them for completion, as they will maintain ownership and maintenance responsibility for this structure and associated improvements. A letter from City acknowledging these improvements will be provided to County Staff.

Still unresolved, the comment that the owner of the Box Culvert, The City of Colorado Springs has in writing accepted the improvements is still outstanding.

## FLOODPLAIN STATEMENT

No portion of this site is located within a FEMA floodplain as determined by the Flood Insurance Rate Maps (F.I.R.M.) Map Numbers 08041C0752G and 08041C0539G, with effective dates of December 7, 2018 (See Appendix).

Still need acceptance of repairs letter from The City of Colorado Springs.

Awaiting letter from city.

## EROSION CONTROL PLAN

The Drainage Criteria Manual specifies an Erosion Control Plan and associated cost estimate be submitted with the Final Drainage Report. We respectfully request that the Erosion Control Plan and cost estimate be submitted in conjunction with the Overlot Grading Plan and construction assurances posted prior to obtaining a grading permit.

## DRAINAGE FACILITY COST OPINION

The concrete box culvert, as proposed with these filings for the Sand Creek Tributary 6 drainageway, was not specifically planned in the DBPS. However, these improvements are a functional substitute for the check structures and rip-rap channel lining as presented in the DBPS. Therefore, the cost of such improvements are creditable towards fees or reimbursable up to the cost as presented in the DBPS. The costs of the improvements as shown in the DBPS are as follows and as presented in the previous report (Hannah Ridge at Feathergrass Filing No. 3):

Include the cost presented in the DBPS for this specific reach of channel improvements.

See revised for specific DBPS contr. and exhibits



**Hannah Ridge at Feathergrass Filing No. 5 Drainage Improvement Costs (Reimbursable)**

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
1.	50' BW, 4' H Grass Channel (Incl. grading, seeding, E.C)	420 LF	\$165/LF	\$ 69,300.00
2.	62' BW Rip-Rap Channel (Type L Rip-Rap D=18")	415 CY	\$93/CY	\$ 38,595.00
3.	74' BW Grouted Rip-Rap (Type L Grouted D=18")	165 CY	\$227/CY	\$ 37,455.00
<del>4.</del>	<del>Concrete Box Culvert (6x12)</del>	<del>463 LF</del>	<del>\$520/LF</del>	<del>\$ 240,760.00</del>
<del>5.</del>	<del>End Treatment - Headwall</del>	<del>1 EA</del>	<del>\$3,500 EA</del>	<del>\$ 3,500.00</del>
<del>6.</del>	<del>End Treatment - Wingwalls</del>	<del>2 EA</del>	<del>\$5,000 EA</del>	<del>\$ 10,000.00</del>
<del>7.</del>	<del>End Treatment - Cutoff wall</del>	<del>1 EA</del>	<del>\$500 EA</del>	<del>\$ 500.00</del>
<b>TOTAL</b>				<b><del>\$ 400,110.00</del></b>

Classic Consulting Engineers & Surveyors cannot and does not guarantee that the construction cost will not vary from these opinions of probable construction costs. These opinions represent our best judgment as design professionals familiar with the construction industry and this development in particular.

*See revised numbers and notes*

**DRAINAGE & BRIDGE FEES**

This site lies within the Sand Creek Drainage Basin. The fees are calculated using the following impervious acreage method approved by El Paso County. All three Filings are re-plats of previously platted tracts within Filing 1. However, these tracts were designated as future development and no fees were paid at time of original platting. Thus, the percent imperviousness for each Filing is calculated below based on the following acreages:

- Filing 5: 12.92 ac.
- Filing 6: 7.94 ac.
- Filing 7: 15.40 ac.
- Filing 7: net acreage for drainage/bridge fees = 13.71 ac.

**Only the amount of channel improvements that were proposed in the 1996 DBPS for the specific length carried forward to today through approved fee increases would be allowed to be Deferred. If you wish to do this, call these numbers out in the report and show your calculations. It must also be stated that these improvement costs were not previously deferred in previous filings. if you wish to get the box culvert reimbursed (along with an associated drainage fee increase) through the drainage board that would be a separate item.**



Per the ECM 3.10.4a, this development requests a reduction of drainage fees based on the on-site full spectrum detention/SWQ facility proposed within the Sand Creek Drainage Basin to be constructed with the first Filing developed. The following facility seems to meet the required six criteria as follows:

1. No downstream regional facility in place yet.
2. Proposed facility is less than 15 ac-ft. in volume
3. The proposed on-site facility is not part of a regional plan.
4. The proposed outlet is designed to release to full-spectrum criteria.
5. Proposed facility is per County criteria and will gain County approval.
6. Proposed facility will be private with ownership and maintenance by HOA.

There is not a planned regional system downstream, therefore, the reduction of fees is not allowed. per ECM 3.10.4a.

✓  
OK removed.

**Total Reduction**

~~Detention Pond 1    4.4 ac-ft. full spectrum    \$ 83,270 x 50% =    \$ 41,635.00~~

**SUMMARY**

This proposed development remains consistent with the previously approved MDDP and Final Drainage Reports for Hannah Ridge at Feathergrass Filings 2, 3 and 4. The existing storm facilities continue to adequately handle both the 5-yr. and 100-yr. developed flows. All proposed detention facilities meet current criteria and provide full spectrum design. The proposed development will not adversely impact surrounding developments.

PREPARED BY:  
**Classic Consulting**



Marc A. Whorton, P.E.  
Project Manager

