



DATE: October 11th, 2022

TO: City/County Subdivision Storm Drainage Board

FROM: Richard Mulledy, P.E., Stormwater Enterprise Manager

SUBJECT: Sand Creek Basin Partial Closure

ACTION REQUESTED:

This action is a request to close the Oakwood Homes (Oakwood) and Norwood Development Group (Norwood) portions of Banning Lewis Ranch within the Sand Creek Basin, as shown in Exhibit A. This partial basin closure would exempt Oakwood and Norwood from paying the per acre drainage fee, erase any remaining credits and deferred fees for Oakwood and Norwood within the portion of Sand Creek Basin indicated in Exhibit A, and eliminate the opportunity for reimbursement for construction of any infrastructure within the same area.

BACKGROUND:

The drainage basin fee program is designed to spread the cost of major drainage improvements across properties within a drainage basin. A per acre fee is established based on an engineered drainage study called a Drainage Basin Planning Study (DBPS). The fee is the calculated cost of major infrastructure within the study area divided by the unplatted land within the study area. Land within the drainage fee basin boundary must pay the per acre fee at the time of platting. A developer that constructs channel improvements that convey flows from upstream development may be reimbursed for the construction by the upstream developer(s) if the constructed channel has been identified as reimbursable in the DBPS.

Developers with large parcels of land will regularly build reimbursable infrastructure of which the cost offsets drainage fees that are due at platting. In other words, they do not pay drainage fees because the cost of their infrastructure exceeds the cost of the drainage fees. This results in the developer who constructs reimbursable facilities being able to offset drainage fees and also being granted drainage credits within the basin. This is the standard process throughout the City.

On occasion, a DBPS or basin closure will define a drainage area as a closed basin. This means that there are no fees due at platting and no reimbursement is available for major stormwater infrastructure. Each developer constructs the infrastructure required to convey on-site and off-site flows at their own expense without an opportunity for reimbursement. Basin closures are considered under the following circumstances:

- Potential basin closures must not result in a fee increase to the rest of the basin.
- Calculations for the remaining basin area must result in a balanced basin fund, with consideration for deferred fees, future improvements, and reimbursement lists.
- Basin closure calculations may only include items deemed to be reimbursable in a DBPS or by a vote of the Drainage Board.
- Calculations must be completed in current dollars, following previous drainage fee increases.

The joint applicants, Oakwood and Norwood, hired Classic Consulting, Inc. to perform a basin closure analysis. This analysis is attached as Exhibit B for reference. Based on the results of the analysis, the Sand Creek Basin fund will remain balanced after the proposed closure with a payment of \$895,019 made by Oakwood towards the closure. The City will work with Oakwood to resolve unpaid fees.

The purpose of this request is to close the Oakwood and Norwood portions of Banning Lewis Ranch within the Sand Creek Basin, as shown on Exhibit A. In doing so, the cost of infrastructure within the indicated areas will be the responsibility of Oakwood and Norwood with no opportunity for reimbursement. Closing the indicated portion of the Sand Creek Basin will remove all Oakwood and Norwood credits and deferred fees presently tied to those areas, and drainage fees will not be due on the indicated areas.

There is no proposed change to the 2022 Sand Creek Drainage Fee as a result of this basin closure.

RECOMMENDATION:

City Staff recommends for Drainage Board to approve a recommendation to City Council to approve a partial closure of the Sand Creek Basin as indicated in Exhibit A, after the City receives payment of unpaid fees in the amount of \$895,019.

A recommended motion would be: I move to approve the partial closure of Sand Creek Basin as set forth in Exhibit A, after the City receives payment of unpaid fees in the amount of \$895,019. Following partial closure of the basin, developers within these areas will be exempt from paying the per acre drainage fee and be eliminated from reimbursement opportunities, and any remaining credits and deferred fees currently associated with the portion of Sand Creek as shown in Exhibit A will be erased.

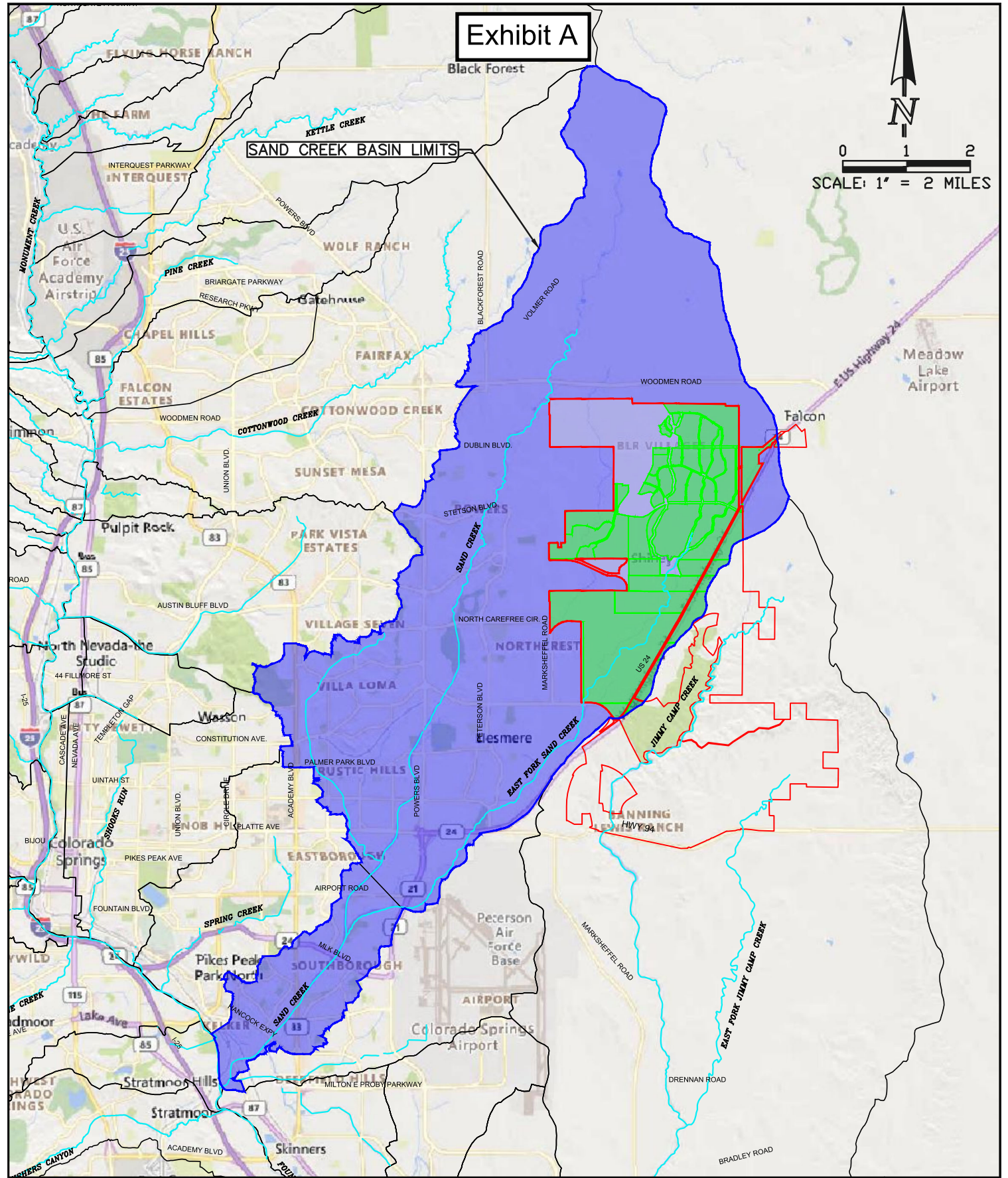
ATTACHMENTS:

- Exhibit A: Sand Creek Basin Closure Delineation
- Exhibit B: Basin Closure Analysis

Exhibit A



0 1 2
SCALE: 1" = 2 MILES



NORWOOD SAND CREEK CLOSED BASIN AREA EXHIBIT VICINITY MAP

SHEET
1

Exhibit B



October 6, 2022

City of Colorado Springs
30 S. Nevada Ave.
Colorado Springs, CO 80903

To: Richard Muledy, P.E., Stormwater Enterprise Manager

Re: Sand Creek Drainage Basin closure related to Banning Lewis Ranch

Dear Rich:

Please find attached to the documents pertaining to the request to close the Sand Creek Basin for those properties related to Banning Lewis Ranch in the City of Colorado Springs. The analysis and justification relies upon the "Sand Creek Drainage Basin Planning Study- Final Report" dated January 2021. We respectfully request your approval of this request.

Please do not hesitate to reach out with and questions.

Sincerely,

A handwritten signature in blue ink that reads "Kyle R. Campbell".

Kyle R. Campbell
Director / Project Manager

db/n drive/250507/letters/Basin closure



INNOVATIVE DESIGN. CLASSIC RESULTS.

**BANNING LEWIS RANCH DRAINAGE BASIN
CLOSURE REQUEST
FOR
CITY OF COLORADO SPRINGS
SAND CREEK DRAINAGE BASIN**

OCTOBER 2022

Prepared for:
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AND

NORWOOD DEVELOPMENT GROUP
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COLORADO SPRINGS, CO 80903
(719) 593-2600

Job no. 2505.07



**BANNING LEWIS RANCH DRAINAGE BASIN CLOSURE REQUEST FOR
CITY OF COLORADO SPRINGS SAND CREEK DRAINAGE BASIN**

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APPENDICES

VICINITY MAP
CLOSED BASIN MAP
DBPS EXCERPT



PURPOSE

This document is the Banning Lewis Ranch Drainage Basin Closure Request for City of Colorado Springs Sand Creek Drainage Basin. The purpose of this request is to provide justification to remove the portions of Banning Lewis Ranch associated with this request from the Sand Creek Drainage Basin program. This request does not eliminate full and complete adhere to the City of Colorado Springs Drainage Criteria Manual as it pertains to design and construction obligations and requirements for any of the public or private drainage facilities within the area requested to be “closed” and removed from the drainage basin program.

GENERAL DESCRIPTION

The area being proposed to be closed is generally defined by Woodmen Road to the north (slightly south), Highway 24 to the east, Constitution Avenue to the south and very generally Marksheffel Road to the west. A map is included in the appendix that identifies the closed basin area parcels.

EXISTING DRAINAGE BASIN STUDY

The basis for this request relies upon the “Sand Creek Drainage Basin Planning Study – Final Report” dated January 2021 and prepared by Stantec, HDR, Inc. and Dewberry. This report analyzed the entire Basin in order to make improvement and drainage fee recommendations. Of note is the fee summary found on page 8.3 of the DBPS which has be included in the appendix of this proposal. Table 8-3 of the DBPS reflects itemized costs for those are identified as inside or outside the Banning Lewis Ranch Master Plan.

A summary of the information on page 8.3 is:

Drainage Fee (2021):	\$18,841*
Non-BLR Area (DBPS):	1,103.4 acres
Total Drainage Fee (2021):	\$20,789,159

*No bridge, pond land, pond facility or surcharge fee with 2021 DBPS approval.



While the area of Mountain Vista Ranch is within the Banning Lewis Master Plan, it is not part of this closure proposal nor is it included in the BLR area in the 2021 DBPS. Updating this information based upon 2022 and platting activity results in:

Drainage fee (2022):	\$20,160
Non-BLR Area (DBPS):	1,103.4 acres
	-136.0 acres - platted in 2021
	<u>-229.2 acres</u> - platted in 2022
Remaining non-BLR acreage	738.2 acres
Total unplatted non-BLR area:	738.2 acres
Total Drainage fee (2022):	\$14,882,112

The DBPS reimbursable non-BLR drainage facilities are:

Non-BLR:	\$25,946,352 (from DBPS - 2021)
Sand Creek 1 Reach 6 Adjustment	-\$3,581,325
(SC1R6 Reimbursement Amount = \$441,075 (2021))	
Total Non-BLR reimbursable facilities:	\$22,365,027 (2021)

PROPOSED CLOSURE

Normally a basin closure relies upon an itemized breakdown of infrastructure associated with the area proposed to be closed. Due to recent preparation and approval date of the Sand Creek DBPS, this analysis focused on ensuring that the areas not participating in the closure (non-BLR) were not adversely affected by the proposal. Based upon the information above, the following is a summary of the resultant basin balance.

Based upon updates for 2022, the resultant totals are:

Total Non-BLR Drainage Fee (\$20,160 / acre):	\$14,882,112
Total Non-BLR Reimbursable Facilities:	\$23,930,579 (with 7% increase)
Non BLR Fee deficit	\$9,048,467
Added DBPS costs	+\$500,000
Subtotal	\$9,548,467
Basin Fund Balance	-\$6,656,147
Deferred Fee Balance	-\$1,997,301
Resultant basin balance	\$895,019 (basin deficit in Non-BLR area)



DRAINAGE AND BRIDGE FEES

As proposed, and if approved, the area identified in the attached "Sand Creek Closed Basin Area Exhibit" will be excluded from the drainage basin fee program.

SUMMARY

In summary, the proposed closed basin will not affect any of the required City drainage facility improvements and full compliance with the City Drainage Criteria manual is required, rather the proposed area will be excluded from participating in the Sand Creek Drainage Basin Fee program (i.e. Closed Basin), and with the resultant balance to be paid addressed per separate agreement, non-BLR areas will retain the same drainage fee.

PREPARED BY:



Kyle R. Campbell, P.E.
Division Manager

db/250507/REPORTS/BLR Drainage Basin Closure Request.docx

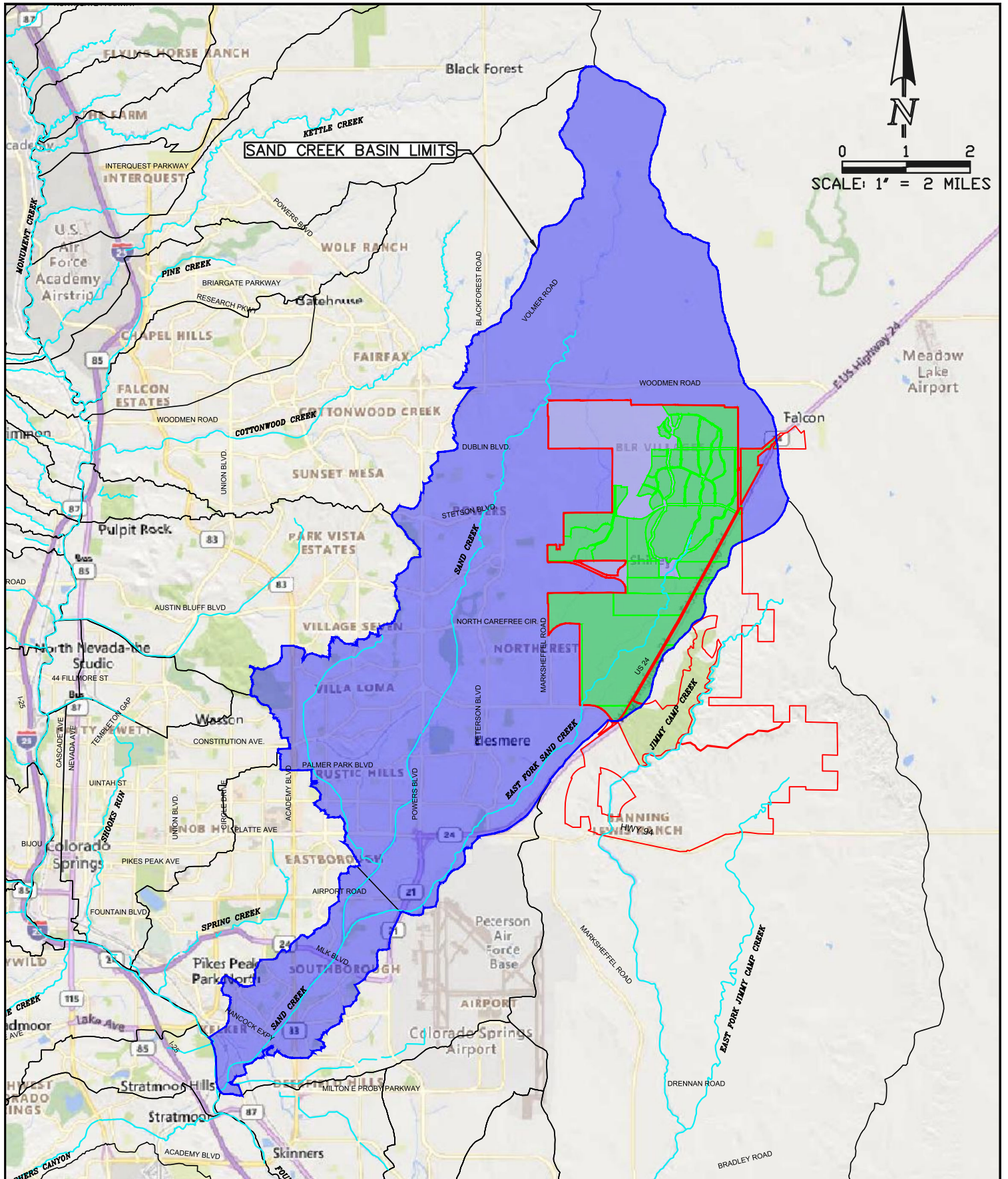


REFERENCES

1. City of Colorado Springs Drainage Criteria Manual Volume 1, May 2014.
2. “Sand Creek Drainage Basin Planning Study – Final Report” by Stantec, HDR, Inc. and Dewberry, dated January 2021

APPENDIX

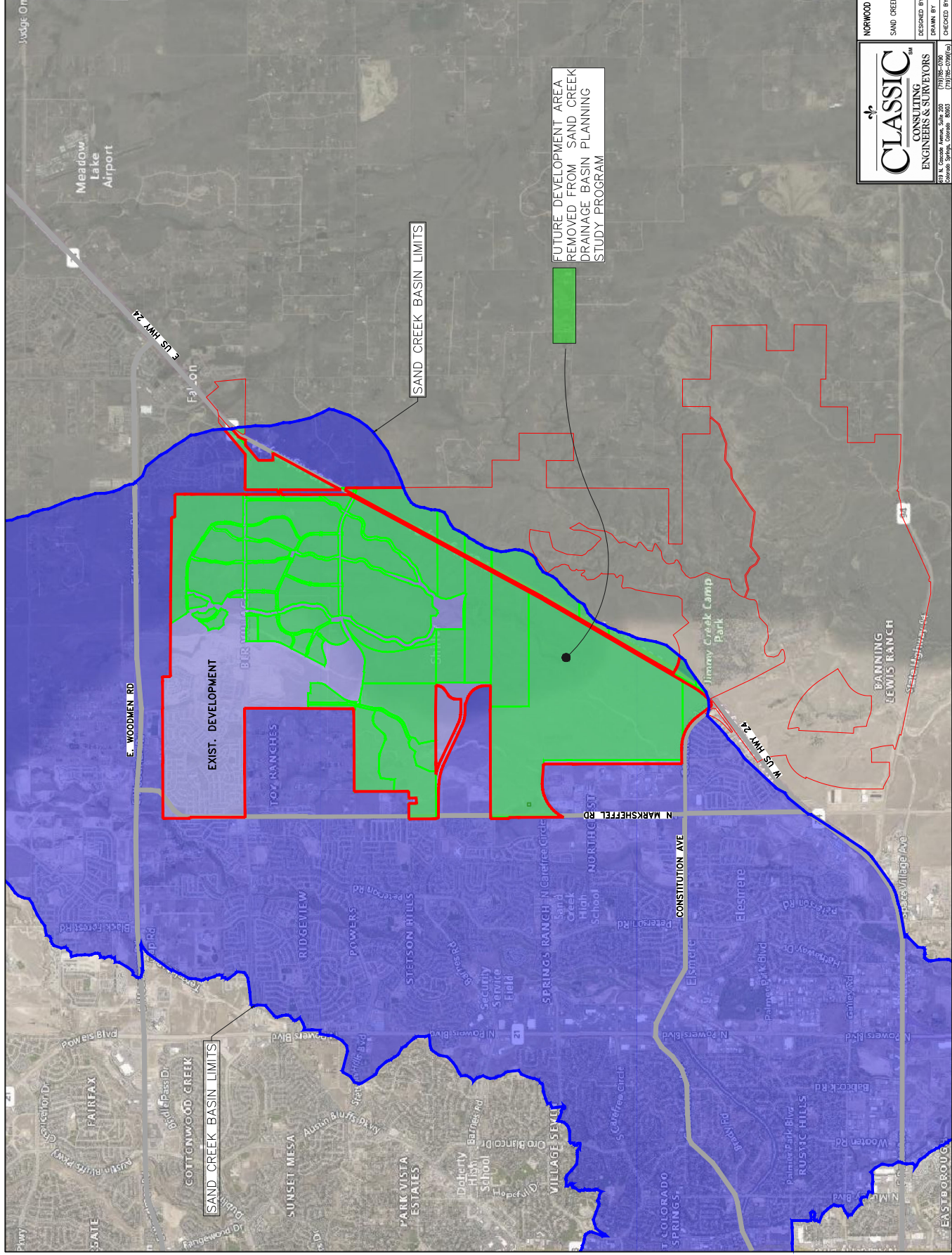
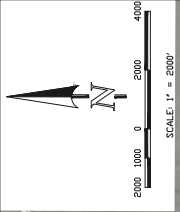
VICINITY MAP



NORWOOD
SAND CREEK CLOSED BASIN AREA EXHIBIT
 VICINITY MAP

SHEET
 1

CLOSED BASIN AREA EXHIBIT



FUTURE DEVELOPMENT AREA
REMOVED FROM SAND CREEK
DRAINAGE BASIN PLANNING
STUDY PROGRAM

SAND CREEK BASIN LIMITS

SAND CREEK BASIN LIMITS

EXIST. DEVELOPMENT

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

619 N. Cascade Avenue, Suite 200
Corvallis, Oregon 97331
(503) 838-2222 (Fax)

NORWOOD

SAND CREEK CLOSED BASIN AREA EXHIBIT

DESIGNED BY	ADP	SCALE	10/6/2022
DRAWN BY	ADP	(H) 1" = 2,000'	SHEET 1 OF 1
CHECKED BY	(V) T.M. N/A	JOB NO.	2568.07

DBPS EXCERPT

SAND CREEK – SAND CREEK DRAINAGE BASIN PLANNING STUDY

Fee Development

Table 8-3. Sand Creek DBPS Reimbursable Facility Cost Estimates in Colorado Springs

Facility (excluding BLR)	Estimate	Unit Cost (dollars)	Cost (dollars)
Engineered Channel ID 1 (TW = 92')	0	\$600	\$ -
Engineered Channel ID 2 (TW = 120')	0	\$800	\$ -
Engineered Channel ID 3 (TW = 168')	6,057	\$1,200	\$ 7,268,060
Engineered Channel ID 4 (TW = 200')	1,628	\$2,400	\$ 3,907,703
Natural Channel ID 5 (TW = 84')	2,292	\$400	\$ 916,635
Natural Channel ID 6 (TW = 144')	10,647	\$700	\$ 7,452,648
Natural Channel ID 7 (TW = 188')	0	\$1,000	\$ -
Natural Channel ID 8 (TW = 284')	0	\$2,000	\$ -
Concrete Reach	1,321	\$1,000	\$ 1,321,306
Small Spot Channel Improvement	0	\$250,000	\$ -
Medium Spot Channel Improvement	13	\$350,000	\$ 4,550,000
Box Culvert 100 < 150 SF	55	\$2,000	\$ 110,000
Box Culvert > 150 SF	160	\$2,500	\$ 420,000
Facility (BLR only)	Estimate	Unit Cost	Cost
Engineered Channel ID 1 (TW = 92')	0	\$600	\$ -
Engineered Channel ID 2 (TW = 120')	0	\$800	\$ -
Engineered Channel ID 3 (TW = 168')	0	\$1,200	\$ -
Engineered Channel ID 4 (TW = 200')	0	\$2,400	\$ -
Natural Channel ID 5 (TW = 84')	44,144	\$400	\$ 17,657,600
Natural Channel ID 6 (TW = 144')	37,619	\$700	\$ 26,333,308
Natural Channel ID 7 (TW = 188')	9,352	\$1,000	\$ 9,352,457
Natural Channel ID 8 (TW = 284')	16,060	\$2,000	\$ 32,120,000
Small Spot Channel Improvement	0	\$250,000	\$ -
Medium Spot Channel Improvement	0	\$350,000	\$ -
Large Spot Channel Improvement	0	\$550,000	\$ -
48" RCP	5,763	\$350	\$ 2,017,062
60" RCP	9,354	\$450	\$ 4,209,455
72" RCP	5,587	\$550	\$ 3,072,958
84" RCP	1,409	\$650	\$ 915,904
Box Culvert < 50 SF	0	\$1,000	\$ -
Box Culvert 50 < 74 SF	104	\$1,400	\$ 145,600
Box Culvert 75 < 99 SF	0	\$1,700	\$ -
Box Culvert 100 < 150 SF	0	\$2,000	\$ -
Box Culvert > 150 SF	0	\$2,500	\$ -
Excluding BLR Subtotal		\$25,946,352	
BLR Subtotal		\$95,824,344	
Sand Creek DBPS Study Cost		\$500,000	
Total		\$122,270,696	

The bridge fee, pond land fee, pond facility fee, and surcharge fee are removed. Bridge, pond land, and pond facilities are not reimbursable within the Sand Creek basin. A summary of 2021 fees for the Sand Creek basin is as follows:

Table 8-4. Summary of Fees

Fee	Dollars/Acre
Drainage Fee	\$18,841
Bridge Fee	\$0
Pond Land Fee	\$0
Pond Facility Fee	\$0
Surcharge Fee	\$0

Only improvements specifically included in this fee calculation are considered to be reimbursable. All other improvements in new development areas are the sole responsibility of the developer. Table 8-5 summarizes the total cost associated with the drainage basin fee.

Table 8-5. Sand Creek DBPS Total Undeveloped Cost Estimates for the City of Colorado Springs and Banning Lewis Ranch

Cost Type	Costs
Total Cost	\$122,270,696
Total Cost (Including Deferred Areas)	\$131,837,737
Deferred Fees	\$20,716,825
Fund Balance	\$1,551,076
Total Unfunded Cost	\$109,569,836
Undeveloped Cost per Acre	\$18,841