

**TWIN OAKS BOARD OF ALDERMEN
NOTICE OF WORK SESSION
TWIN OAKS CITY HALL
WEDNESDAY, APRIL 19, 2023, 6:15 P.M.
TWIN OAKS, MO 63021**

TENTATIVE AGENDA

- 1) Crescent Avenue Sidewalk Project — Stormwater Improvements
- 2) ADJOURNMENT

Frank Johnson
City Clerk/Administrator

POSTED: April 17, 2023, 10 a.m.

Please note: Any person requiring physical or verbal accommodations should contact the city office 12 hours prior to meeting at 636-225-7873. Copies of public records for this agenda are available for public inspection before and at the time of the meeting.

103 Elm Street
Washington, MO 63090
April 13, 2023



636.239.4751
www.bfaeng.com

City of Twin Oaks
1381 Big Bend Road
Twin Oaks, MO 63021
Attn: Frank Johnson, City Clerk/Administrator

RE: Summary of Cost – Stormwater and Sidewalk Improvement Project
Crescent Ave (Golden Oak Ct to 150 Crescent Rd)
BFA #3497-13A

Mr. Johnson,

Per our meeting with Mr. Krewson dated 03/22/2023 , our telephone call dated 03/31/2023, and the City council meeting dated 03/30/2023. BFA did a concept analysis on a modified version of Option 3 from the Stormwater Evaluation dated 09-02-2021 for managing stormwater flow accumulated on Crescent Ave.

Engineering Cost Summary

Modified Option 3 Estimate	\$15,400
Remaining Budget as of March 31, 2023	<u>(\$6,695)</u>
Add to Budget for Change in Scope	\$8,704

Construction Estimate

Modified Option 3 Estimate	\$97,512
Option 5 from Stormwater Evaluation dated 09-02-2021*	<u>(\$9,714)</u>
Add to Budget for Change in Scope	\$ 87,798

*Option 5 – Convey water to new curb inlet and release in yard of 90 Crescent Ave

This would add \$8,704 in Engineering and \$87,798 in Construction to the current total project cost of \$527,176.50.

The updated Total Project Cost comes to \$623,679.50

Enclosures provide further information regarding the analysis of Modified Option 3.

Please let me know if you need further explanation of an of these items or if you have additional items that you would like to have reviewed in more detail.

Best Regards,

Tiffany Danz
BFA, Inc

Enclosures:
Modified Option 3: Cost Estimate
Modified Option 3: Grading Plan GR-2 04-05-2023



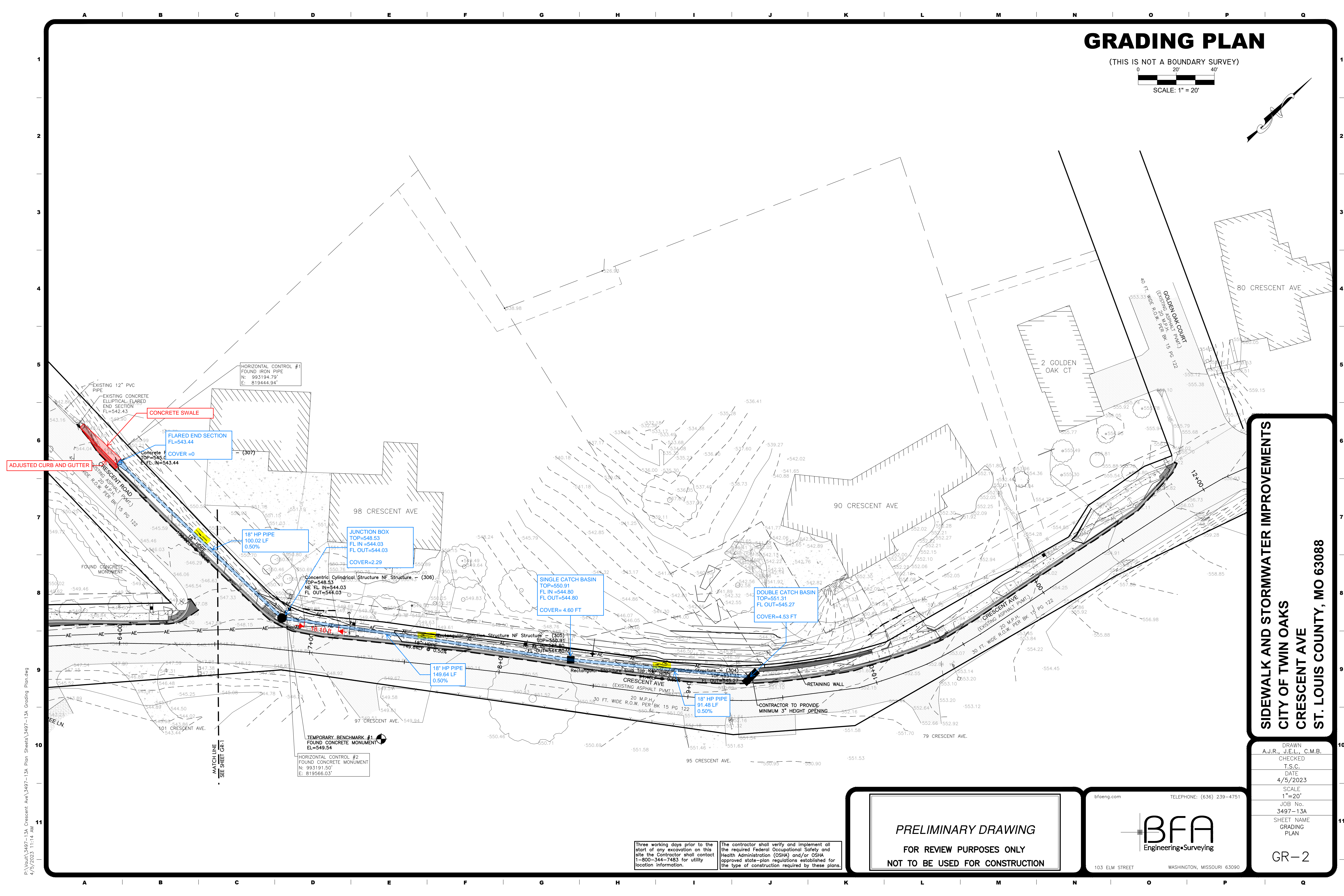
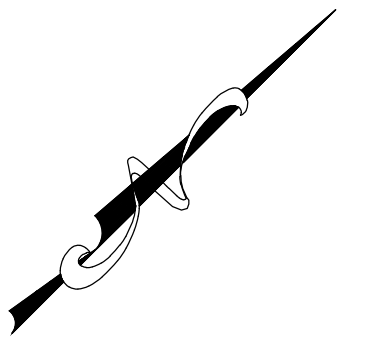
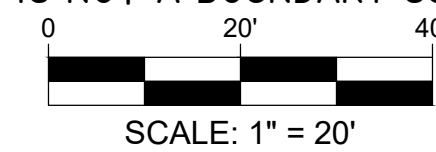
Modified Option 3: Cost Estimate
Crescent Ave Sidewalk - Phase I
BFA Project No. 3497-13A STORMWATER
Date: 4-13-2023

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Utility				
Catch Basin	1	EACH	\$ 4,937.00	\$ 4,937.00
Double Catch Basin	1	EACH	\$ 6,523.00	\$ 6,523.00
Junction Box	1	EACH	\$ 4,937.00	\$ 4,937.00
18" Flared End Section	1	EACH	\$ 209.00	\$ 209.00
Stormsewer - 18" HP	342	LF	\$ 159.56	\$ 54,570.00
Sitework				
Concrete Swale	10	SY	\$ 93.50	\$ 935.00
Demo				
Asphalt Pavement Removal	11	SY	\$ 10.91	\$ 120.00
SUBTOTAL				\$ 72,231.00
Contingency due to preliminary		25%		\$ 18,057.75
Contingency for Inflation		10%		\$ 7,223.10
CONSTRUCTION TOTAL				\$ 97,512
ENGINEERING FEE				\$ 15,400

1. An approximate 20% inflation cost is anticipated based on observations on recent projects.
2. Cost estimate does not include ROW or easement acquisition.
3. Engineering fee includes preparing stormwater calculations (\$4,000), survey (\$1,400), and design plan (\$10,000).
4. Estimates are based on limited investigation of existing conditions and the concept design of the proposed solution.
5. Engineering Fee does not include utility coordination, bid assistance, construction management, public involvement, concept plans, and Easement Exhibit preparation.
6. Cost estimate assumes MSD permitting is not required.
7. Construction fee does not include traffic control, mobilization, finish grading, seeding, and erosion & sediment control.
8. The existing pipe at the catch basin on Crescent Road appears to be in poor condition and may require additional repairs.
9. This estimate is based on the preliminary layout Modified Option 3 dated 04/05/2023.
10. This does not include meeting with home owners.

GRADING PLAN

(THIS IS NOT A BOUNDARY SURVEY)



ADJUSTED CURB AND GUTTER

CONCRETE SWALE

FLARED END SECTION
FL=543.44
COVER=0

18" HP PIPE
100.02 LF
0.50%

JUNCTION BOX
TOP=548.53
FL IN=544.03
FL OUT=544.03
COVER=2.29

SINGLE CATCH BASIN
TOP=550.91
FL IN=544.80
FL OUT=544.80
COVER=4.60 FT

DOUBLE CATCH BASIN
TOP=551.31
FL OUT=545.27
COVER=4.53 FT

18" HP PIPE
149.64 LF
0.50%

18" HP PIPE
91.48 LF
0.50%

TEMPORARY BENCHMARK #1
FOUND CONCRETE MONUMENT
EL=549.54

HORIZONTAL CONTROL #2
FOUND CONCRETE MONUMENT
N: 993191.50'
E: 819566.03'

MATCH LINE
SEE SHEET GR-1

SIDEWALK AND STORMWATER IMPROVEMENTS
CITY OF TWIN OAKS
CRESCENT AVE
ST. LOUIS COUNTY, MO 63088

DRAWN	A.J.R., J.E.L., C.M.B.
CHECKED	T.S.C.
DATE	4/5/2023
SCALE	1"=20'
JOB No.	3497-13A
SHEET NAME	GRADING PLAN

GR-2

PRELIMINARY DRAWING
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

103 ELM STREET WASHINGTON, MISSOURI 63090

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-344-7483 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

P:\Vault\3497-13A Crescent Ave\3497-13A Plan Sheets\3497-13A Grading Plan.dwg
4/5/2023 11:14 AM

103 Elm Street
Washington, MO 63090



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Crescent Ave Sidewalk - Phase I
Engineering and Construction Cost Estimate
BFA Project No. 3497-13A
Date: 4-13-2023

Public Involvement and Concept Plans	Aug 26, 2022	Feb 26, 2023	Mar 31, 2023	Remaining
Concept Plans and Meetings	\$ 16,500.00			
Concept Stormwater Packet of Options	\$ 3,816.25			
Aerial Concept Plan for South Properties	\$ 745.00			
Concept Plans and Meetings for South Properties		\$ 3,035.94		
Capital Planning Estimates and Meeting		\$ 3,170.00		
Concept Plans and Meetings				\$ 2,294.06
Survey				
Topographic Survey and Field Work	\$ 6,961.25	\$ 1,196.22	\$ 70.00	
ROW Documents	\$ 3,780.00	\$ 5,192.78	\$ 200.00	\$ 5,561.00
Stormwater Analysis				
Stormwater Calcs and Report	\$ 575.00	\$ 1,785.00		\$ 2,390.00
Meeting with Krewsons and Concept Plans		\$ 445.00	\$ 2,085.00	\$ 970.00
Additional Topo		\$ 1,320.00		\$ 1,180.00
Additional Design for Krewsons Yard		\$ 75.00	\$ 270.00	\$ 2,155.00
Design Services				
Preliminary Design for North Properties	\$ 10,498.00			
Preliminary and Final Design		\$ 20,255.00	\$ 3,225.00	\$ 11,341.00
Tree Removal at 140 Crescent Ave (Added 4-5-23)				\$ 3,000.00
County SWPPP Permit		\$ 3,927.78	\$ 2,340.00	\$ 732.22
Utility Coordination		\$ 2,275.00	\$ 720.00	\$ 3,005.00
Bid Assistance				\$ 5,400.00
Construction Observations				
As Needed				\$ 19,400.00
Stormwater Grant Document				
Prepare and Sign	\$ 285.00			
Total Estimate for BFA Services	\$ 152,176.50			
Total Spent	\$ 43,160.50	\$ 42,677.72	\$ 8,910.00	\$ 57,428.28
*Construction Estimate	\$ 375,000.00			
Total Project	\$ 527,176.50			

North Properties: 90 Crescent, 98 Crescent, 2 Golden Oaks Ct
South Properties: 140 Crescent Ave, and 150 Crescent Ave

***\$10,000 has been added to construction cost for removal of trees on 140 Crescent.**

Does not include
Grant Administration
MSD submittal and approvals
Concept Plans and Cost Estimates over the Estimated Fee (\$8,500) this estimate was after Aug. 26, 2022.
County Site Plan Approval
Coordination and/or reviews by Valley Park