

August 30, 2021

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

RE: Methods of Stormwater Management
Crescent Ave Sidewalk - BFA 3497-13A

Mr. Johnson,

Per our workshop dated 8-18-2021 and our telephone conversation dated 8-19-2021. BFA did a concept analysis on five different options for managing stormwater flow accumulated on Crescent Ave. The following briefly describes the concepts:

- Option 1: Convey water to MSD structure (\$39,658+\$10,500=\$50,158)
- Option 2: Convey water to a detention basin (\$39,803+\$10,500=\$50,303)
- Option 3: Convey water to city structure on Crescent Road (\$98,687+\$16,500=\$115,187)
- Option 4: Convey water down 90 Crescent Ave's driveway & through the proposed sidewalk (\$30,450+\$8,000=\$38,450)
- Option 5: Convey water to new curb inlet and release in yard of 90 Crescent Ave (sidewalk proposal includes this fee)

Enclosures provide further information of the methods of stormwater management analyzed.

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

Best regards,

Tiffany Campbell

Enclosures:

Option 1 Cost Estimate _____ Page 2 of 13
Option 1 Map 1 of 1 _____ Page 3 of 13
Option 2 Cost Estimate _____ Page 4 of 13
Option 2 Map 1 of 1 _____ Page 5 of 13
Option 3 Cost Estimate _____ Page 6 of 13
Option 3 Map 1 of 1 _____ Page 7 of 13
Option 4 Cost Estimate _____ Page 8 of 13
Option 4 Map 1 of 1 _____ Page 9 of 13
Option 5 Cost Estimate _____ Page 10 of 13
Option 5 Map 1 of 1 _____ Page 11 of 13
Watershed to 90 Crescent Ave _____ Page 12 of 13
Overall Map of Project Area _____ Page 13 of 13

Option 1: Cost Estimate

Crescent Ave Sidewalk - Phase I
BFA Project No. 3497-13A STORMWATER

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Stormwater				
Curb Catch Basin	1	EACH	\$ 4,100.00	\$ 4,100.00
Stormsewer - 15" RCP	460	LF	\$ 50.00	\$ 23,000.00
FES with Armour	1	EACH	\$ 1,100.00	\$ 1,100.00
SUBTOTAL				\$ 28,200.00
Contingency due to preliminary	25%			\$ 7,050.00
Inflation	20%			\$ 5,640.00
CONSTRUCTION TOTAL				\$ 40,890
ENGINEERING FEE				\$ 10,500

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 (\$2,500), and design plan (\$4,000).
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.

Draft

08/30/2021 3:40:32 PM

Option 2: Cost Estimate

Crescent Ave Sidewalk - Phase I

BFA Project No. 3497-13A STORMWATER

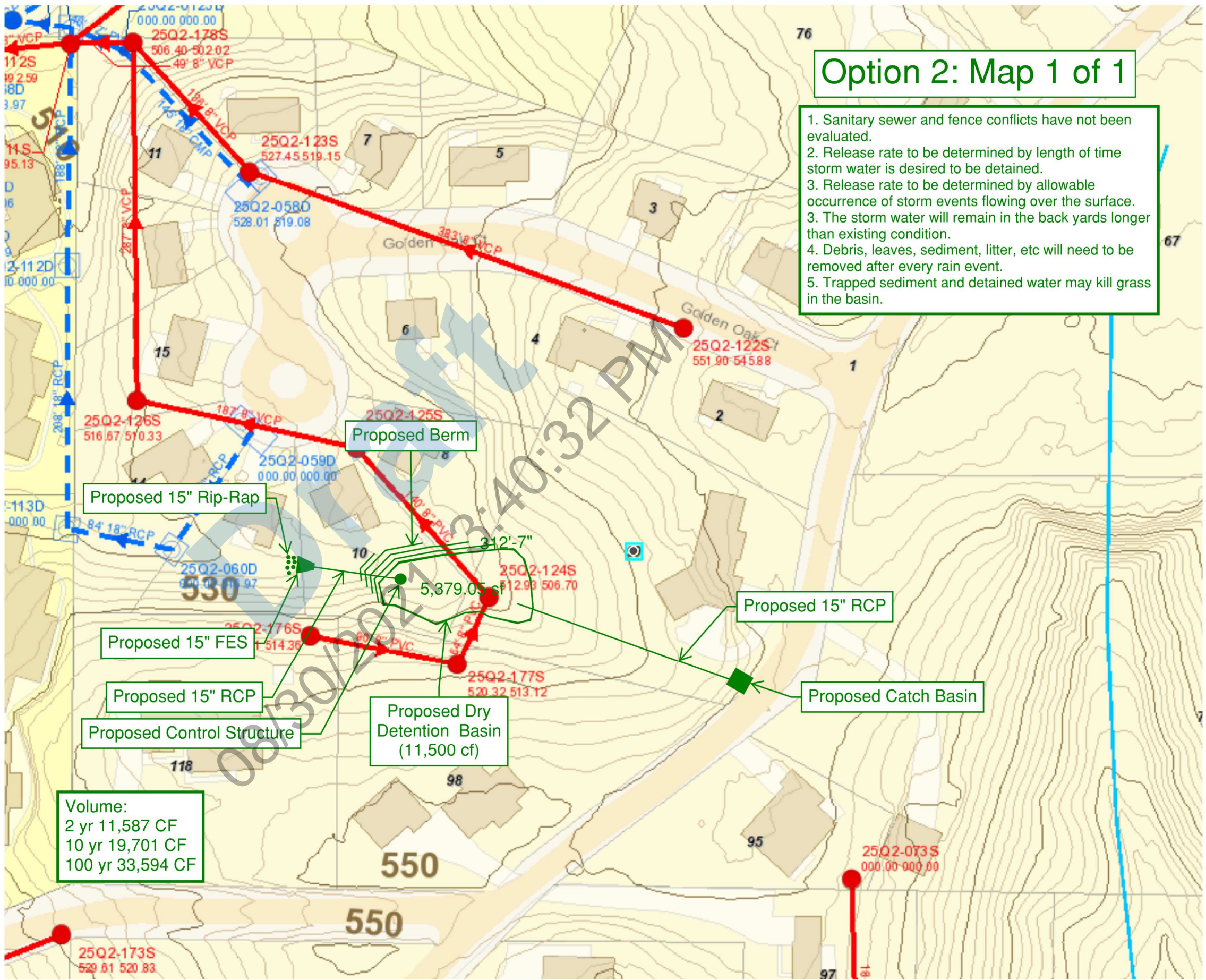
ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Utility				
Curb Catch Basin	1	EACH	\$ 4,100.00	\$ 4,100.00
Control Structure	1	EACH	\$ 3,000.00	\$ 3,000.00
Flared End Section	1	EACH	\$ 100.00	\$ 100.00
Stormsewer - 15" RCP	255	LF	\$ 50.00	\$ 12,750.00
Rip-Rap	1	LS	\$ 1,000.00	\$ 1,000.00
Sitework				
Detention Basin Grading (includes haul off)	450	CY	\$ 10.00	\$ 4,500.00
Finish Grading	1	LS	\$ 2,000.00	\$ 2,000.00
SUBTOTAL				\$ 27,450.00
Contingency due to preliminary	25%			\$ 6,862.50
Inflation	20%			\$ 5,490.00
CONSTRUCTION TOTAL				\$ 39,803
ENGINEERING FEE				\$ 10,500

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 (\$2,500), and design plan (\$4,000).
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, seeding, and erosion & sediment control.

Note: Underground Detention Chambers cost approximately \$7 per cubic yard of storage.

Option 2: Map 1 of 1

1. Sanitary sewer and fence conflicts have not been evaluated.
2. Release rate to be determined by length of time storm water is desired to be detained.
3. Release rate to be determined by allowable occurrence of storm events flowing over the surface.
3. The storm water will remain in the back yards longer than existing condition.
4. Debris, leaves, sediment, litter, etc will need to be removed after every rain event.
5. Trapped sediment and detained water may kill grass in the basin.



Volume:
 2 yr 11,587 CF
 10 yr 19,701 CF
 100 yr 33,594 CF

Option 3: Cost Estimate

Crescent Ave Sidewalk - Phase I

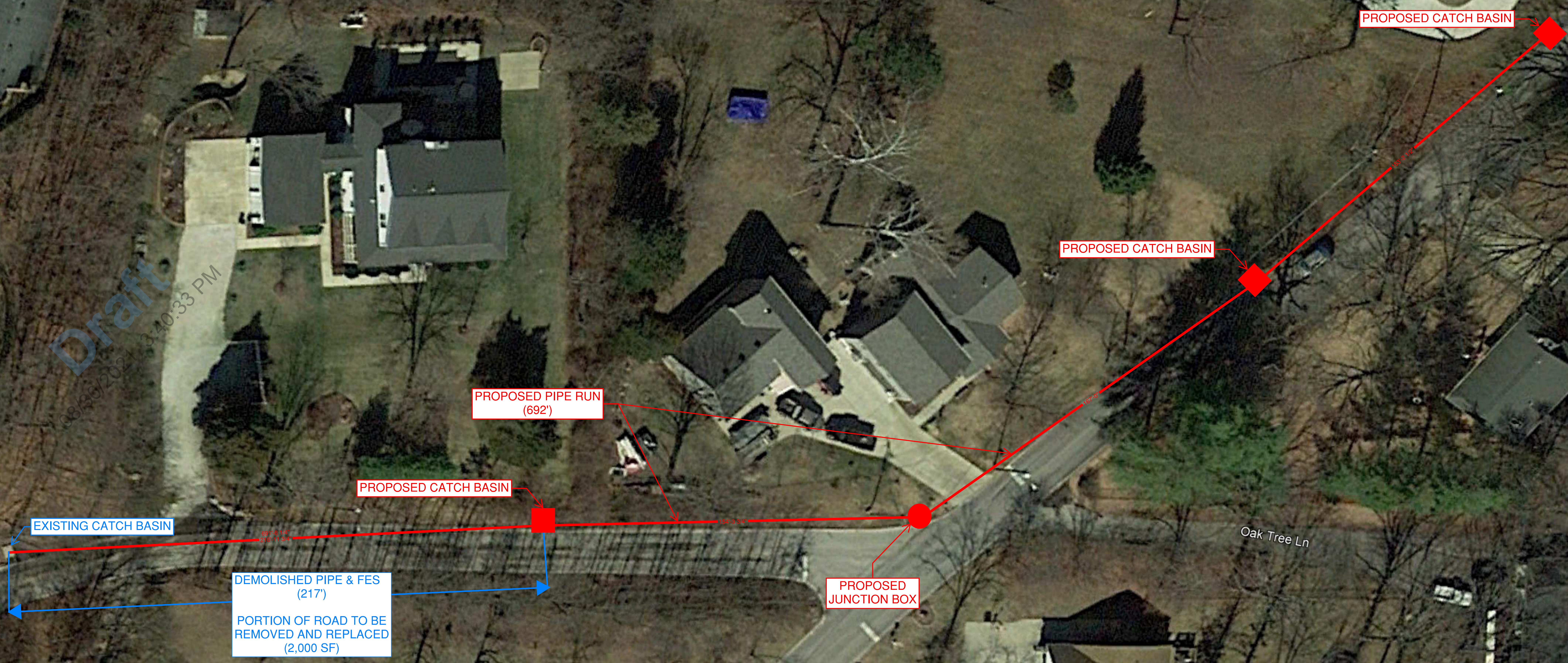
BFA Project No. 3497-13A STORMWATER

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Utility				
Curb Catch Basin	3	EACH	\$ 4,100.00	\$ 12,300.00
Junction Box	1	EACH	\$ 1,500.00	\$ 1,500.00
Stormsewer - 15" RCP	692	LF	\$ 50.00	\$ 34,600.00
Sitework				
Asphalt Pavement	225	SY	\$ 43.00	\$ 9,675.00
Demo				
Asphalt Pavement Removal	225	SY	\$ 15.00	\$ 3,375.00
Stormsewer Pipe Removal	217	LF	\$ 30.00	\$ 6,510.00
Flared End Section Removal	1	EACH	\$ 100.00	\$ 100.00
SUBTOTAL				\$ 68,060.00
Contingency due to preliminary		25%		\$ 17,015.00
Inflation		20%		\$ 13,612.00
CONSTRUCTION TOTAL				\$ 98,687
ENGINEERING FEE				\$ 16,500

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 (\$2,500), 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.

Option 3: Map 1 of 1

- 1. Size and depth of down gradient pipe has not been evaluated.
- 2. Project could require additional repair of down gradient system.



Draft
08/09/2021 3:40:33 PM

Oak Tree Ln

Option 4: Cost Estimate

Crescent Ave Sidewalk - Phase I

BFA Project No. 3497-13A STORMWATER

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Stormwater				
PVC Channels in Curb	1	LS	\$21,000.00	\$ 21,000.00
SUBTOTAL				\$ 21,000.00
Contingency due to preliminary		25%		\$ 5,250.00
Inflation		20%		\$ 4,200.00
CONSTRUCTION TOTAL				\$ 30,450
ENGINEERING FEE				\$ 8,000

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 (\$2,000), survey (\$1,000), and design plan (\$5,000).
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.

Draft

08/30/2021 3:40:33 PM

Driveway graded to convey water

PVC Pipes in sidewalk to allow excess flow to go on its original course, flowing over the slope.



Oak Tree Ln

1. This unique design requires a skilled contractor.
2. This requires continued maintenance. PVC pipes are to be cleaned at every rainfall event to reduce clogging.

Option 5: Cost Estimate

Crescent Ave Sidewalk - Phase I

BFA Project No. 3497-13A STORMWATER

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Stormwater				
Curb Catch Basin	1	EACH	\$ 4,100.00	\$ 4,100.00
Stormsewer - 15" RCP	28	LF	\$ 50.00	\$ 1,400.00
15" FES	1	EACH	\$ 850.00	\$ 850.00
SUBTOTAL				\$ 6,350.00
Contingency due to preliminary	25%			\$ 1,587.50
Inflation	20%			\$ 1,270.00
CONSTRUCTION TOTAL				\$ 9,208
ENGINEERING FEE				NA

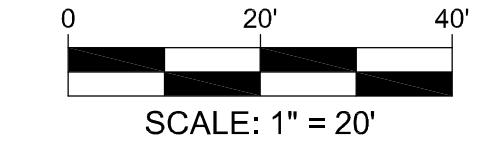
1. An approximate 20% inflation cost is anticipated based on observations on recent projects.
2. Cost estimate does not include ROW or easement acquisition.
3. Estimates are based on limited investigation of existing conditions and the concept design of the proposed solution.
4. Engineering Fee does not include utility coordination, bid assistance, construction management, public involvement, concept plans, and Easement Exhibit preparation.
5. Cost Estimate assumes MSD permitting is not required.
6. Construction Fee does not include traffic control, mobilization, finish grading, seeding, and erosion & sediment control.
7. Engineering fee is included in the sidewalk proposal.

Draft

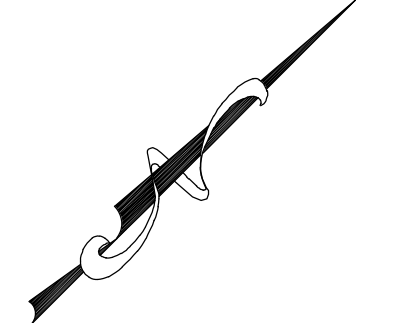
08/30/2021 3:40:33 PM

GRADING PLAN

(THIS IS NOT A BOUNDARY SURVEY)



Option 5 Map 1 of 1



ABBREVIATION KEY	
ABBREVIATION	DESCRIPTION
R/W	RIGHT-OF-WAY
TSCL	TEMPORARY SLOPE CONSTRUCTION LICENSE
NFV	NOT FIELD VERIFIED
PVC	POLYVINYL CHLORIDE

GRADING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UNDERGROUND ELECTRIC	—UE—	—UE—
UNDERGROUND TELEPHONE	—UT—	—UT—
GAS LINE	—G—	—G—
WATERLINE	—W—	—W—
SANITARY SEWER	—SS—	—SS—
STORM SEWER	=====	=====
FENCE	—X—X—X—	—X—X—X—
CONTOURS	(100)	—100—
UTILITY POLE	•	•
SANITARY MANHOLE	•	•
WATER VALVE	•	•
FIRE HYDRANT	•	•
CATCH BASIN	■	■
CONCRETE JOINTS	-----	-----
SAWCUT	-----	-----
TSCL	-----	-----
PERMANENT EASEMENT	-----	-----

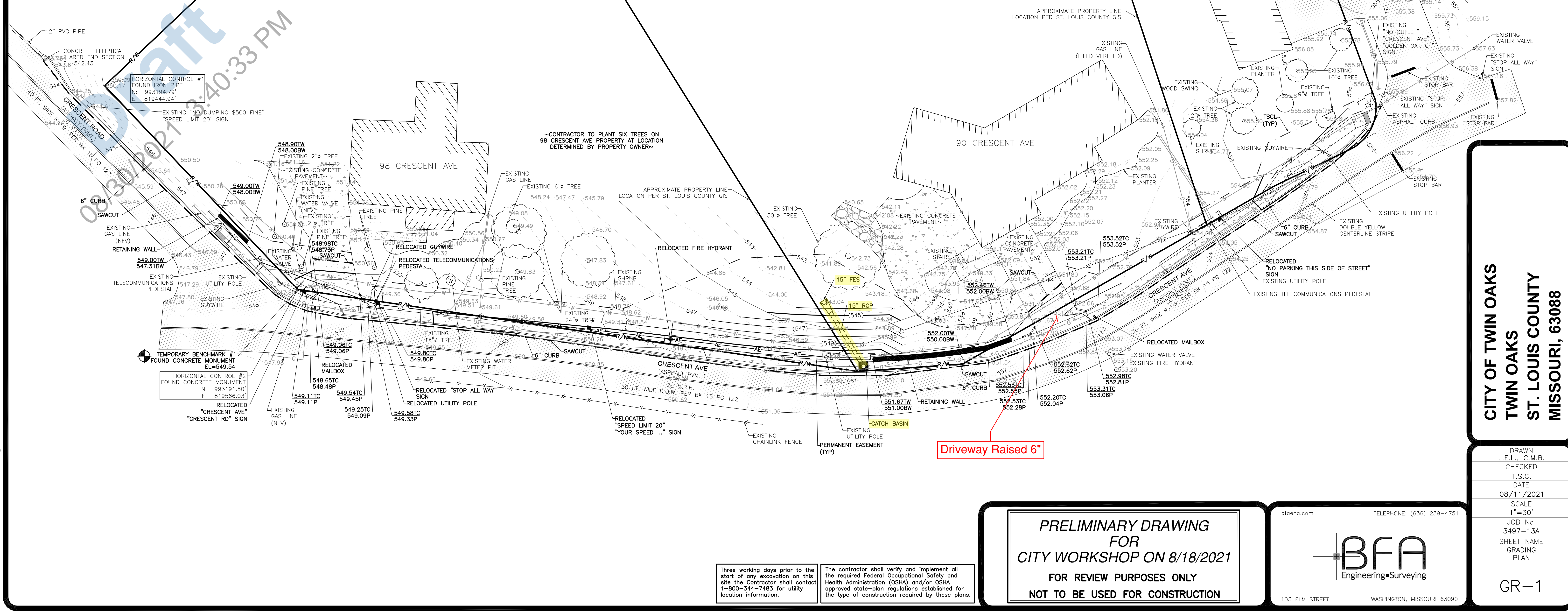
SPOT GRADE LEGEND	
TOP OF CURB	000.00TC
PAVEMENT ELEVATION	000.00P
TOP OF RETAINING WALL	000.00TW
BOTTOM OF RETAINING WALL	000.00BW

HORIZONTAL CONTROL POINTS			
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	FOUND IRON PIPE	993194.79	819444.94
2	FOUND CONCRETE MONUMENT	993191.50	819566.03

GRADING NOTES:

- Bearing referenced to Grid North of the Missouri Coordinate System 1983, East Zone per GPS observations utilizing the MODOT VRS RTK Network.
- Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans. Vertical datum used is NAVD 1988 per GPS observations utilizing MODOT VRS RTK Network.
- Temporary Benchmark No. 1—Concrete Monument
Elevation = 549.54
- This site scales within Zone X, as per Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 29189C0292K dated 2/4/2015.
- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the paved surface. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installations.
- All un surfaced areas are to receive six inches of topsoil. Contractor to seed, mulch, fertilize, water, and maintain all areas outside of paved areas that were disturbed during construction until an acceptable stand of grass is established. Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- The contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to the Erosion and Sediment Control Plan throughout construction.
- The Contractor shall maintain the site in a well-drained manner in order to assure the shortest possible drying time after each rainfall. This will mean that pumping of standing water in low areas on the site will most likely be required during construction. Also pumping of ground water in utility trenched and deep excavations will be required during construction.
- The sitework for this project shall meet or exceed the "Site Specific Specifications".
- All survey monuments disturbed during construction shall be replaced by a surveyor licensed in the state, in which this project is located, at the Contractors expense.
- The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the contractor.
- Due to seasonal variations in rainfall and the groundwater level, the Contractor may be required to use light earth moving equipment to minimize pumping.
- The Contractor shall grade all areas to drain in order to prevent ponding water. The minimum allowable slope on all paved surfaces shall be 1 percent.
- Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify the BFA and appropriate modifications will be issued.

EASEMENTS		
ADDRESS	EASEMENT TYPE	SQUARE FOOTAGE
2 GOLDEN OAK	PERMANENT EASEMENT	528
	TEMPORARY SLOPE CONSTRUCTION LICENSE	1,156
90 CRESCENT AVE	PERMANENT EASEMENT	389
	TEMPORARY SLOPE CONSTRUCTION LICENSE	3,037
98 CRESCENT AVE	PERMANENT EASEMENT	233
	TEMPORARY SLOPE CONSTRUCTION LICENSE	4,946



CITY OF TWIN OAKS
TWIN OAKS
ST. LOUIS COUNTY
MISSOURI, 63088

DRAWN	J.E.L., C.M.B.
CHECKED	T.S.C.
DATE	08/11/2021
SCALE	1"=30'
JOB No.	3497-13A
SHEET NAME	GRADING PLAN
GR-1	

PRELIMINARY DRAWING
FOR
CITY WORKSHOP ON 8/18/2021
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfoeng.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.

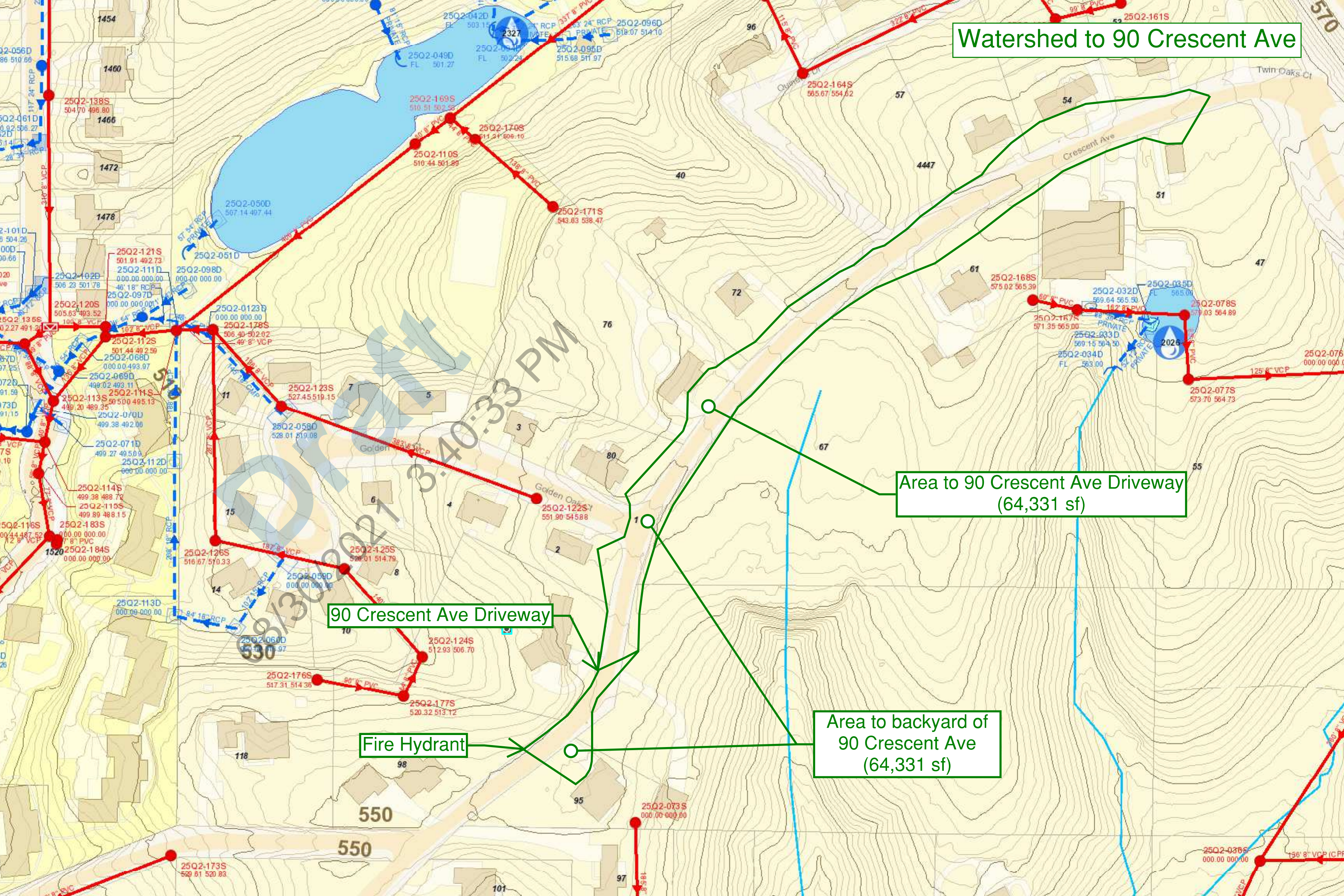
Watershed to 90 Crescent Ave

Area to 90 Crescent Ave Driveway
(64,331 sf)

90 Crescent Ave Driveway

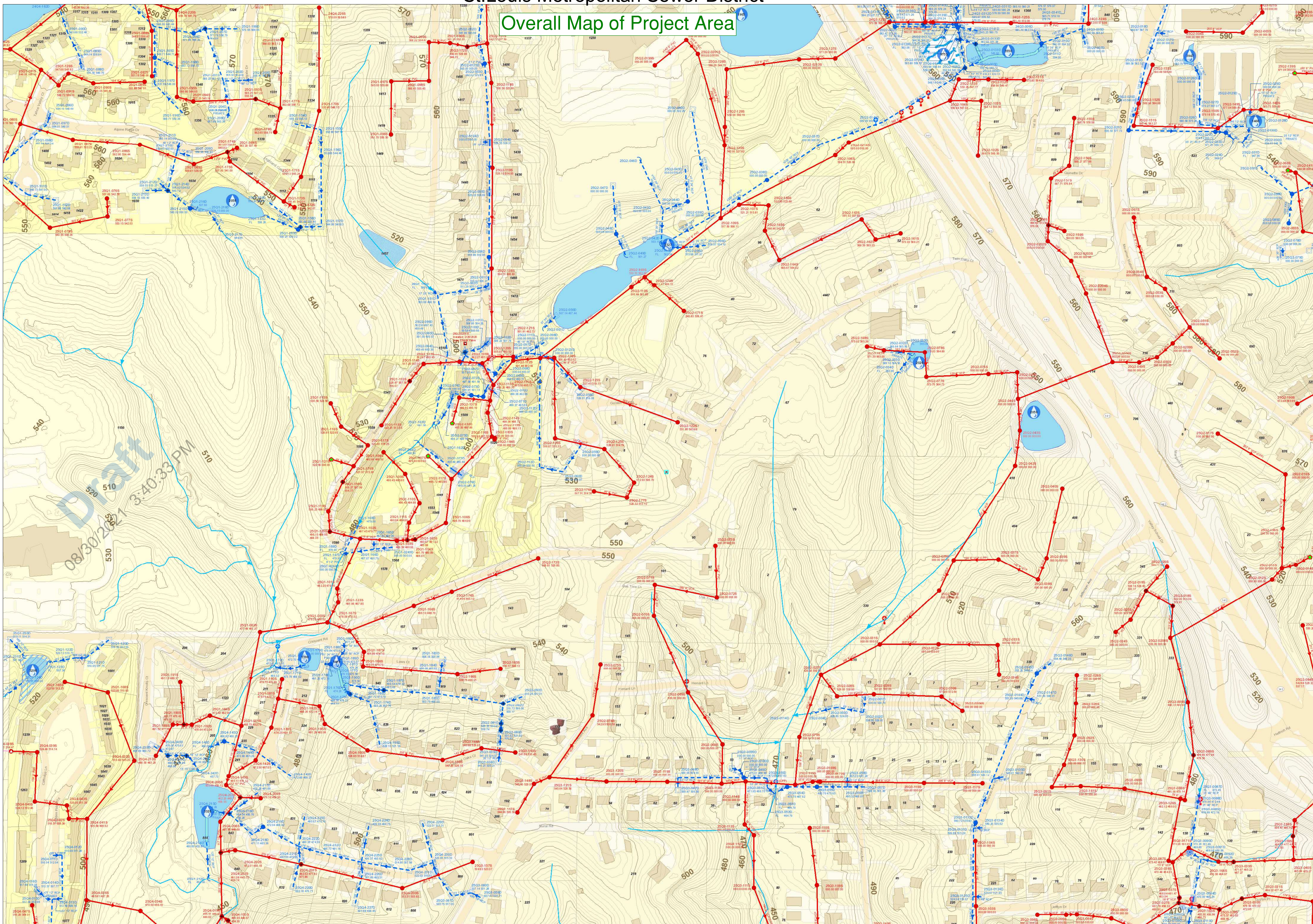
Fire Hydrant

Area to backyard of
90 Crescent Ave
(64,331 sf)



St. Louis Metropolitan Sewer District

Overall Map of Project Area



8/23/2021

2:19:27 PM



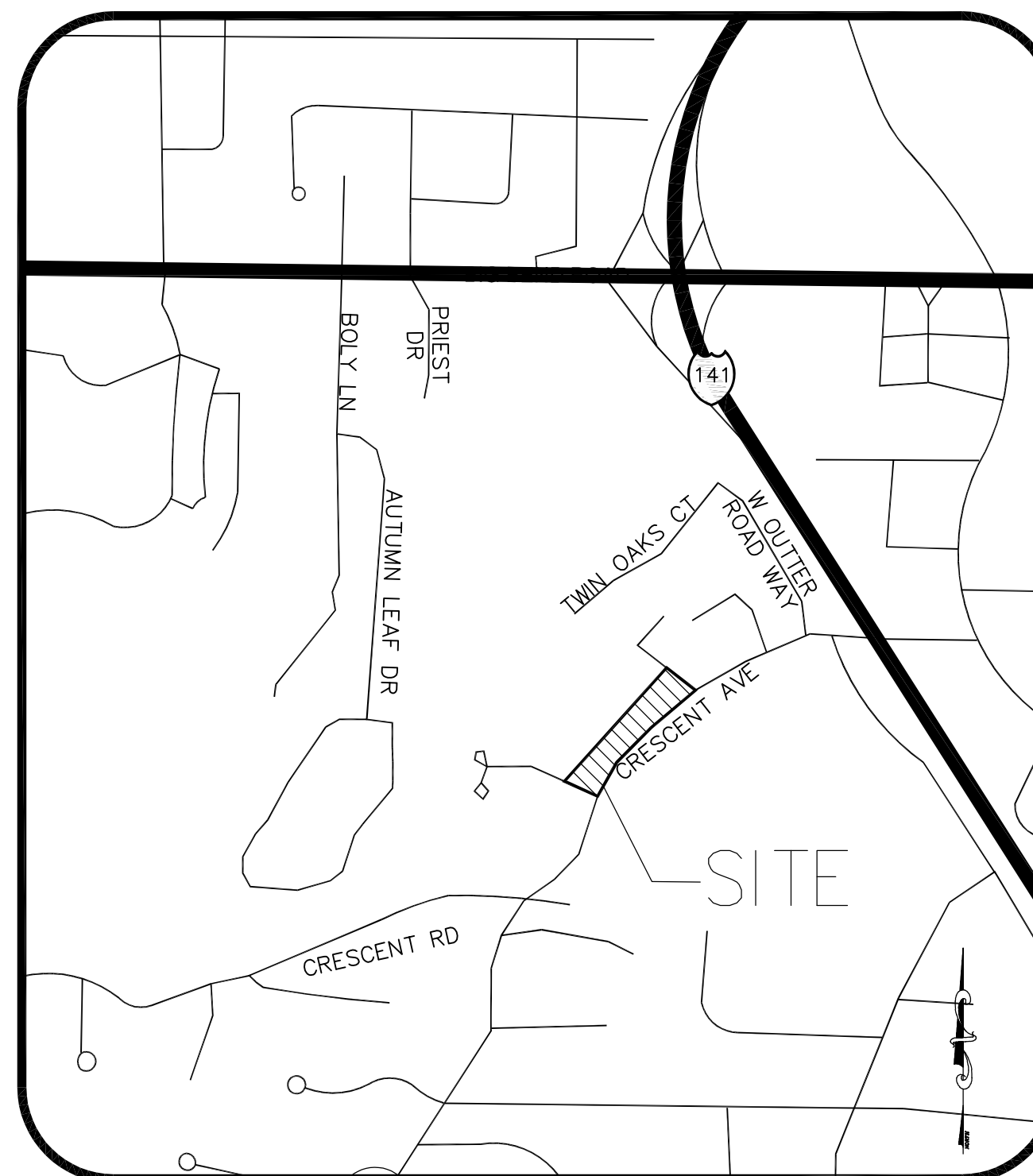
1 inch = 100 feet

Disclaimer: This map was prepared by MSD from available information and for its exclusive use. It is not intended to be used or relied upon by others. MSD makes no representation of either the accuracy or the completeness of its contents. These data source: GIS (FEMA). Determination in regard to location within or near the Special Flood Hazard Area must be confirmed by referencing the printed copy.



PROPOSED SIDEWALK AND STORMWATER IMPROVEMENTS CRESCENT AVE, TWIN OAKS ST. LOUIS COUNTY, MISSOURI

UTILITY/ GOVERNING AGENCIES CONTACTS	
GAS	SPIRE CONTACT: MATTHEW OTTSEN PHONE: (314) 502-0361 EMAIL: MATTHEW.OTTSEN@SPIREENERGY.COM
TELEPHONE	AT&T CONTACT: DANNY GRAY JR. OFFICE PHONE: (636) 949-1320 MOBILE PHONE: (314) 415-0832 EMAIL: DG7548@ATT.COM
ELECTRIC	AMEREN CONTACT: JOSHUA K WOODSON PHONE: (314) 344-9890 EMAIL: JWOODSON@AMEREN.COM
WATER	UTILITY DEPARTMENT OF PUBLIC WORKS 200 WEST MAIN ANYCITY, ANYSTATE, 00000 CONTACT: NAME PHONE: (XXX) XXX-XXXX



SITE LOCATION MAP
NOT TO SCALE

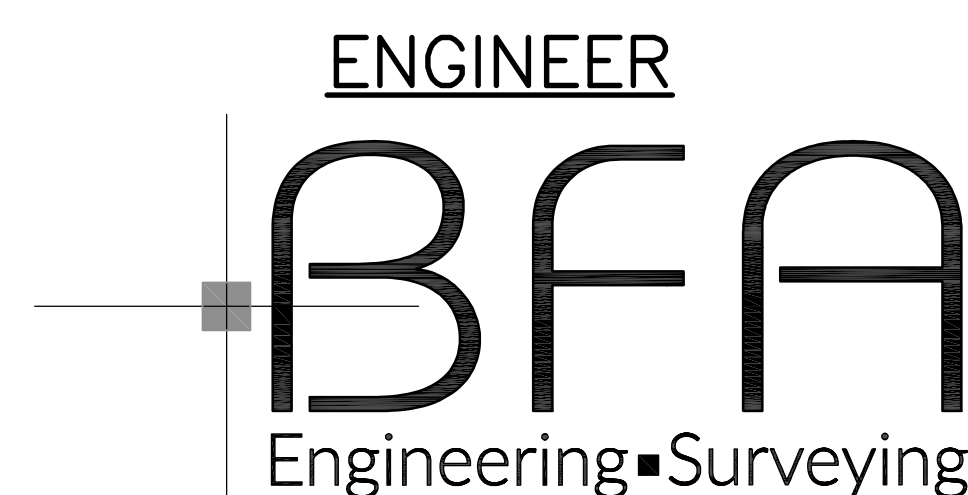
SHEET INDEX		
SHEET TITLE	SHEET NUMBER	SHEET NUMBER
COVER SHEET	CS-1	1 OF 6
TOPOGRAPHIC SURVEY / DEMOLITION PLAN	TS/DM-1	2 OF 6
GRADING PLAN	GR-1	3 OF 6
SITE/UTILITY PLAN	ST/UT-1	4 OF 6
DETAIL SHEET 1	DTL-1	5 OF 6
DETAIL SHEET 2	DTL-2	6 OF 6

**CITY OF TWIN OAKS
TWIN OAKS
ST. LOUIS COUNTY
MO 63088**

REVISIONS		
1		
2		
3		
4		

By: X.X.X	XX-XX-XX	App: X.X.X
By: X.X.X	XX-XX-XX	App: X.X.X
By: X.X.X	XX-XX-XX	App: X.X.X
By: X.X.X	XX-XX-XX	App: X.X.X

DRAWN	J.E.L. C.M.B.
CHECKED	T.S.C.
DATE	08/11/2021
SCALE	1"=30'
JOB No.	3497-13A
SHEET NAME	COVER SHEET
CS-1	

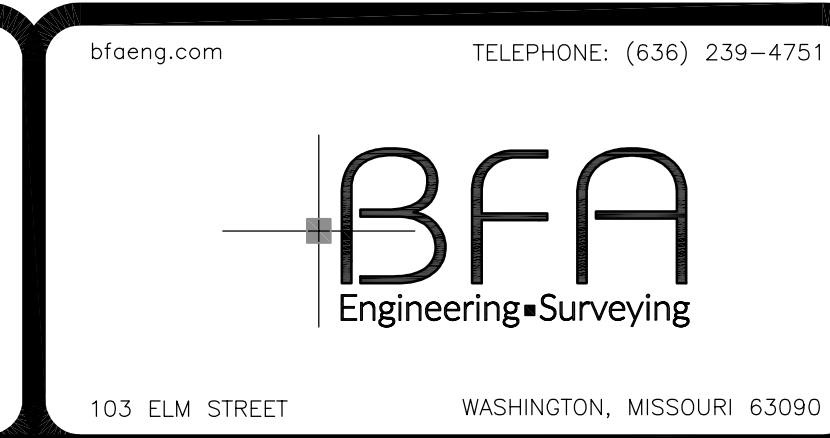


OWNER
City of TWIN OAKS
1381 Big Bend Road
Twin Oaks, MO 63021
TEL: (636) 225-7873

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.

**PRELIMINARY DRAWING
FOR
CITY WORKSHOP ON 8/18/2021
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION**

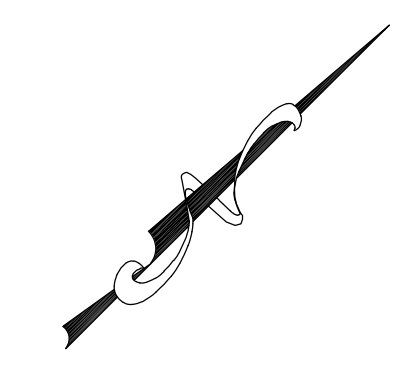
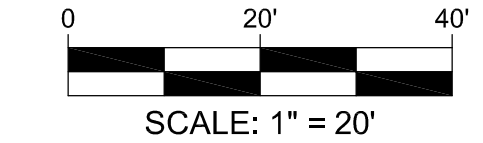


103 ELM STREET WASHINGTON, MISSOURI 63090 bfaeng.com TELEPHONE: (636) 239-4751

P:\Vault\3497-13A Crescent Ave\3497-13A Plan Sheets\3497-13A Cover Sheet.dwg 8/11/2021 3:09 PM

GRADING PLAN

(THIS IS NOT A BOUNDARY SURVEY)



ABBREVIATION KEY	
ABBREVIATION	DESCRIPTION
R/W	RIGHT-OF-WAY
TSCL	TEMPORARY SLOPE CONSTRUCTION LICENSE
NFV	NOT FIELD VERIFIED
PVC	POLYVINYL CHLORIDE

GRADING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UNDERGROUND ELECTRIC	—UE—	—UE—
UNDERGROUND TELEPHONE	—UT—	—UT—
GAS LINE	—G—	—G—
WATERLINE	—W—	—W—
SANITARY SEWER	—SS—	—SS—
STORM SEWER	=====	=====
FENCE	—X—X—X—	—X—X—X—
CONTOURS	(100)	—100—
UTILITY POLE	•	•
SANITARY MANHOLE	●	○
WATER VALVE	•	•
FIRE HYDRANT	•	•
CATCH BASIN	■	■
CONCRETE JOINTS	-----	-----
SAWCUT	-----	-----
TSCL	-----	-----
PERMANENT EASEMENT	-----	-----

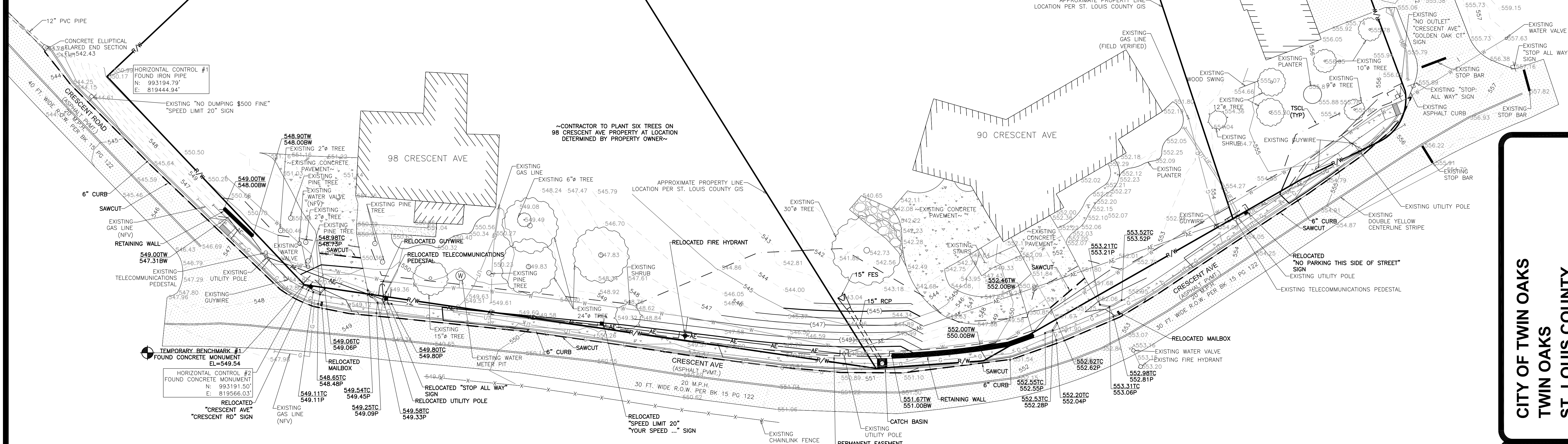
SPOT GRADE LEGEND	
TOP OF CURB	000.00TC
PAVEMENT ELEVATION	000.00P
TOP OF RETAINING WALL	000.00TW
BOTTOM OF RETAINING WALL	000.00BW

HORIZONTAL CONTROL POINTS			
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	FOUND IRON PIPE	993194.79	819444.94
2	FOUND CONCRETE MONUMENT	993191.50	819566.03

GRADING NOTES:

- Bearing referenced to Grid North of the Missouri Coordinate System 1983, East Zone per GPS observations utilizing the MODOT VRS RTK Network.
- Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans. Vertical datum used is NAVD 1988 per GPS observations utilizing MODOT VRS RTK Network.
- Temporary Benchmark No. 1—Concrete Monument
Elevation = 549.54
- This site scales within Zone X, as per Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 29189C0292K dated 2/4/2015.
- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the paved surface. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installations.
- All un surfaced areas are to receive six inches of topsoil. Contractor to seed, mulch, fertilize, water, and maintain all areas outside of paved areas that were disturbed during construction until an acceptable stand of grass is established. Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- The contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to the Erosion and Sediment Control Plan throughout construction.
- The Contractor shall maintain the site in a well-drained manner in order to assure the shortest possible drying time after each rainfall. This will mean that pumping of standing water in low areas on the site will most likely be required during construction. Also pumping of ground water in utility trenches and deep excavations will be required during construction.
- The sitework for this project shall meet or exceed the "Site Specific Specifications".
- All survey monuments disturbed during construction shall be replaced by a surveyor licensed in the state, in which this project is located, at the Contractors expense.
- The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the contractor.
- Due to seasonal variations in rainfall and the groundwater level, the Contractor may be required to use light earth moving equipment to minimize pumping.
- The Contractor shall grade all areas to drain in order to prevent ponding water. The minimum allowable slope on all paved surfaces shall be 1 percent.
- Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify the BFA and appropriate modifications will be issued.

EASEMENTS		
ADDRESS	EASEMENT TYPE	SQUARE FOOTAGE
2 GOLDEN OAK	PERMANENT EASEMENT	528
	TEMPORARY SLOPE CONSTRUCTION LICENSE	1,156
90 CRESCENT AVE	PERMANENT EASEMENT	389
	TEMPORARY SLOPE CONSTRUCTION LICENSE	3,037
98 CRESCENT AVE	PERMANENT EASEMENT	233
	TEMPORARY SLOPE CONSTRUCTION LICENSE	4,946



**CITY OF TWIN OAKS
TWIN OAKS
ST. LOUIS COUNTY
MISSOURI, 63088**

DRAWN	J.E.L., C.M.B.
CHECKED	T.S.C.
DATE	08/11/2021
SCALE	1" = 30'
JOB No.	3497-13A
SHEET NAME	GRADING PLAN
	GR-1

**PRELIMINARY DRAWING
FOR
CITY WORKSHOP ON 8/18/2021
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION**

bfoeng.com TELEPHONE: (636) 239-4751

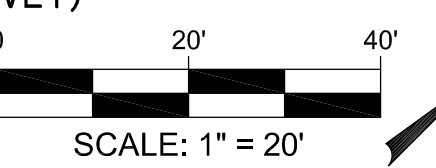
103 ELM STREET WASHINGTON, MISSOURI 63090

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.

TOPOGRAPHIC SURVEY/ DEMOLITION PLAN

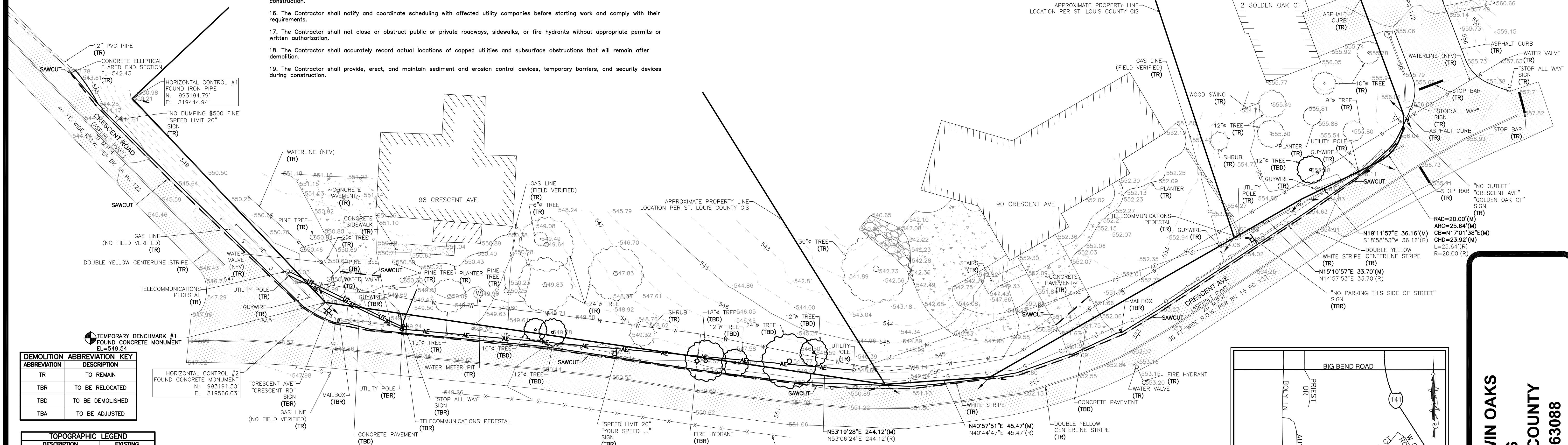
(THIS IS NOT A BOUNDARY SURVEY)



TOPOGRAPHIC SURVEY NOTES:

- The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
 - Bearing referenced to Grid North of the Missouri Coordinate System 1983, East Zone per GPS observations utilizing the MODOT VRS RTK Network.
 - Field work was completed on this site by Buescher Frankenberg Associates, Inc. on October 27, 2020.
 - (M) Indicates measured outboundary information obtained by BFA, Inc.
 - (R) Indicates recorded outboundary information as Village of Twin Oaks, Missouri Street Boundary Map by P.H. WEIS & Associates Incorporated dated 9/1/00.
 - Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
- Vertical datum used is NAVD 1988 per GPS observations utilizing MoDOT VRS RTK Network.
- Temporary Benchmark No. 1 - Concrete Monument
Elevation = 549.54
- This site scales within Zone X, as per Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 29189C0292K dated 2/4/2015.
 - Water service to this site is provided by Missouri-American Water Company.
 - Sanitary sewer service to this site is provided by Metropolitan St. Louis Sewer District, at time of survey.
 - Electrical service to this site is provided by Ameren, at time of survey.
 - Telephone service to this site is provided by AT&T, at time of survey.
 - Natural gas service to this site is provided by Spire, at time of survey.
 - Existing storm sewers, that were accessible at the time field work was completed, appeared to be in fair condition.
 - This site is within the St. Louis County District of the Missouri Department of Transportation. The DOT contact for this site is Tom Blair, P.E.
 - Existing curbs are asphaltic along asphalt paved areas with a height of 3".
 - The Contractor shall conform to all applicable State and local codes for demolition of structures, safety of adjacent structures, dust control, and sediment and erosion control during construction.
 - The Contractor shall verify that all required permits and licenses from appropriate authorities have been obtained prior to construction.
 - The Contractor shall notify and coordinate scheduling with affected utility companies before starting work and comply with their requirements.
 - The Contractor shall not close or obstruct public or private roadways, sidewalks, or fire hydrants without appropriate permits or written authorization.
 - The Contractor shall accurately record actual locations of capped utilities and subsurface obstructions that will remain after demolition.
 - The Contractor shall provide, erect, and maintain sediment and erosion control devices, temporary barriers, and security devices during construction.

- The Contractor shall protect existing landscaping materials, appurtenances, and structures, which are not to be demolished. Any damage caused by demolition operations shall be repaired by the Contractor at no cost to Owner.
- The Contractor shall protect and maintain in a safe and operable condition utilities that are to remain. The Contractor shall prevent interruption of existing utility service to occupied or used facilities, except when authorized in writing by authorities having jurisdiction. The Contractor shall provide temporary services during interruptions to existing utilities as acceptable to governing authorities and Owner.
- The Contractor shall notify adjacent owners of work that may affect their property, potential noise, utility outages or disruptions.
- Completely fill below grade areas and voids resulting from demolition or removal of structures, underground fuel storage tanks, wells, cisterns, etc., using approved select fill materials consisting of stone, gravel, and sand. Fill materials shall be free from debris, trash, frozen materials, roots, and other organic matter.
- No burning of any material, debris, or trash on-site or off-site will be allowed, except when allowed by appropriate governing authority and Owner. Any permits required for doing so shall be obtained by the Contractor.
- All items noted "to be adjusted" shall be raised or lowered to match the new grade indicated or flush with the surrounding pavement. (i.e. manhole rims, valve covers, grates, etc.)
- Unless noted otherwise, utilities designated to be removed shall be removed in their entirety. Trenches shall then be backfilled and compacted as per the sitework specifications.
- Should hazardous materials be found during demolition operations, the Contractor shall notify the owner and all governing agencies, if necessary, and conform to all applicable regulatory procedures.
- The Contractor shall provide, install, and maintain traffic control at all times during construction. This includes signs, barriers, construction fencing, striping, etc. necessary to safely control site traffic.
- The Contractor shall keep the premises clean and free of debris during construction.
- The fire protection for the site shall remain in service at all times during construction.
- All survey monuments disturbed during construction shall be replaced by a licensed land surveyor, licensed in the state where this project is located.
- The edges of all pavement and curb sections to be removed shall be saw cut. Remaining pavement and curb sections shall have smooth, clean edges.
- The sitework for this project shall meet or exceed the "Site Specific Specifications".
- The contractor shall maintain the site in a well-drained manner in order to assure the shortest possible drying time after each rainfall. This will mean that pumping of standing water in the low areas on the site may be required during construction.
- The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.



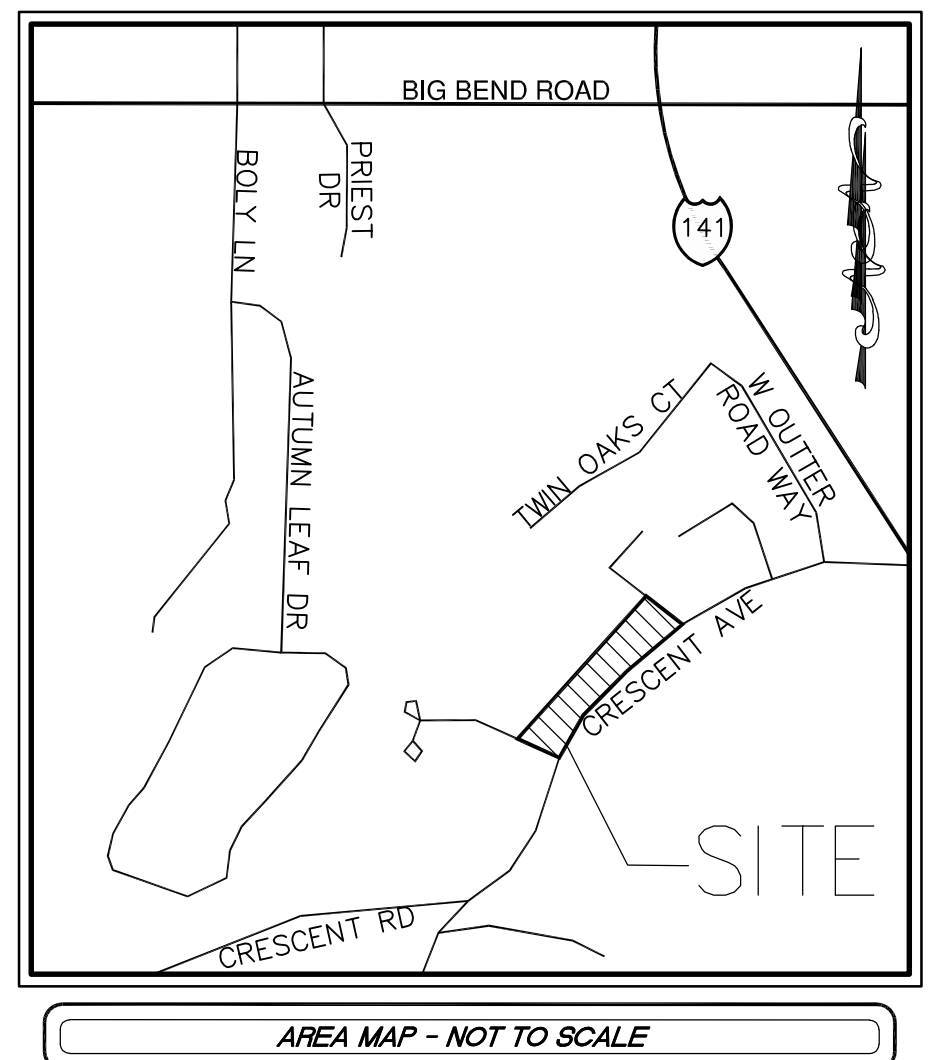
DEMOLITION ABBREVIATION KEY	DESCRIPTION
TR	TO REMAIN
TBR	TO BE RELOCATED
TBD	TO BE DEMOLISHED
TBA	TO BE ADJUSTED

TOPOGRAPHIC LEGEND	
DESCRIPTION	EXISTING
AERIAL ELECTRIC	AE
UNDERGROUND ELECTRIC	UE
UNDERGROUND TELEPHONE	UT
GAS LINE	G
WATERLINE	W
FLOWLINE	FL
SANITARY SEWER	SS
STORM SEWER	SS
FENCE	FX
CONTOURS	100
UTILITY POLE	U
SANITARY MANHOLE	O
WATER VALVE	V
FIRE HYDRANT	H
CATCH BASIN	B
CONCRETE JOINTS	J

HORIZONTAL CONTROL POINTS			
POINT NUMBER	DESCRIPTION	NORTHING	EASTING
1	FOUND IRON PIPE	993194.79	819444.94
2	FOUND CONCRETE MONUMENT	993191.50	819566.03

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.



CITY OF TWIN OAKS
TWIN OAKS
ST. LOUIS COUNTY
MISSOURI, 63088

DRAWN
J.E.L.
CHECKED
T.S.C.
DATE
08/11/2021
SCALE
1"=20'
JOB No.
3497-13A
SHEET NAME
TOPOGRAPHIC
SURVEY/DEMOLITION
PLAN

TS/DM-1

**PRELIMINARY DRAWING
FOR
CITY WORKSHOP ON 8/18/2021
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION**

bfoeng.com TELEPHONE: (636) 239-4751

103 ELM STREET WASHINGTON, MISSOURI 63090

Crescent Ave Sidewalk - Phase I

Preliminary Plans

BFA Project No. 3497-13A

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
Mobilization	1	LS	\$ 3,000.00	\$ 3,000.00
Traffic Control	1	LS	\$10,000.00	\$ 10,000.00
Temporary Erosion Control	1	LS	\$ 3,000.00	\$ 3,000.00
Demolition				
Tree Removal 10"-24" diameter	7	EACH	\$ 500.00	\$ 3,500.00
Shrub Removal	1	EACH	\$ 80.00	\$ 80.00
Pavement Driveway	87	SY	\$ 15.00	\$ 1,305.00
Pavement Roadway	65	SY	\$ 15.00	\$ 975.00
To Be Relocated				
Mailbox	2	EACH	\$ 200.00	\$ 400.00
Signs	4	EACH	\$ 150.00	\$ 600.00
Guy Wire Adjusted Due to Grading	3	EACH	\$ 1,500.00	\$ 4,500.00
Utility Pole to be Adjusted Due to Grading	3	EACH	\$ 1,500.00	\$ 4,500.00
Utility Pole & Guy Wire	1	EACH	\$ 8,500.00	\$ 8,500.00
Fire Hydrant	1	EACH	\$ 3,000.00	\$ 3,000.00
Telecommunications Pedestal Adjusted	1	EACH	\$ 1,500.00	\$ 1,500.00
Telecommunications Pedestal	1	EACH	\$ 2,175.00	\$ 2,175.00
Sitework				
4' Concrete Sidewalk (4" thick)	275	SY	\$ 58.00	\$ 15,950.00
Seeding/Sodding	475	SY	\$ 3.00	\$ 1,425.00
Earthwork, Import Fill	40	CY	\$ 15.00	\$ 600.00
Earthwork, Cut & Fill Rotation	175	CY	\$ 5.00	\$ 875.00
Truncated Dome	2	EACH	\$ 200.00	\$ 400.00
Driveway Sawcut	37	LF	\$ 10.00	\$ 370.00
Rebuild Concrete Driveway	60	SY	\$ 43.00	\$ 2,580.00
2' Tall Retaining Wall	90	LF	\$ 105.00	\$ 9,450.00
Concrete Curb	660	LF	\$ 23.00	\$ 15,180.00
Curb Catch Basin	1	EACH	\$ 4,100.00	\$ 4,100.00
Stormsewer - 15" RCP	28	LF	\$ 50.00	\$ 1,400.00
15" FES	1	EACH	\$ 850.00	\$ 850.00
Roadway				
Striping	660	LF	\$ 1.00	\$ 660.00
Sawcut	660	LF	\$ 10.00	\$ 6,600.00
Concrete Roadway	660	LF	\$ 5.00	\$ 3,300.00
SUBTOTAL				\$ 110,775.00
Contingency due to preliminary	10%			\$ 11,077.50
Inflation	20%			\$ 22,155.00
CONSTRUCTION TOTAL				\$ 144,008

1. This based on Preliminary Plans dated 8/11/2021.

2. An approximate 20% inflation cost is anticipated based on observations on recent projects.

August 13, 2021

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

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

Mr. Johnson,

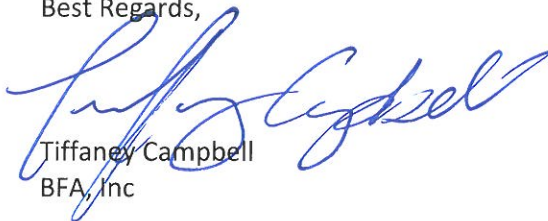
The proposed sidewalk is located along the west of side Crescent Ave from Golden Oak Ct to Crescent Road and is approximately 560-feet long. The project consists of constructing a 4-foot wide sidewalk, 6-inch curb and stormwater improvements at 90 Crescent Ave. Below is a summary of the estimated cost for the project.

Construction Cost Estimate	\$144,008
Public Involvement and Concept Plans	\$16,500
Engineering Services for Design and Bid Assistance	\$26,100
Survey Services for Right of way, TSCL, & License to Utilize Easement	\$10,350
Construction Observation Services	\$9,700
<hr/>	
Total Project Cost	\$206,658
Total Spend as of August 6, 2021	<u>\$(23,218.85)</u>
Total Future Project Cost	\$183,439.15

This does not include the following:

- Purchase of Right-of-way
- Coordination and negotiation of Right-of-way Acquisition
- Construction testing

Best Regards,


Tiffany Campbell
BFA, Inc

Enclosed
Construction Cost Estimate
Proposal for Engineering Services
Proposal for Survey Services
Proposal for Construction Observation Services

August 12, 2021

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

RE: Proposal for Engineering Services – Stormwater and Sidewalk Improvement Project
Crescent Ave (Golden Oak Ct to Crescent Rd)
BFA #3497-13A

Mr. Johnson,

BFA, Inc. (BFA) is submitting this proposal to provide Professional Engineering and Surveying Services for the above-referenced project. As shown in Concept Plan D, dated 4-2-21 and approved on 5-5-21, the proposed 0.11-mile sidewalk and stormwater improvements include the following:

- New 4-foot-wide sidewalk along the west side of Crescent Ave
- New 6-inch tall curb with 1-foot wide concrete shoulder
- Stormwater improvement at 90 Crescent Ave
- This scope does not include grade changes to the road

BFA's general scope of work is to prepare plans and bid documents for the project. For this scope of work, **BFA's estimated fee is \$26,100.**

The section below provides a general listing of the anticipated services and deliverables to be provided by BFA. Client-desired items not listed below should be **clarified in writing**, to prevent conflicts of anticipated scope and fees during the project.

Survey Services

BFA completed the fieldwork as part of the public involvement portion of the project.

Preparation of Preliminary Design Improvement Plans (\$6,500)

This estimated fee includes work that is partially complete.

BFA will begin developing design plans of the proposed improvements based on Concept Plan D. The proposed improvements will be periodically shared and discussed with city staff for review and comment. BFA will prepare a preliminary Cost Estimate of the proposed site improvements. Anticipated tasks are as follows:

- Develop Preliminary Improvement Plans. Anticipated plan sheets: Cover Sheet, Topographic Survey/Demolition Plan, Grading Plan
- City Workshop Meeting with City Board to discuss preliminary plans (1 meeting included)
- Revise Preliminary Improvement Plans based on city comments (1 set of comments included)
- Prepare a Preliminary Cost Estimate of Proposed Improvements

Permits and Regulatory Requirements (\$5,000)

Preparation of Plans, Specifications, and Applications to apply for a St. Louis County Land Disturbance Permit. Anticipated tasks to be completed are as follows:

- Prepare Erosion and Sediment Control Plans and Details for County Review
- Revise Erosion and Sediment Control Plans per County comments (3 sets of comments included)
- Obtain St. Louis County Land Disturbance Permit (City is responsible for signatures and permitting fees)

Preparation of Final Plans and Specifications (\$6,500)

Final Plans and Sitework Specifications will be prepared for bidding purposes, along with a cost estimate of the Final Site Improvements. The Final Plans and Documents will be provided to the City in .pdf format and one full-size hard copy. Anticipated tasks associated with the preparation of Final Plans and Specifications are as follows:

- Develop Final Signed and Sealed Improvement Plans. Anticipated plan sheets: Cover Sheet, Topographic Survey/Demolition Plan, Grading Plan, Site Plan/Utility Plan, Detail Sheets
- Prepare Sitework Specifications
- Prepare a Final Cost Estimate of Improvement Plans
- City Workshop Meeting with the City Board to discuss final plans (1 meeting included)

Preparation of Contract Documents (\$4,500)

Once the Final Plans are prepared, we will prepare the contract documents and bid advertisement. We will assist the City in advertising the project to interested bidders. Anticipated tasks are as follows:

- Attend a Pre-Bid Meeting with the City and interested Bidders
- Contact Contractors and give notice of Bid Advertisement
- Bid Administrator Assistance, which includes preparing contract documents
- Attend the Bid Opening with the City and interested bidders
- Prepare Bid Tabs and Recommendation

Utility Coordination (\$4,000)

This estimated fee includes work that is partially complete.

Once the topographic survey is completed, BFA will verify the survey with utility companies. Once plans are 70% complete, BFA will coordinate potential utility relocations. Anticipated tasks are as follows:

- Coordinate with utility companies to verify utility locations
- Make alterations to plan sheets per utility company comments
- Coordinate with utility companies to relocate utilities

BFA's proposed fee does not include the following services and/or items. Should the City wish for any of the below items to be included, we can provide these services and negotiate the associated fee(s):

- Geotechnical Services
- Environmental Services
- This proposal includes addressing one set of City comments with plan modifications. Should major plan revisions be requested after the preparation of the Design Improvements, additional fees may be incurred.
- This proposal includes two City meetings. Should additional meetings be requested, additional fees may be incurred (Estimated fee \$1000/meeting).

The City of Twin Oaks will be billed monthly on a time and materials basis. Reimbursable printing, mileage, permit fees, etc. will be billed at cost to BFA without any markup and are not included in our proposed Engineering and Surveying Fee proposal. BFA shall obtain written approval from the City before performing any work that is outside of the scope of the project.

Please provide formal authorization for us to begin work on this project by signing below and returning this document to us. BFA's proposal and fees for this project shall remain applicable for 60 days after execution by BFA below.

We are excited about the opportunity to work with the City on this project. Please feel free to contact us at any time should you have questions about our services and/or this proposal.

Best regards,

Tiffany Campbell
Project Manager
BFA, Inc.
Direct: 636.231.4319
tcampbell@bfaeng.com

Date

CLIENT ACCEPTANCE OF PROPOSAL FOR PROFESSIONAL SERVICES

BFA Inc. Authorization:

Client Authorization:

Raymond H. Frankenberg II
President

Name: Russ Fortune
Title: Mayor

Date

Date

August 12, 2021
City of Twin Oaks
1381 Big Bend Road
Twin Oaks, MO 63021
Attn: Frank Johnson, City Clerk

RE: Proposal for Survey Services – Stormwater and Sidewalk Improvement Project
Crescent Ave (Golden Oak Ct to Crescent Rd)
BFA #3497-13A

Mr. Johnson,

BFA, Inc. (BFA) is submitting this proposal to provide Professional Surveying Services for the above-referenced project. BFA's general scope of work is to determine the location of the existing right-of-way along the property being affected by the proposed sidewalk and stormwater improvements, then determine areas of Right-of-Way encroachments for the future sidewalk. For this scope of work, **BFA's estimated fee is \$10,350.**

The section below provides a general listing of the anticipated services and deliverables to be provided by BFA. Client-desired items not listed below should be **clarified in writing**, to prevent conflicts of anticipated scope and fees during the project.

Phase I - Locate Right-of-Way based on Existing Surveys (\$2,400)

Estimate Fee: \$800/parcel

- BFA to obtain plats and deeds, this scope includes fees to purchase documents
- Review available plats and deeds
- Fieldwork to locate property corners (survey monuments, iron rods, etc)
- Prepare a Preliminary Exhibit, which includes critical existing features such as roadway, driveways, fences, slope, etc. and the Right-of-Way Dedication and Temporary Slope
- Include dimensions from the existing road to the right-of-way to easily locate the right-of-way

Phase II – Stakeout Right-of-Way lines (\$750)

Estimated Fee: \$250/parcel

- Set laths at property corners along Right-of-Way
- Set laths every 50 to 75 feet for the existing and proposed Right-of-Way

Phase III – Right-of-Way Acquisition (By Others)

- Present Preliminary Boundary Adjustment Survey and stakeout of the Existing and Proposed Right-of-Way to the Property Owner
- Negotiate cost and conditions of purchase with property Owner
- Obtain Owner's signature for purchase of property
- City to provide documents to be signed by Owner

Phase IV – Right of Way Dedication and Temporary Slope Construction License Exhibit (\$2,700)**Estimated Fee: \$900/parcel**

- Adjust property lines to widen the Right-of-Way
- Prepare Final Exhibit
- This includes recording fees
- This does not include a legal Description (Estimated Fee \$100/parcel)
- This does not include setting pins at property corner for each lot (Estimated Fee \$250/parcel)

Phase V – License to Utilize Easement (\$4,500)**Estimated Fee: \$1500/parcel**

- BFA to obtain letter report from the title company, this includes fees to purchase documents (not to exceed \$150/parcel)
- Prepare License to Utilize Easement Exhibit
- Coordinate with utility companies to obtain signatures

The City of Twin Oaks will be billed monthly on a time and materials basis. Reimbursable printing, mileage, permit fees, etc. will be billed at cost to BFA without any markup and are not included in our proposed Engineering and Surveying Fee proposal. BFA shall obtain written approval from the City before performing any work that is outside of the scope of the project.

Please provide formal authorization for us to begin work on this project by signing below and returning this document to us. BFA's proposal and fees for this project shall remain applicable for 60 days after execution by BFA below.

We are excited about the opportunity to work with the City on this project. Please feel free to contact us at any time should you have questions about our services and/or this proposal.

Best regards,

Tiffany Campbell
Project Manager
BFA, Inc.
Direct: 636.231.4319
tcampbell@bfaeng.com

Date

CLIENT ACCEPTANCE OF PROPOSAL FOR PROFESSIONAL SERVICES

BFA Inc. Authorization:

Client Authorization:

Raymond H. Frankenberg II
President

Name: Russ Fortune
Title: Mayor

Date

Date

August 12, 2021

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

RE: Proposal for Construction Observation Services - Stormwater and Sidewalk Improvement Project
Crescent Ave (Golden Oak Ct to Crescent Rd)
BFA #3497-13A

Mr. Johnson,

BFA, Inc. (BFA) is submitting this proposal to provide Construction Observation Services for the above project. BFA's general scope of work is to provide construction observations and inspections. For this scope of work, **BFA's estimated fee is \$9,700.**

The section below provides a general listing of the anticipated services and deliverables to be provided by BFA. Client-desired items not listed below should be **clarified in writing**, to prevent conflicts of anticipated scope and fees during the project.

Project Construction Observation (\$9,700)

A BFA Field/Construction Technician will complete the following anticipated tasks:

- Attend Pre-Construction Meeting at the project site. Provide clarification and direction to construction questions the awarded contractor might have. **(\$750)**
- Respond to Client Project Manager and Contractor on construction and site questions that develop during construction. **(\$1,000)**
- Conduct periodic site visits to observe that constructed work conforms to the contract documents. Provide two site visits per week of approximately 2 hours on-site per visit. This scope assumes a Construction duration of 5 weeks, for a maximum of 10 site visits **(\$4,000)**
- Check shop drawings and review schedules submitted by the Contractor. **(\$350)**
- Review material certifications provided by the Contractor. **(\$350)**
- Maintain progress diary of work performed, document schedule, and schedule changes proposed/made by the Contractor. Provide a brief weekly summary for the City of Twin Oaks. **(\$1,500)**
- Participate in final inspection and prepare an as-built plan of the Crescent Ave Sidewalk Improvements. **(\$1,750)**
- This scope does not include testing services for the concrete

The City of Twin Oaks will be billed monthly on a time and materials basis. Reimbursable printing, mileage, permit fees, etc. will be billed at cost to BFA without any markup and are not included in our proposed Engineering and Surveying Fee proposal. BFA shall obtain written approval from the City before performing any work that is outside of the scope of the project.

Please provide formal authorization for us to begin work on this project by signing below and returning this document to us. BFA's proposal and fees for this project shall remain applicable for 60 days after execution by BFA below.

We are excited about the opportunity to work with the City on this project. Please feel free to contact us at any time should you have questions about our services and/or this proposal.

Best regards,

Tiffany Campbell
Project Manager
BFA, Inc.
Direct: 636.231.4319
tcampbell@bfaeng.com

Date

CLIENT ACCEPTANCE OF PROPOSAL FOR PROFESSIONAL SERVICES

BFA Inc. Authorization:

Client Authorization:

Raymond H. Frankenberg II
President

Name: Russ Fortune
Title: Mayor

Date

Date

August 23, 2021

Frank Johnson
City Clerk/Administrator
City of Twin Oaks

RE: Right of Way Acquisition Services
Crescent Avenue

Dear Mr. Johnson;

Thank you for contacting O. R. Colan Associates (ORC) about submitting a proposal to provide right of way acquisition services for three parcels specifically known as 98 Crescent Avenue, 90 Crescent Avenue, and 2 Golden Oak Court.

The following Scope of Work and Cost Proposal are based upon the information we have received on the project and our understanding of the project as of today. Included in our understanding is that there is a possibility of federal funds being used in some, or all, of the project. Based upon this possibility, ORC's proposal anticipates needing to follow the requirements of 49 CFR Part 24 Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs in addition to the laws and regulations of the State of Missouri.

Each section below indicates the cost proposal for that section with additional information attached.

Title Work

Since Permanent Easements are to be acquired from all three properties, we recommend obtaining title reports on each parcel. These title reports will provide information on ownership, liens and other information which may affect the negotiations or the property owner's ability to transfer the needed property rights.

Cost for Title Reports: 3 reports @ \$425 each = \$1275

This price proposal does not include copies of documents. If document copies are needed, they will be invoiced at cost.

Valuation Services

Based upon our review of the situation, it appears the valuation problem on two of the properties (90 Crescent Avenue & 2 Golden Oak Court) is uncomplicated and the anticipated value of the proposed acquisitions is estimated at less than \$10,000. Due to this situation, these two properties can be valued using the Waiver Valuation/Payment Estimate method.

The property located at 98 Crescent Avenue involves considerably more property and a number of trees, all of which adds to the complexity of the valuation problem. Due to this situation this parcel will be valued by an appraiser utilizing the Value Finding Appraisal Format and upon completion this report will be reviewed by a separate appraiser.

Cost for Valuations: 2 Payment Estimates @ \$400 each = \$800
1 Value Finding Report @1,800 = \$1,800
1 Value Finding Review @ \$900 = \$900

Negotiations

*ORC shall negotiate acquisitions in accordance with the MoDOT LPA Manual, the Uniform Act, and the laws of the State of Missouri. This may include but it not limited to the following: Describing the acquisition, referencing plats, and explaining construction, project schedule and other details. Clearly explain details related to the appraisal and how the offer was developed as well as answering valuation questions.

*ORC shall prepare all necessary documents for review and signature by the City of Twin Oaks (City). The only offer allowed is that approved by the City. ORC may not present any counteroffer or agree to any plan revisions without the expressed permission of the City. ORC shall relay all concerns, counter offers or issues to the City.

*When negotiations result in an agreement for approved fair market value or a City approved administrative settlement, ORC shall prepare the necessary documents and secure signatures from the owner or their representative.

*Upon reaching a settlement with the property owner, ORC will process for payment. On a case-by-case basis the City will need to provide direction as to whether the closing should take place at a title company with the title company obtaining deeds of release or if the City is comfortable with simply recording the deeds. If a property is closed at a title company, ORC will facilitate the closing with the title company. The title company costs will be a pass through and are not included in this proposal. If the decision is made to record the deeds, ORC will handle the recording. The Recording fees will be a pass-through cost and are not included in this proposal.

*Should negotiations not result in a settlement and there is a need for a condemnation action, ORC shall provide a copy of the parcel file to the City.

*At a minimum, ORC will take the following actions on each right of way parcel to be acquired for the project: Deliver acquisition brochure, plan pages, offer letters, and unsigned transfer documents. These will be delivered by either personal contact, certified mail or other method as approved by the City. ORC will maintain a negotiator's log of contacts with property owners which will indicate efforts to achieve amicable settlements, responsiveness to owner's counter proposals and suggestions for changes to the plans.

Cost for Negotiations: 3 parcels @\$2,000 per parcel = \$6,000

ORC will invoice \$1,000 for each parcel at the initiation of negotiations and will invoice for the balance on each parcel at the earliest of (1) the owners sign to sell, (2) the parcel is submitted for condemnation or (3) the parcel is removed from the project. ORC will not invoice more than once per month.

Project Management

Project Management involves oversight of the right of way acquisition process on the project including supervision of subcontractors and staff, quality control and providing regular written status reports on the project.

3 parcels @ \$300 each = \$900

ORC will invoice \$1500 for each parcel at the initiation of negotiations and will invoice for the balance on each parcel at the earliest of (1) the owners sign to sell, (2) the parcel is submitted for condemnation or (3) the parcel is removed from the project. ORC will not invoice more than once per month.

Cost Proposal Summary

Cost for Title Reports: 3 reports @ \$425 each = \$1275
Cost for Payment Estimates: 2 @ \$400 each = \$800
Cost for Value Finding Report: 1 @ \$1,800 = \$1,800
Cost for Value Finding Report Review: 1 @ \$900 = \$900
Cost for Negotiations: 3 parcels @ \$2,000 per parcel = \$6,000
Cost for Project Management: 3 parcels @ \$300 each = \$900

Total Cost Proposal: \$11,675

Other

The following items are not included in the above cost proposal and will be provided by others, in a timely manner, if required:

- *Plats & Legal Descriptions
- *Surveys
- *Property purchase payments and closing & related fees including recording fees, title insurance, closing services and partial deeds of release.
- *Property management & maintenance
- *Environmental services
- *Condemnation activities

Thank you for the opportunity to provide this proposal and please do not hesitate to contact me with any questions.

Sincerely,



Daryl Knobbe
Vice-President



Frank Johnson <fjohnson@cityoftwinoaks.com>

ROW Negotiation for the City of Twin Oaks

Daryl Knobbe <dknobbe@orcolan.com>
To: Frank Johnson <fjohnson@cityoftwinoaks.com>
Cc: Randy Higginbotham <jhigginbotham@orcolan.com>

Tue, Aug 24, 2021 at 8:35 AM

Thanks Frank,

As to an estimated schedule, please see the following:

Day 1 – Notice to Proceed

Day 1 to Day 75 – Valuations and Review of Valuations

Day 60 to Day 90 – Extend offers to property owners

Day 60 to Day 150 – Negotiations complete or parcels submitted for condemnation

The two main items that I anticipate will affect this schedule are the workload of the appraisers at the time the work is assigned to them and how receptive the property owners are to the project, the affect on their property and the compensation offered to them. Appraisers have been extremely busy so they may not be able to start work on this project immediately after it is assigned.

This schedule also assumes we will be supplied with the title work, legal descriptions and plans at Notice to Proceed.

Let me know if you have any questions.

[Quoted text hidden]

Memo to: Board of Aldermen
From: Frank Johnson, City Clerk
Subject: Crescent Road Sidewalk Project
Date: August 12, 2021

Below is an updated schedule for the Crescent Road Sidewalk Project from BFA. This assumes that the board approves the preliminary plan with no additional revisions and sets a budget framework at the Sept. 1 Board meeting.

This is a conservative timeline. The project could possibly be finished sooner, with one of the biggest factors being how quickly the City is able to complete the right-of-way acquisition.

1. BFA to gather field data and prepare a topographic survey of the project area.
Grading plan, topographic survey, site plan and cost estimate delivered Jan. 8, 2021.
 - a. These plans were discussed at a Jan. 15 work session. BFA was directed to prepare revised plans.

2. BFA to prepare Concept Plan for City Approval. City to provide feedback and comments.
Concept Plan Approved on May 19, 2021.
 - a. Three variations of the plan (concepts A, B and C) were delivered on Feb. 12 and discussed by the board at a Feb. 17 work session. The board directed BFA to prepare versions of Concept Plan A and Concept Plan C that could be presented to residents.
 - b. Versions of Concept Plan A and Concept Plan C without labels were delivered on Feb. 23.
 - c. Meetings held with homeowners on March 1 and March 2. The Board discussed the feedback from these meetings on March 3 and directed BFA to make several revisions to the concept plan.
 - d. Concept Plan D was delivered on April 2. The Board reviewed the plan during a work session on April 7.
 - e. Open House on the Concept Plan was held on April 19.
 - f. Concept Plan approved and design work authorized on May 19.

3. BFA to prepare Preliminary Design and Layout: Duration 6 to 12 weeks
Currently at this Stage. Preliminary Design delivered Aug. 11, 2021.
 - a. BFA has started utility coordination and prepared Preliminary Design for City review and comment along with updated cost estimates.
 - b. City to approve preliminary plans and allocate funds for 2021 and 2022 budgets.

4. City Right-of-way Acquisition: Duration 16 to 20 weeks
Estimated Delivery Date: Dec. 22, 2021 to Jan. 19, 2022
 - a. BFA to obtain plats and deeds and perform field work to locate property corners. (4 to 6 weeks)
 - b. BFA to prepare preliminary right-of-way exhibit. City to engage firm for negotiating with property owners (8 to 12 weeks).
 - c. BFA to stake out right-of-way lines. Negotiator to meet with property owners. City to come to agreement with property owners for right-of-way acquisition. City Attorney to draft agreement. (8 weeks)
 - d. BFA to obtain letter report from title company and work with City attorney on easement agreements with utilities, if needed.

6. BFA to prepare Final Design and Prepare Bid Documents: 6 to 8 weeks (was 4 to 6)
Estimated Delivery Date: March 2 to March 16, 2022

6. Bidding Period: Duration 4 to 6 weeks
Estimated End of Bidding Period: April 13 to April 27, 2022

7. Construction begins 2 to 4 weeks later
Construction Start Date: May 11 to May 25, 2022

8. Construction: Duration 60 to 90 Days
Construction End Date: July or August 2022