



AGENDA
CITY OF CREVE COEUR
STORMWATER SUBCOMMITTEE
CITY COUNCIL CHAMBERS
APRIL 10, 2024
4:00 PM

CALL TO ORDER

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

1. March 20, 2024 (Draft)

UNFINISHED BUSINESS

2. Complete review of the HOA and individual cost-share applications

BUSINESS FROM STAFF

COMMENTS FROM THE GENERAL PUBLIC

NEXT MEETING DATE

ADJOURNMENT

Posted by: _____

Date/Time posted: _____

If you need special accommodations to attend a meeting, services may be arranged by contacting the Office of the City Administrator in advance.



**MINUTES
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM**

CALL TO ORDER

The meeting was called to order at 3:00 p.m.

ROLL CALL

Committee Chair Dick Kutta
Committee Member Patrick Brown
Committee Member Samantha Davies
Committee Member Mary Helen Gerst

Others Present: Director of Public Works Jim Heines, Assistant Director of Public Works/City Engineer Steven Berecz, Civil Engineer Dione Garson and Administrative Services Associate TaMara Pelkey.

APPROVAL OF AGENDA

APPROVAL OF MINUTES - None

UNFINISHED BUSINESS - None

BUSINESS FROM STAFF

Dione Garson gave an overview of the Stormwater Subcommittee Meeting presentation. The City has budgeted \$60,000 total for the Homeowners Associations application (HOA) which allows for two (2) projects a year with a reimbursement of up to \$20,000 for each approved project. Individual homeowner applications have a total of \$20,000, which allows up to four (4) projects a year with a reimbursement of up to \$5,000 for each approved project. Both categories reimburse 50% of installation costs up to the programs' maximum. Dick Kutta mentioned concerns regarding the City not paying until the work is approved and completed, possibly causing cash flow issues for HOA applicants. This concern would be addressed by CAO, Mark Perkins if it arises.

For the programs pilot year, the preferred solutions for the HOA category focused on maintenance of existing basins through dredging or removing debris, restoring outflow and inflow performance with pipe replacement, cleaning pipes and removing blockage. The Individual category, the first year of the program, will focus on maintenance or Best Management Practices (BMP's) such as grading, drainage improvements, rain gardens, bioswale vegetation and addressing erosion issues. As applications were received, Dione Garson and Steve Berecz did site visits and spoke on the phone with



MINUTES
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM

applicants and offered suggestions to strengthen their applications to be presented to the subcommittee for review.

1. Evaluate/discuss HOA stormwater cost-share application

HOA Application 1: Somerton Homeowner Association

Location: 811 Haverton Drive - Ward 4

The Somerton pond has two (2) corrugated metal pipes (CMP) that are collapsing, causing manhole surcharges and sinkholes. The Metropolitan Sewer District (MSD) does not take responsibility for the failing pipes.

The following questions/concerns were discussed by the committee:

- Flow and sizing concerns - MSD allows for maintenance repairs to the existing size. In order to increase the pipe size, MSD approval is required, and then the basin will be required to meet today's standards, which are more stringent. The proposed solution would be to replace pipes with a better material, such as Sanitite with granular bedding and rip rap/ stone revetment. The city does believe replacing the collapsing pipes is a good solution.
- One of the outflow pipes from the pond has been replaced.
- Dredging will eventually need to be done.
- The HOA prefers to use Kelpie Contracting for the repairs. They had used Kelpie before and were happy with the work.
- Concern that this repair may only be a partial fix and may solve a problem today, but concerned about outflow in the future.
- If there is additional work beyond what had been approved how is that addressed? As long as they have not used the maximum \$20,000, they can access the remainder with approval.

HOA Application 2: Golf View on the Green

Location: 590 Sarah Lane - Ward 2

The detention pond is required to satisfy MSD regulatory requirements being designed to be dry. The HOA decided to block a low-flow outlet to keep more water in the pond for aesthetic reasons. In 2020 MSD informed the HOA that blocking outflows to detain water was preventing the pond from functioning as required. The HOA complied with



MINUTES
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM

MSD, lowering the water level to create the required storage volume and chose to install fountain which failed. The City did suggest alternatives such as a grass lawn or planting native vegetation that were in accordance with the program, however the HOA wants a fountain.

The following questions/concerns were discussed by the committee:

- The concern is mosquitoes and water quality.
- Stabilization of the gabion rock baskets around the pond are a concern if they dredge and excavate to go deeper to allow a fountain.
- If the committee denies the application, would it be beneficial to propose further conversations on ideas for resubmittal next year.

Dick Kutta suggested that the cost-share wording for the pilot phase change the wording from stormwater detention basin too Best Management Practices (BMP) in the future.

2. Evaluate/discuss individual stormwater cost-share applications

Application 1: 2 Dielmann Farm Estates Drive - Ward 1

Water runoff from neighboring sites plus runoff from the homeowner's roof is ponding near the home, causing erosion near N Tealbrook Drive. The homeowner installed gutters. The homeowner's proposed solution would be to install gutter downspouts and a French drain to re-direct flows to a wooded area on the west side of the property.

Application 2: 42 Morwood Lane - Ward 2

Runoff from the site to the east causes' backyard flooding, erosion, damage to plants and damage to their residence. The homeowner has tried solutions in the past by installing a retaining wall with an erosion barrier and a catch basin, as well as installing a French drain and regrading. The homeowners' proposed solution would be to grade and install a rain garden with an atrium drain to direct flows to an underground basin.

Application 3: 12889 Nimes Drive - Ward 4

Excessive runoff from the sites to the north (upgrade) causes yard and structural flooding. The previous owners installed a French drain system that was not sized properly. The homeowners recently installed an egress window while renovating the



**MINUTES
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM**

basement. The window well fills with stormwater and floods the basement. The homeowner did install a pump in the window well that failed. City staff recommended checking the window well drain to make sure it is not blocked, as well as raising the window well lip and/or removing a raised stone planting bed that may be blocking flow from exiting the site. The homeowner's proposed solution is a properly sized French drain system. If approved, the existing outlet pipe for the window well will need to be either cut back or redirected to be at least 10 feet from the property line to comply with City Code.

Application 4: 828 Fernview Drive - Ward 4
Yard and structural flooding. The homeowner installed block walls at the front and rear of the house and re-graded the yard to slope always from the home. The previous owner installed a drain system that does not work. The homeowner's proposed solution is to install a French drain system with drywells. If approved existing outfall pipes will need to be cut back or redirected at least 10 feet from the property line to comply with City Code.

The discussion from the committee is that we want to avoid pushing the stormwater issue from one property to another. We need to find a solution using the preferred methods for the program to qualify. For next year's projects it was suggested that we hold a workshop explaining the preferred methods with pictures of solutions and frequently asked questions. Have applicants meet with staff and/or subcommittee members prior to submitting to offer preferred solutions to their stormwater issues. Installing French drains is not the preferred method of the Stormwater cost-share program requirements.

The subcommittee members will take home and review the documentation presented and score the applications. The scored applications will then be presented to the full Stormwater Committee, and the full Stormwater Committee will vote on which projects will be recommended to the City Council to be awarded funding.

COMMENTS FROM THE GENERAL PUBLIC



**MINUTES
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM**

NEXT MEETING DATE

The next Stormwater subcommittee meeting will meet at 4:00 p.m. on Wednesday, April 10, 2024, prior to the Stormwater committee meeting at 4:45 p.m. on Wednesday, April 10, 2024.

ADJOURNMENT

The meeting was adjourned at 4:19 p.m.

DRAFT



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 13, 2024

TO: Stormwater Cost-Share Program Subcommittee

CC: Jim Heines, Director of Public Works
Steve Bercz, P.E., Assistant Director of Public Works and City Engineer

FROM: Dione Garson, P.E., Civil Engineer

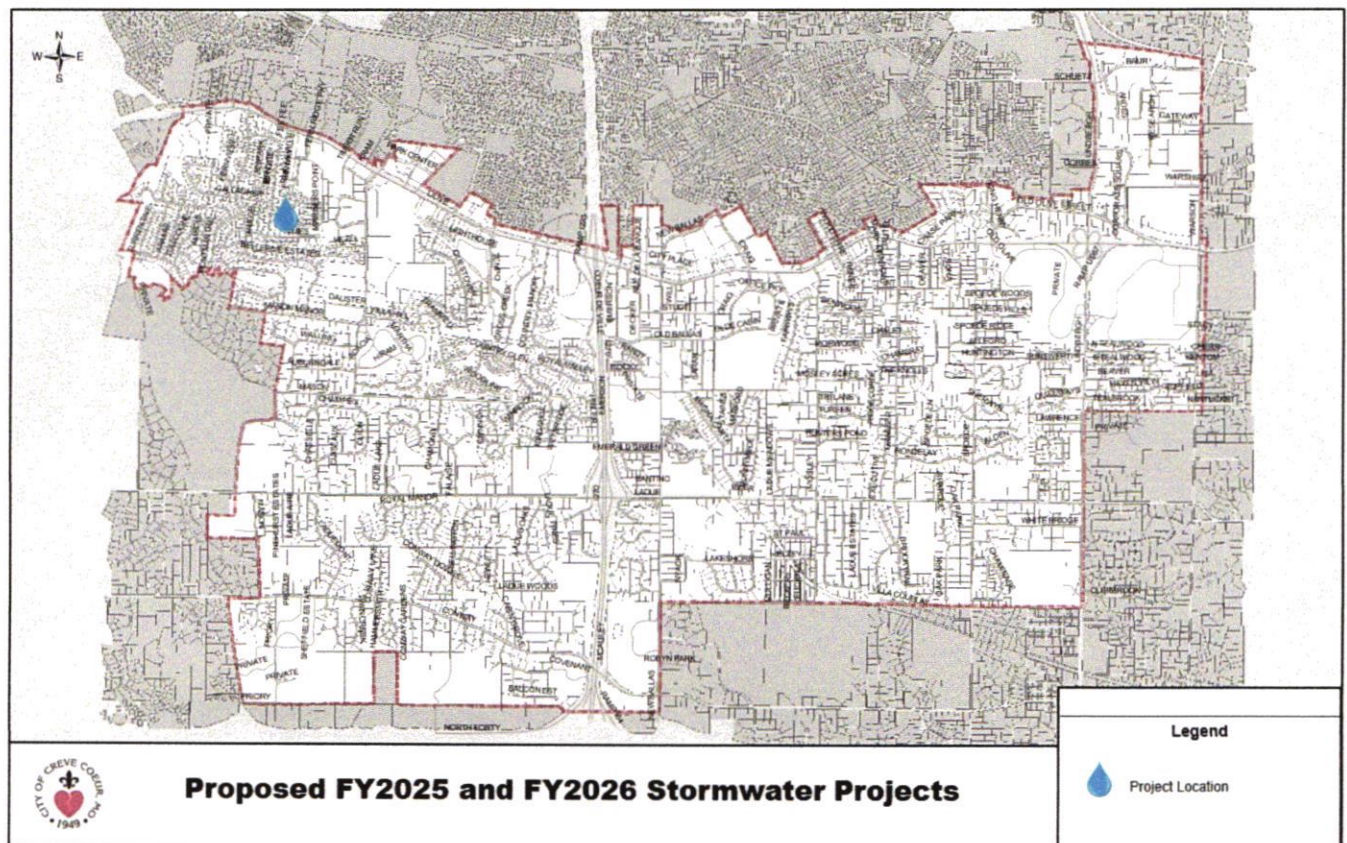
SUBJECT: Summary of 2024 Applications

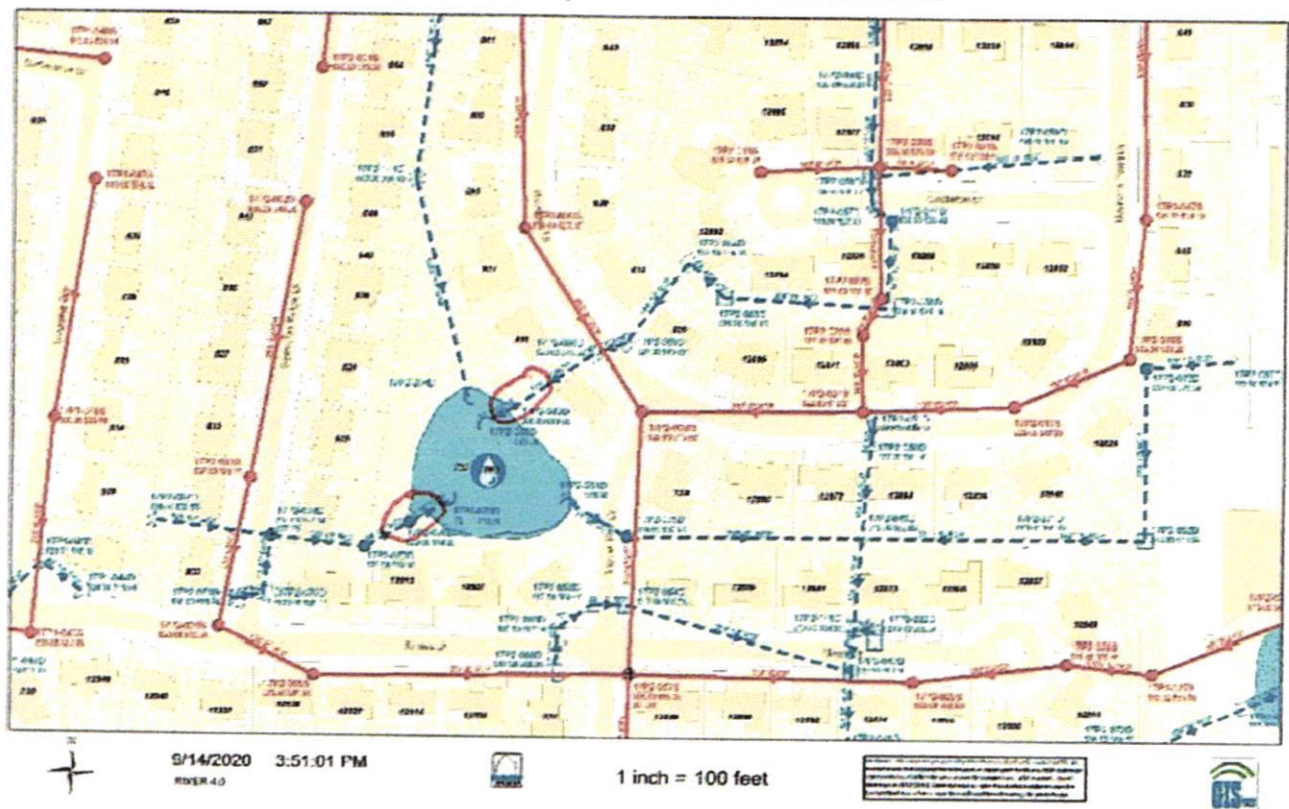
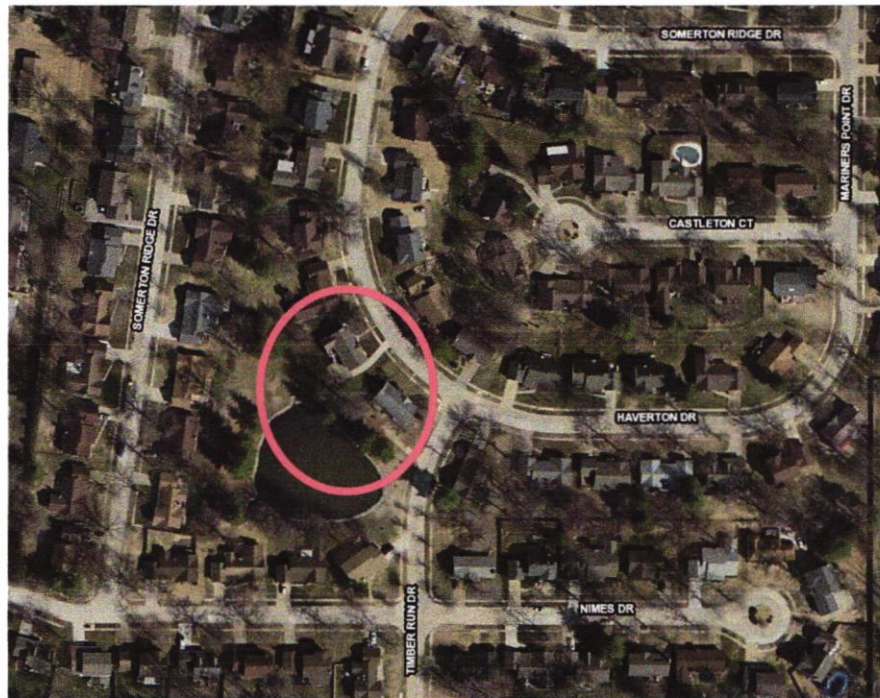
The following applications were submitted to the Stormwater Management Cost-Share program:

Homeowner Association Category

Application 1: Somerton Homeowner Association

Location: 811 Haverton Drive – Ward 4





From the application (summary):

Problem:

The Somerton Pond has two inlet corrugated metal pipes (CMP) that are collapsing. One of the inlet pipes is a 30-inch diameter pipe, and the other is an 18-inch diameter pipe. The failing pipes are creating the following safety hazards:

- Backups cause the manhole to surcharge and lift the manhole cover.
- Erosion and sinkholes are a safety hazard.



Proposed solution:

Replace both failing CMPs with Sanitite pipes. Connect new pipes to the existing manhole.

What efforts if any have been made in the past to solve the stormwater issues?

A camera inspection was attempted but could not be completed because the water levels in the pipes was too high.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

The CMPs continue to deteriorate and cause additional sinkholes and manhole surcharges.

Will neighboring sites or public infrastructure benefit from the project?

The primary beneficiary will be the subdivision's residents.

Estimates:

1. Kelp Contacting, INC*

This is the HOA's choice for contactor and scope of work.

In the past, the HOA worked with this contractor to replace a failing CMP.

Scope:

- 20 LF of 18-inch Sanitite
- 20 LF of 30-inch Sanitite
- Pumping to be able to preform the work
- Site restoration (seed and straw)
- Granular bedding
- Rip Rap/Stone revetment
- Permits and inspections
- Mobilization

Bid price: \$17,172

2. Kuesel Excavating Co.

Scope:

- Mobilization
- Permit
- Pumping to be able to perform the work
- 40 LF of 18-inch Sanitite
- 20 LF of 30-inch Sanitite
- Connect to existing manhole
- Finish grading and seed & straw restoration

Bid price: \$25,695

3. Budrovich

Scope Option 1 – remove and replace 20 LF of CMP on North Pond Bank:

- 20 LF of 18-inch HP storm pipe
- Remove tree
- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$12,750

Scope Option 2 – reinstall pipe, dredge to improve drainage

- 20 LF of 18-inch HP storm pipe
- Dredge

- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$36,915

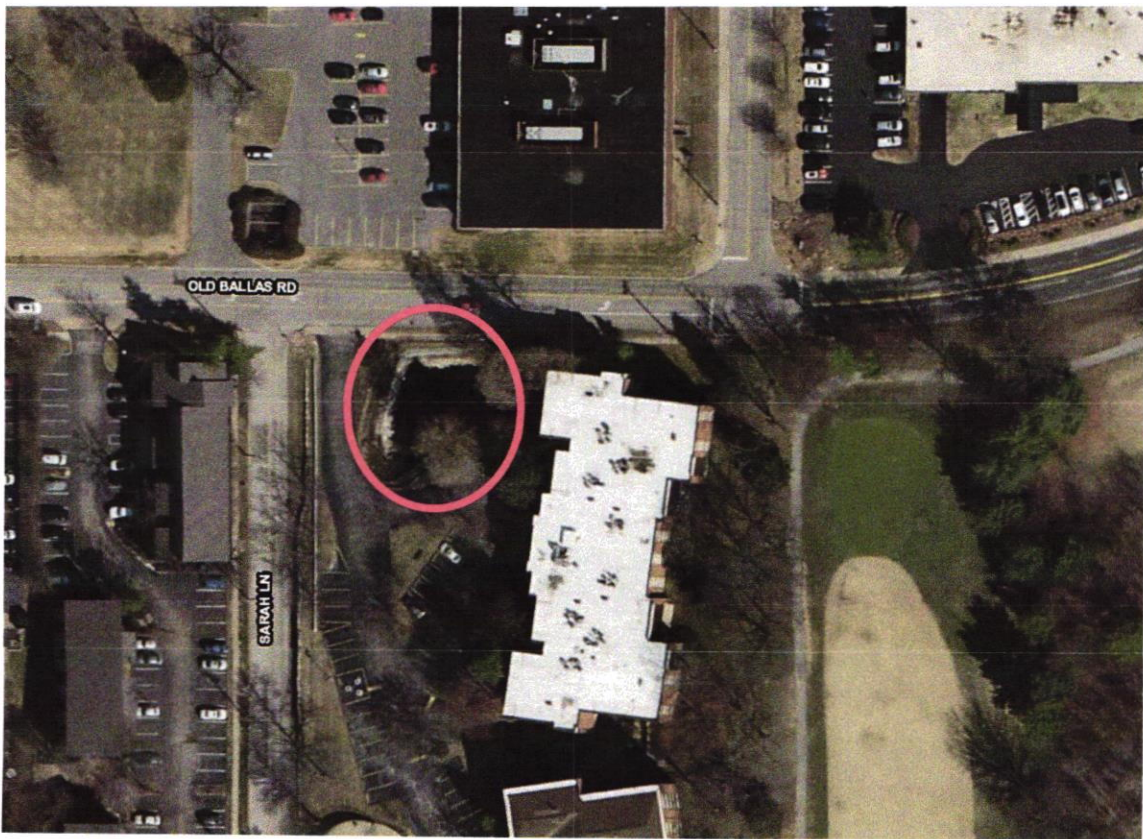
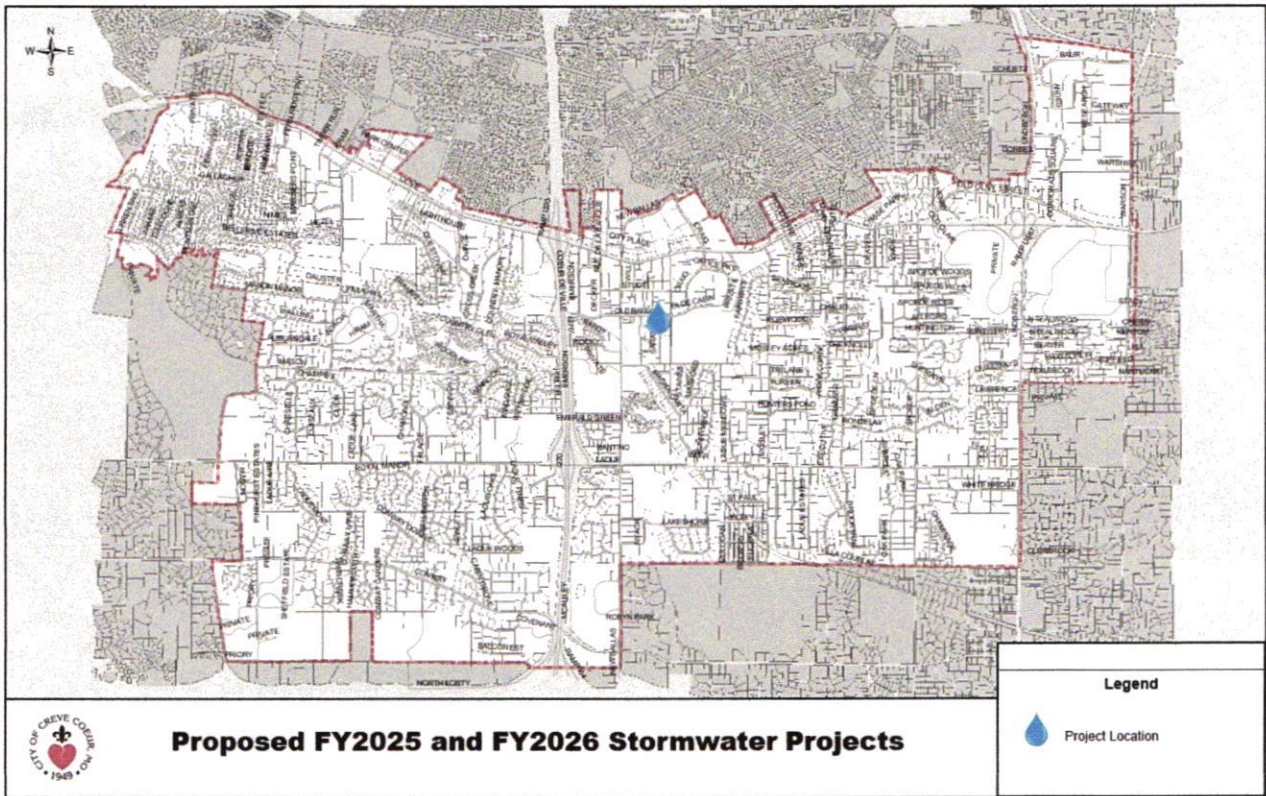
Scope Option 2B – clean existing rip-rap to slightly dredge to improve drainage

- Clean rip-rap
- Dredge
- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$29,960

Application 2: Golf View on the Green

Location: 590 Sarah Lane – Ward 2



From the application (summary):

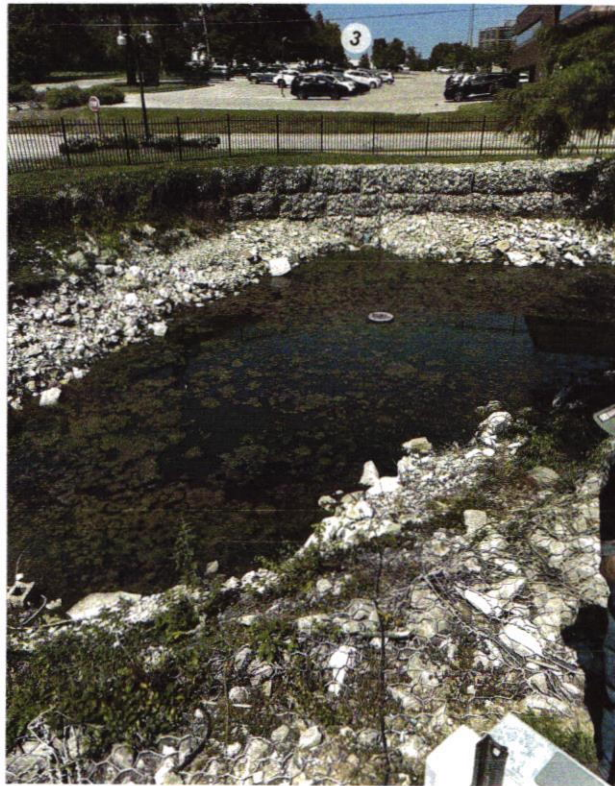
Problem:

The detention pond is required to satisfy MSD regulatory requirements.

To keep more water in the pond for aesthetic reasons, the HOA blocked a low-flow outlet to keep more water in the pond.

In 2020, MSD informed the HOA that blocking outflows to detain water was preventing the pond from functioning as designed and required. By holding the detained water from the blocked outlet, the pond was unable to manage flows during rain events, which created flooding issues on Old Ballas Road and at neighboring sites.

After the low-flow outfalls were restored, the HOA installed a fountain, which failed because the water level was too shallow. Without a pump, the pond experienced an algae bloom. The HOA is concerned about mosquitos and water quality.



Proposed solution:

Dredging the pond to a depth that would allow a fountain to work. The proposed project would also remove overgrown vegetation.

What efforts if any have been made in the past to solve the stormwater issues?

The HOA complied with MSD, lowed the water level to create the required storage volume, and installed a fountain which soon failed.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

The failing fountain created conditions that enabled algae growth.

Will neighboring sites or public infrastructure benefit from the project?

Neighbors will benefit from a more aesthetically pleasing pond.

Estimates:

1. G&W Engineering

According to the G&W estimate, MSD will not require submittals or approvals if the scope of work is limited to dredging. Any modifications to the outlets will require plan submittal and approval plus meeting current water quality and quantity requirements. To meet current requirements, the pond would mostly likely need to be significantly larger.

Scope:

- Survey
- Feasibility study
- Project management

Bid price: \$10,600

2. MuckMiners

Sample measures indicate the pond has approximately 1 foot of water about the sediment. Bottom of basin is estimated to be about 6 feet deep.

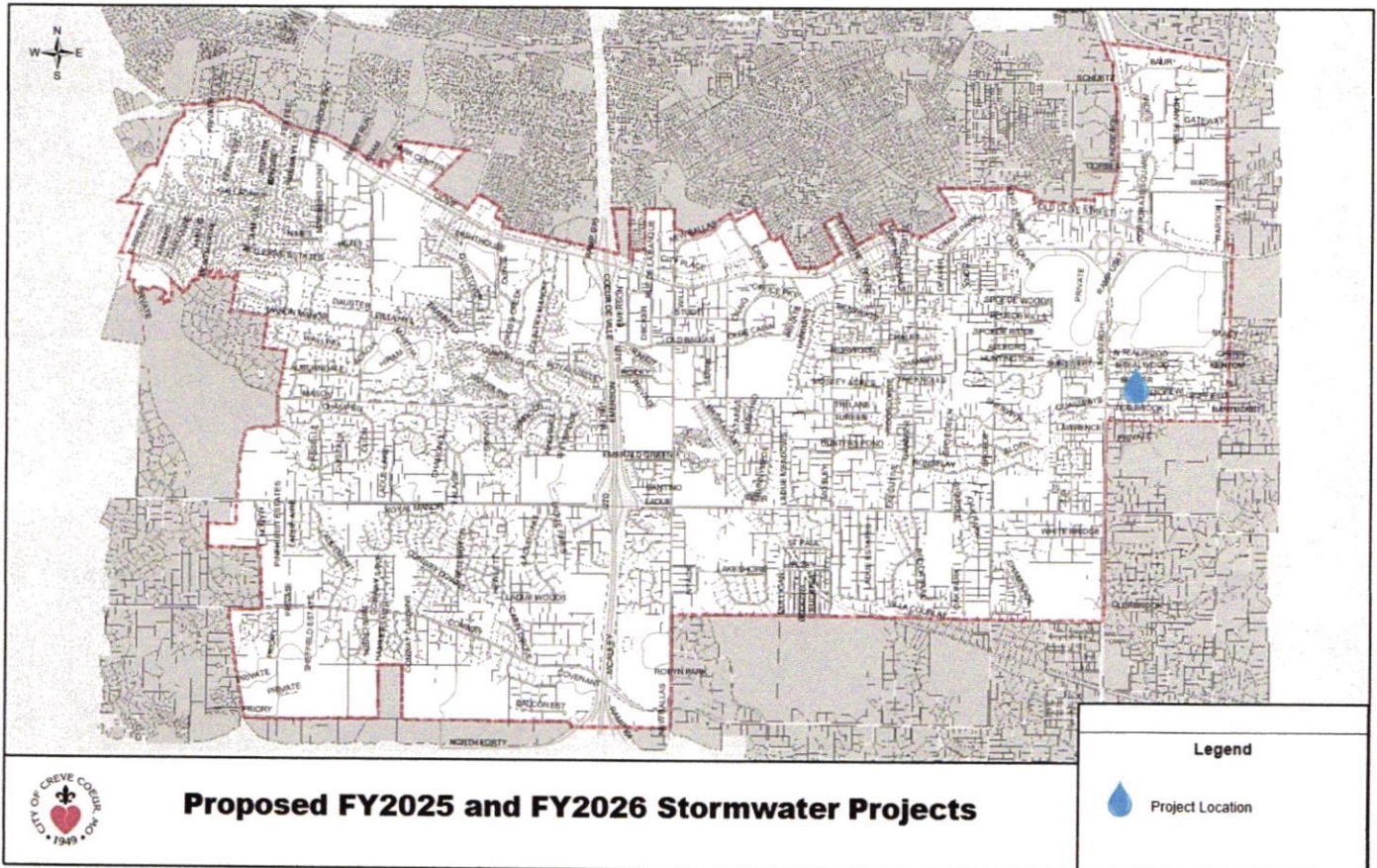
Scope:

- Remove approximately 65 cubic yards of sediment (assumes an average sediment depth of 3.5 feet).

Bid price: \$15,000 to \$25,000

Individual Homeowner Category

Application 1:
2 Dielmann Farm Estates Drive – Ward 1





Higher elevations on the east side (648 feet) than the west side (640 feet).

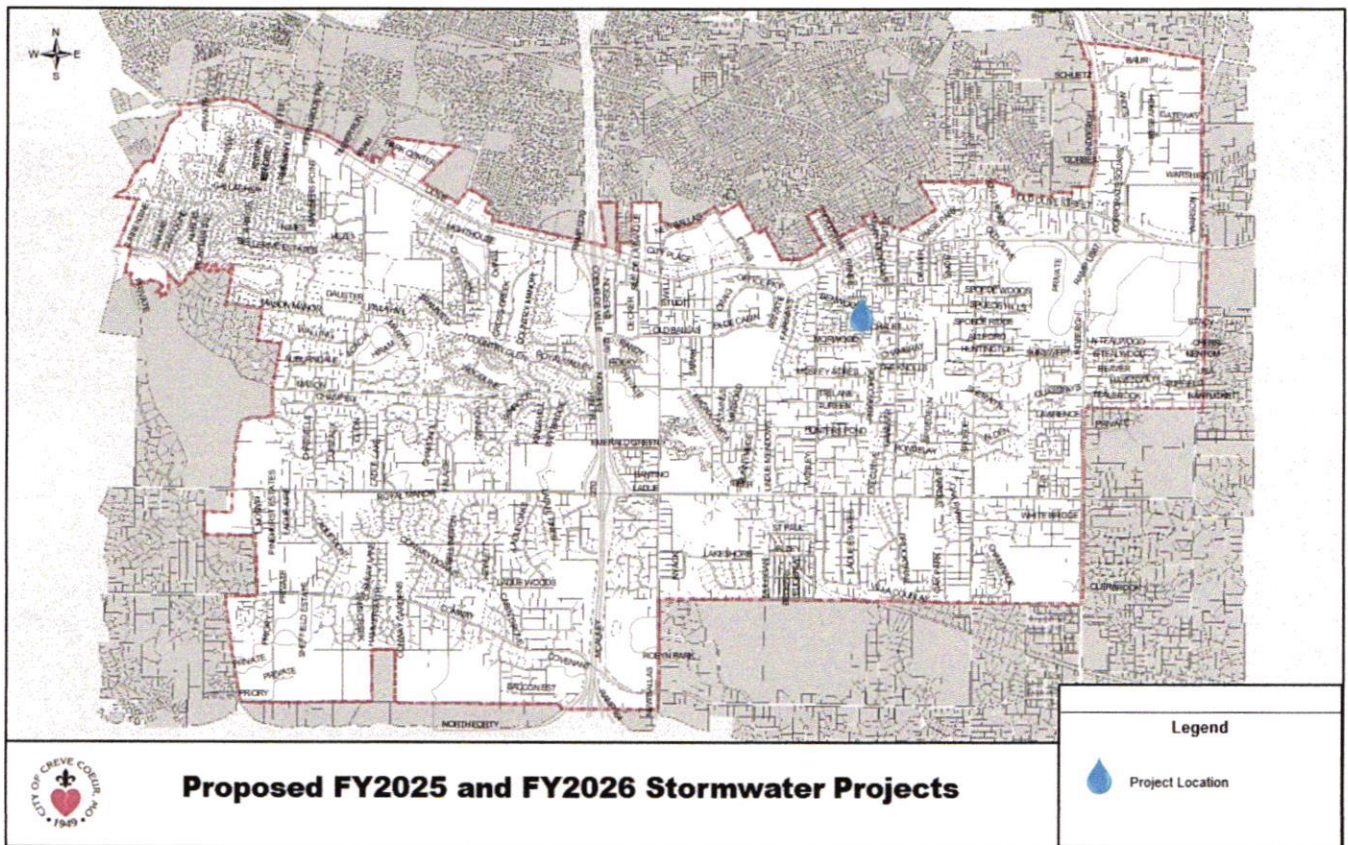
Estimate:

The homeowner will install the proposed drainage system. On our phone conversations with the homeowner, he is open to installing modified French drains, which will keep more stormwater onsite.

From the application:

Item	Quantity	Price
Downspout filter connectors	7	49
pipe tape	1	5
100' perforated pipe 4"	1	77
100' solid corrugated 6' pipe	1	170
250' solid corrugated 4' pipe	1	125
Duraweb 4' x 125' Geotextile Fabric	1	90
B gravel kirkwood material	2 yards	560
4" Y connector	4	84
4" to 6 inch connector	1	13
Total cost of material		1173

**Application 2:
42 Morwood Lane – Ward 2**



The east side of the property is approximate 12 feet lower than the neighboring lawn.

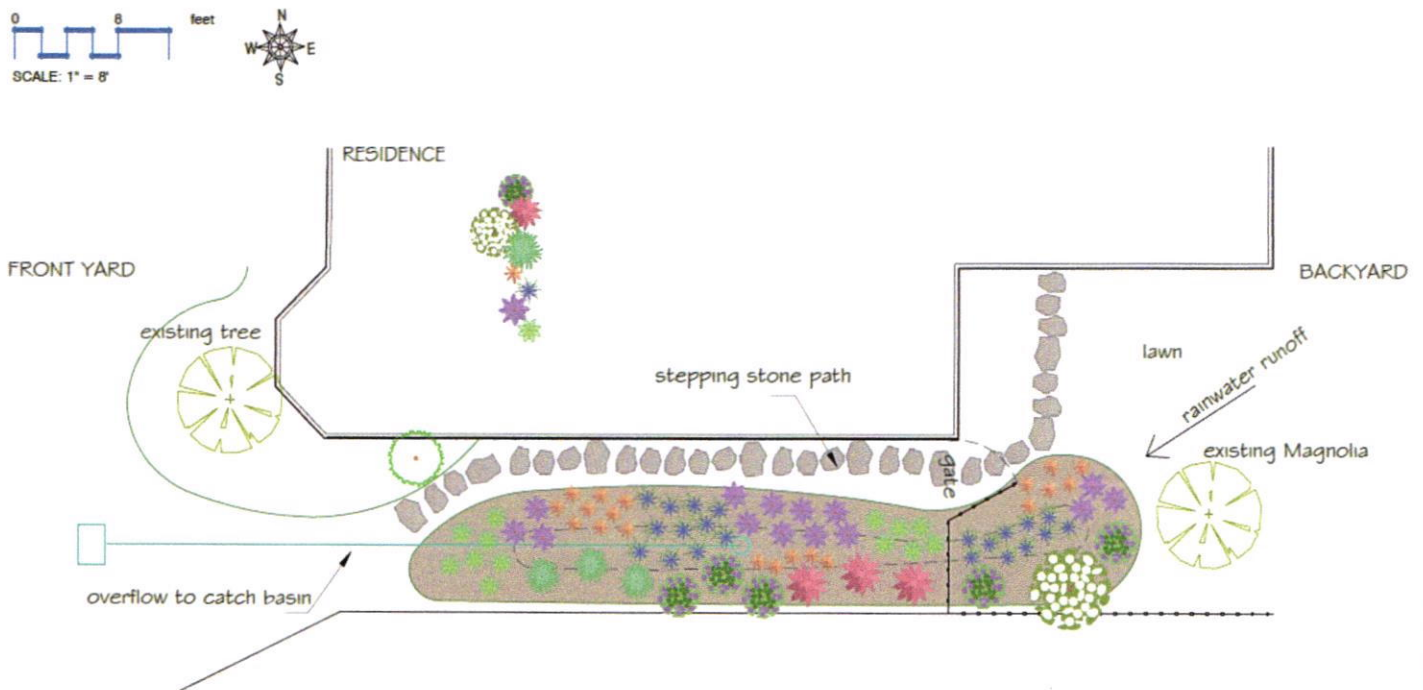
From the application (summary):

Problem:

Runoff from the site to the east causes backyard flooding, erosion, damage to plants, and damage to the home.

Proposed solution:

Grade and install a raingarden. Regrade and then reinstall existing flagstone path to create better flow from the backyard. Install an Atrium drain with an underdrain in the rain garden and direct flows to an underground basin.



What efforts if any have been made in the past to solve the stormwater issues?

A retaining wall with erosion barrier and catch basin was constructed. Three years ago, the homeowners also installed a French drain system and regraded. Last year, additional drains were installed and the existing system was cleaned.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

No

Will neighboring sites or public infrastructure benefit from the project?

The project may keep some flows from the home to the south.

Estimate:

1. O'Hara Outdoors

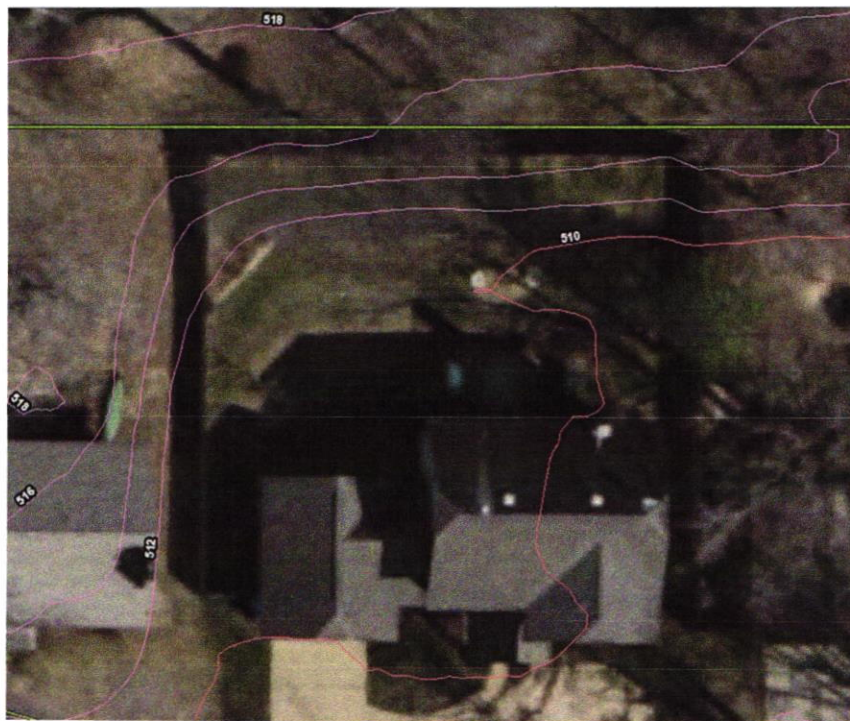
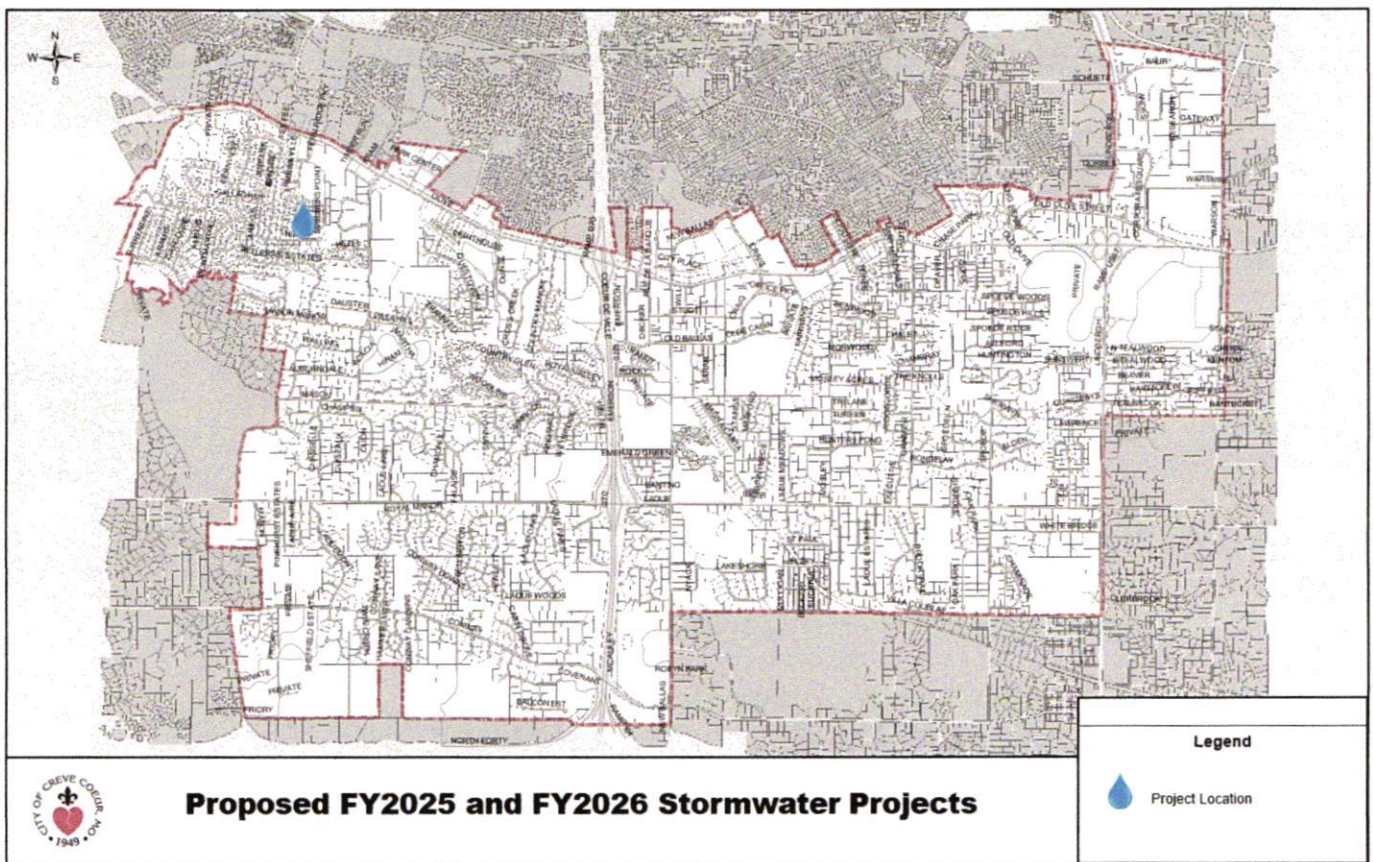
Scope:

- Grading
- Install raingarden soil mix
- Install underdrain
- Underground basin
- Plant raingarden plants

Bid price: \$9,642

Four bids were submitted before the deadline. After a call with City Staff, the homeowner sent the above revised plan and estimate. It is Staff's opinion that in this situation one bid meets program requirements and that this is a responsible bid.

**Application 3:
12889 Nimes Drive – Ward 4**



There is an approximate 8 foot elevation difference between the neighbors to the north and this applicant's yard.

From the application (summary):

Problem:

Excessive runoff from the sites to the north (upgrade) causes yard and structural flooding.

Proposed solution:

French drain system.

What efforts if any have been made in the past to solve the stormwater issues?

The previous owners installed a French drain system that was not sized properly.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

Since the homes to the north have been renovated, the homeowner reports flows increased. The homeowners recently renovated the basement and installed an egress window. The egress window well fills with stormwater and floods the basement. The homeowner installed a pump in the window well. The pump, however, fails.

City staff has talked with the homeowner about checking the drain in the window well to make sure it is not blocked. The homeowner reports that water is infiltrating the well from the ground and not overtopping the lip. Staff still recommended that the homeowner consider raising the window well lip. Staff also recommended that the homeowners remove a raised stone planting bed that may be blocking flows from exiting the site and instead ponding near the window well.

Will neighboring sites or public infrastructure benefit from the project?

No

Estimates:

From the application:

"We had three bids and the other two were ridiculously expensive and required removal of trees and landscape, which we were not willing to do. Upgrading the French drain system seemed like the most rationale and reasonable approach."

Scope:

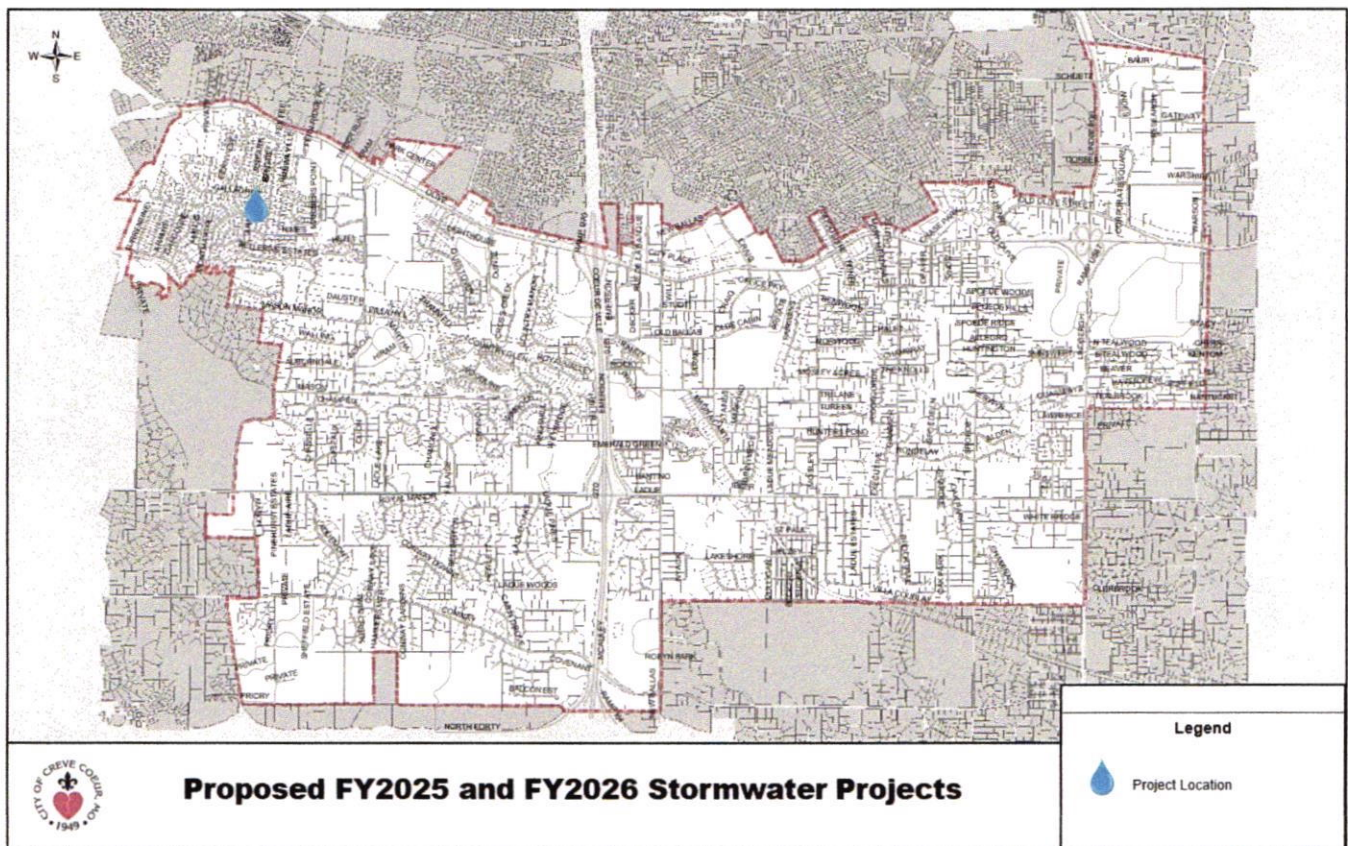
- Install 150 LF of four-inch PVC and six nine-inch catch basins.

Bid price: \$6,570

Staff notes:

The existing outlet pipe for the window well will need to be either cut back or redirected to comply with City Code Section 500.210 (A)(2), which requires outfalls to be at least 10 feet from the property line.

**Application 4:
828 Fernview Drive – Ward 4**



Problem:

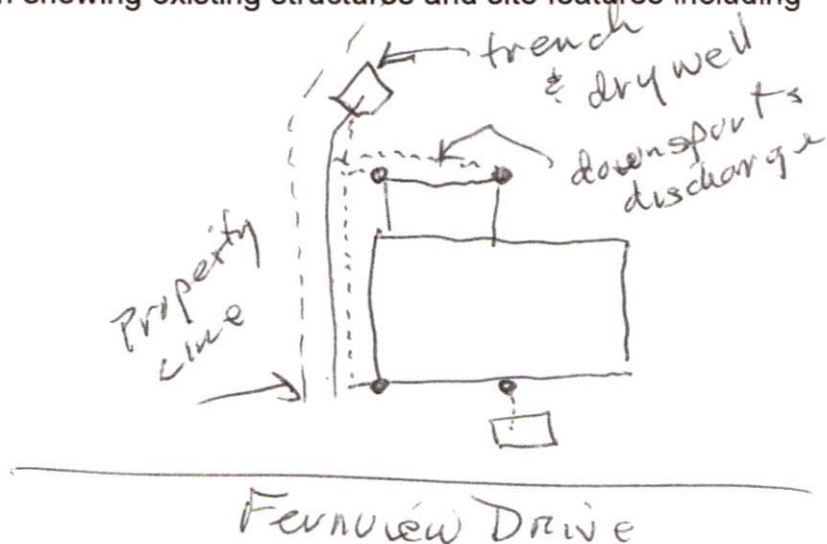
Yard and structural flooding.

Proposed solution:

Install French drain system with drywells.

Please provide the following:

- ☐ Layout and description showing existing structures and site features including creeks and streams
- ☐ Location of laterals
- ☐ Simple project plans



What efforts if any have been made in the past to solve the stormwater issues?

Installed block walls at the front and rear of the house. Re-grade yard to slope away from the home. The previous owner installed a drain system that does not work.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

No

Will neighboring sites or public infrastructure benefit from the project

No

Estimates:

1. Quiet Village Landscape, Co.

Scope:

- Install French drain system

Bid price: \$12,276.37

2. If the homeowner performs the work (from an email):

As requested I have put together a rough estimate of materials and equipment.

- Using a walk behind trencher (150')
- 4" SDR Pipe perforated and solid with fittings and cleanouts
- Drywell
- Backfill topsoil/1"clean limestone/geo fabric

Cost should not exceed \$6,000

Staff notes:

If the funding for the proposed work is approved, existing outfall pipes will need to be cut back or redirected to conform with City Code Section 500.210 (A)(2), which requires outfalls to be at least 10 feet from the property line.

Application 4:
8 Knolls Lane

Proposed work is associated with new construction/redevelopment and is not eligible to receive funding from this program.

Summary

Resolution No. 1677 authorized a total pilot phase budget of up to \$60,000. Of that total budget:

- The Homeowner Association (HOA) Category will have a budget of \$40,000.
 - Up to two HOA projects can be funded.
 - Each awarded project will be eligible for up to \$20,000 reimbursement.
 - The program will reimburse 50% of the total cost (materials and labor) up to the maximum limit.
- The Individual Homeowner Category will have a budget of \$20,000.
 - Up to four Individual Homeowner projects can be funded.
 - Each awarded project will be eligible for up to \$5,000 reimbursement.
 - The program will reimburse 50% of the total cost (materials and labor) up to the maximum limit.

Homeowner Association Category	Estimated Cost	Potential City Funding
Somerton Homeowner Association	\$17,172	\$8,586
Golf View on the Green	Up to \$25,000	Up to \$12,5000
Individual Homeowner Category		
2 Dielmann Farm Estates Drive	\$1,173	\$587
42 Morwood Lane	\$9,642	\$4,821
12889 Nimes Drive	\$6,570	\$3,285
828 Fernview Drive	\$12,276	\$6,138
8 Knolls Lane	NA	NA
Total (maximum)		\$35,917