

# **Stormwater Utility and Flood Mitigation Advisory Committee**

January 15, 2025 Meeting

# Tonight's Agenda

1. Welcome (7pm, 5 min)
2. Approve minutes of November meeting (7:05, 5 min, John)
3. Approve Committee charter (7:10, 10 mins, John)
4. Program Update from City Staff (7:20pm, 40 min, City staff)
  - Large capacity projects: Commonwealth/Ashby/Glebe; Hooffs Run Culvert Bypass, Pitt & Gibbon
  - Spot Improvements
  - Sanitary Sewer Upgrades
  - Sanitary Sewer Renewal program
  - Communications
  - Maintenance
  - Mitigation grant program
5. Preparation for FY2026 Budget Season (8:00, 20 min, John)
6. Discussion of recent Virginia law allowing property tax exemption for flood mitigation improvements by homeowners (8:20, 20 min, John & Katie)
7. Public Comment (8:40pm, 20 min)
8. Adjourn (9:00pm)

# Welcome remarks

AGENDA ITEM #1

# Review of Minutes

AGENDA ITEM #2

# Approve Committee Charter

AGENDA ITEM #3

# Program Update from City Staff

AGENDA ITEM #4



# Flood Action Progress Report: Hooffs Run Culvert Bypass Project

- Project objectives
  - Convey the 10-year future rainfall event without worsening flooding elsewhere in the drainage system.
  - Where control of the 10-year future storm is not practicable, reduce flooding as much as possible.



# Flood Action Progress Report: Hooffs Run Culvert Bypass Project

- A desktop analysis is being performed on the high-performing alternatives.
- The analysis is an initial assessment to evaluate the feasibility of the alternatives
- The analysis includes:
  - Engineering feasibility
  - Cost
  - Constructability
  - Disruption of City functions
  - Potential negative impacts on the community

# Flood Action Progress Report: Hooffs Run Culvert Bypass Project

- City staff and project consultants are developing a set of possible design alternatives, which are being analyzed and evaluated.
- As the planning phase continues, project teams will be narrowing down the alternatives, based on several different aspects, including flood mitigation effectiveness, cost, project schedule, construction impacts, and complexity.
- Next steps
  - Refine evaluation criteria
  - Continue evaluation of alternatives
  - Define a course of action
  - Start the design phase

# Flood Action Progress Report: CSS

- Pitt & Gibbon (\$20-25M) CSO surcharge mitigation. Project team reviewing alternatives to mitigate flooding for the 10-year storm. Schedule pending.
- Nethergate (\$5M) CSO Surcharge mitigation. Project transitioned from planning to design phase. Project team working on task order request for on-call design consultants. Public meeting to be scheduled once designer on board.

Nethergate Storm Sewer Improvements

**Project Webpage**

<https://www.alexandriava.gov/capital-projects/project/nethergate-storm-sewer-improvements>

**Project Description**

The purpose of this project is to mitigate flooding in the Nethergate Townhome community based on reports from residents after intense rainfall events. The project area is bound by Bashford Ln to the north, Second St. to the south, Portner Rd to the west and W Abingdon Dr to the east. As part of this project, the design team will analyze hydraulic capacity of the existing storm sewer, and develop alternatives to mitigate flooding.

**Project Information**

**Current Phase:** Planning

**Total Planned Budget:** \$1,587,951.82

**Funding Sources:** SSF

**Schedule - Calendar Year (CY)**

Schedule Phase	2022				2023				2024				2025				2026				2027		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Planning																							
Design																							
Construction																							

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Bellefonte Ave Storm Drain Improvements

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/bellefonte-avenue-storm-drain-improvements>

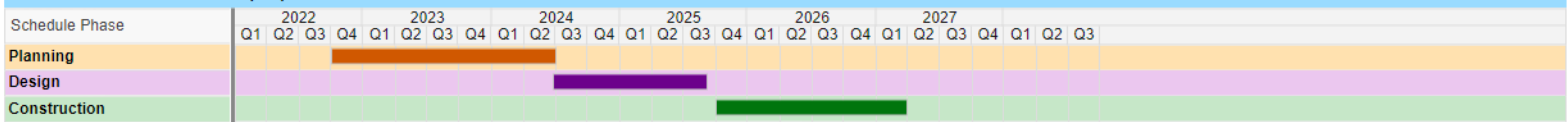
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$1,564,869.29  
**Funding Sources:** SWU

### Project Description

The Bellefonte Avenue Storm Drain improvement project aims to improve the local storm drainage system, specifically targeting areas prone to flooding during the City's standard 10-year, 24-hour storm event along East Bellefonte Avenue and East Howell Avenue. The project seeks to mitigate the impact of larger storm events while ensuring that improvements do not worsen flooding in other parts of the drainage system.

### Schedule - Calendar Year (CY)



### ON-GOING

- Received fee proposal
- Continued negotiations

### FORECASTED

- Advancing to design kickoff

## Clifford Ave, Fulton St. & Manning St. (CFM) Storm Sewer Improvements

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/clifford-avenue-fulton-street-and-manning-street-storm-sewer-improvements>

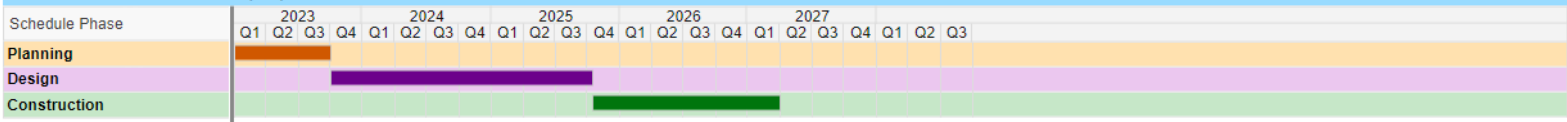
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$831,630.00  
**Funding Sources:** SWU, HUD (Beyer)

### Project Description

The Clifford Avenue, Fulton Street and Manning Street (CFM) Storm Sewer Improvements Project will provide flooding mitigation to townhouses along the 3000 block of Fulton Street and Manning Street. The alley bound between the two streets will be re-built to channelize surface flow and improve drainage. Inlets and underground storage will be installed to capture and attenuate stormwater runoff. Utility impacts will be identified and resolved during the design phase.

### Schedule - Calendar Year (CY)



### ON-GOING

- Received 30% Design & began 30% design review

### FORECASTED

- Complete 30% design
- Host community Meeting

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Edison St. Storm Sewer Upgrades

### Project Webpage

<https://www.alexandriava.gov/stormwater-management/edison-street-and-dale-street-early-phase>

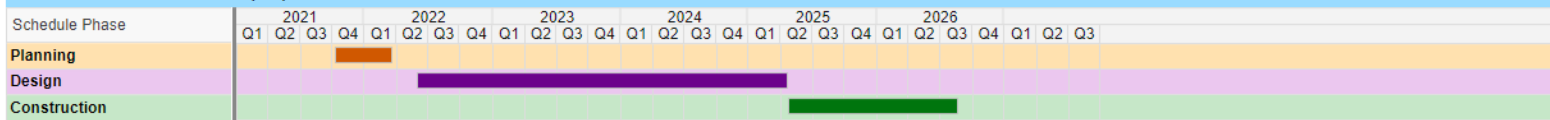
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$979,000.00  
**Funding Sources:** SWU, CFPF

### Project Description

The Edison St. Storm Sewer Upgrades Project proposes to upgrade the storm sewer system capacity along the 3800 block of Edison Street to the outfall in Four Mile Run Park. Additional inlets are proposed along Edison Street to increase storm water capture. These storm sewer improvements are a portion of the future Large Capacity Project – Edison and Dale that have been accelerated upon receiving funding from Virginia Community Flood Preparedness Fund (CFPF) prior to the funding becoming available in FY 2026.

### Schedule - Calendar Year (CY)



## Four Mile Run and Hoofs Run Inlet Installation and Enhancement

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/four-mile-run-and-hoofs-run-inlet-installation-and-enhancement>

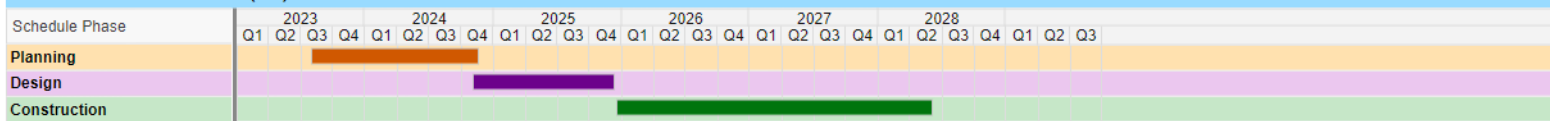
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$1,584,100.00  
**Funding Sources:**

### Project Description

This project will focus on comprehensive analysis of the existing stormwater inlet capacity across Four Mile Run and Hoofs Run watersheds. By evaluating the capacity of existing stormwater inlets within these two watersheds, this project will provide recommendations on installing new inlets and upsizing existing ones to mitigate local flash floods and to enhance the overall conveyance efficiency of the storm sewer system. The project receives funding from the City's Stormwater Utility and the Virginia Community Flood Preparedness Fund (CFPF) grant.

### Schedule - Calendar Year (CY)



### ON-GOING

- Continuing Utility coordination
- Received revised final design

### FORECASTED

- Planning Pre-construction community meeting
- Advancing to Construction Procurement

### ON-GOING

- Planning completed
- Final Inlet Study Report being reviewed
- Design begins

### FORECASTED

- Development of design solicitation
- Procure design services

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Hume Ave Stormdrain Bypass

### Project Webpage

<https://www.alexandriava.gov/tes/hume-avenue-bypass-project>

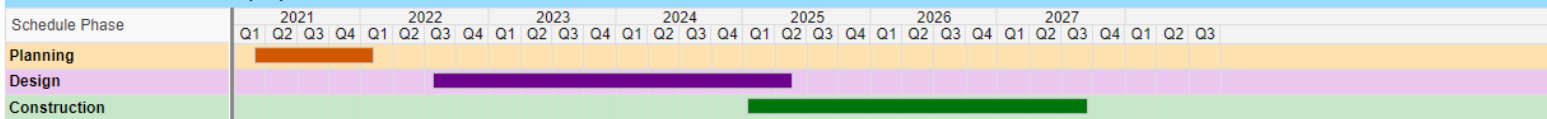
### Project Description

The Hume Avenue Storm Sewer Bypass Project will install storm sewer and inlets along the 100 block of Hume Avenue and E. Raymond Avenue. The addition of a new utility within each right-of-way requires the relocation of gas, electric, water and sanitary systems. On E. Raymond Avenue the sanitary sewer will be upgraded to a larger pipe in tandem with its re-location. Hume Avenue will be re-built to restore conveyance along the curb and gutter.

### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$4,567,216.00  
**Funding Sources:** SWU, ARPA

### Schedule - Calendar Year (CY)



## Mt Vernon and Edison Dual Culvert Replacement Project

### Project Webpage

<https://www.alexandriava.gov/stormwater-management/mount-vernon-dual-corrugated-metal-pipe-cmp-culvert-replacement-project>

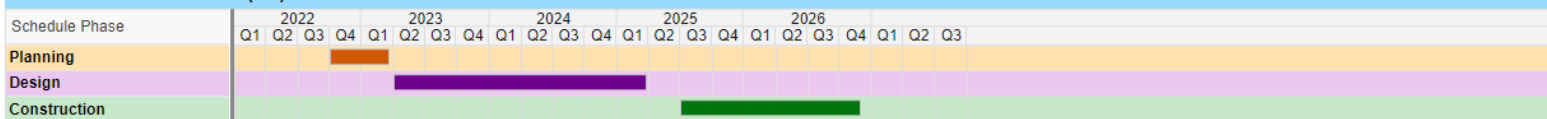
### Project Description

The project upgrades an existing Dual Corrugated Metal Pipe (CMP) culvert system to convey larger storm events, reducing the chance of surcharging in Mount Vernon Avenue. The project receives funding from the City's Stormwater Utility and a grant from the Virginia Community Flood Preparedness Fund (CFPF).

### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$2,500,000.00  
**Funding Sources:** SWU, CFPF

### Schedule - Calendar Year (CY)



### ON-GOING

- Continuing Utility coordination
- Continuing temporary easement negotiations

### FORECASTED

- Resolve utility conflicts
- Receive final design

### ON-GOING

- Review of different strategies to reduce flooding and stabilize existing culverts

### FORECASTED

- Advancing to 90% Design

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Mt. Vernon Cul-de-sac Inlets and Alley Storm Sewer Improvements

### Project Webpage

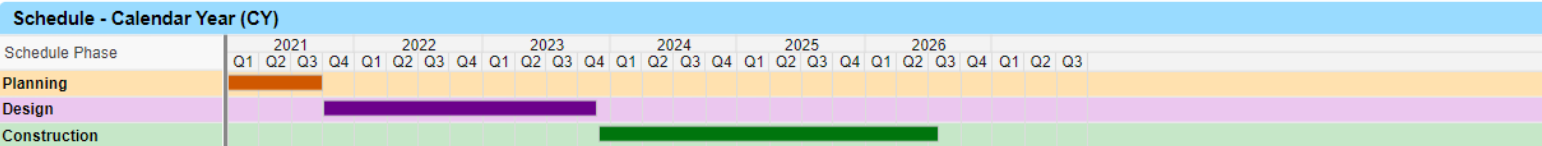
<https://www.alexandriava.gov/capital-projects/project/mt-vernon-cul-de-sac-inlets-and-alley-storm-sewer-improvements>

### Project Information

**Current Phase:** Construction  
**Total Planned Budget:** \$2,055,841.00  
**Funding Sources:** SWU, ARPA

### Project Description

The Mt. Vernon Cul-de-sac Inlets and Alley Improvements Project will provide flood mitigation for townhomes on the 100 block of Mt. Vernon Avenue. Inlets and underground storage vaults will be installed on Mt. Vernon Avenue and it's adjacent alleyway to capture and attenuate storm water runoff. In tandem with work, the alleyway will be re-graded to improve surface drainage into the downstream swale. The addition of new underground utilities requires the relocation of the local water utility.



## N Overlook Drainage Improvements

### Project Webpage

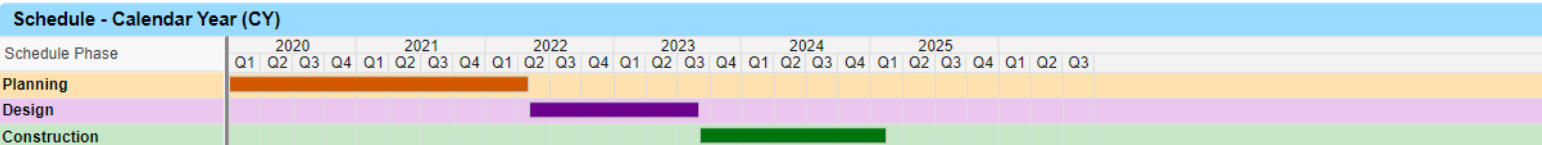
<https://www.alexandriava.gov/capital-projects/project/n-overlook-drainage-improvements-project>

### Project Information

**Current Phase:** Construction  
**Total Planned Budget:** \$387,979.35  
**Funding Sources:** SWU

### Project Description

Runoff from N Overlook Dr flows to a driveway access between 701 N Overlook Dr and 615 N Overlook Dr. Runoff overtops the north curb of the driveway access and flows towards Pullman Pl. This project will increase inlet capture and storm sewer capacity to mitigate flooding for the 10-year storm. In addition, project will ensure no increases in downstream storm sewer for the 10-year storm.



### ON-GOING

- Reviewing community concerns and planning responses and adjustments

### FORECASTED

- Additional community outreach
- Water main re-location by private utility

### ON-GOING

- Project Closeout & final documents

### FORECASTED

- Project complete

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Oakland Terrace Timber Branch Channel Wall Replacement

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/oakland-terrace-timber-branch-channel-wall-reconstruction>

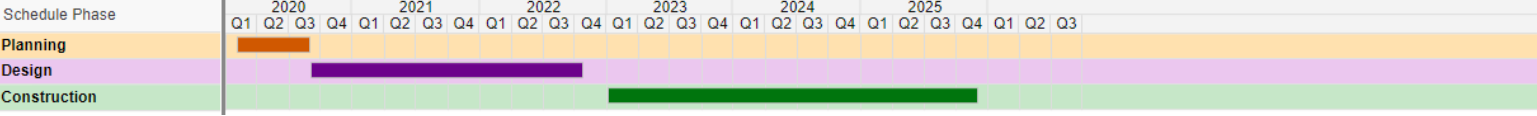
### Project Description

This project replaces approximately 205 linear feet of an existing concrete retaining wall with a vegetative reinforced revetment and bioengineered soil.

### Project Information

**Current Phase:** Construction  
**Total Planned Budget:** \$307,854.00  
**Funding Sources:** SWU

### Schedule - Calendar Year (CY)



- ON-GOING**
- Continued construction
- FORECASTED**
- Wall replacement complete
- Grow-in of live stakes & vegetation

## S Jordan St. Stormwater Improvement Phase II

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/s-jordan-st-stormwater-improvement-project-phase-ii>

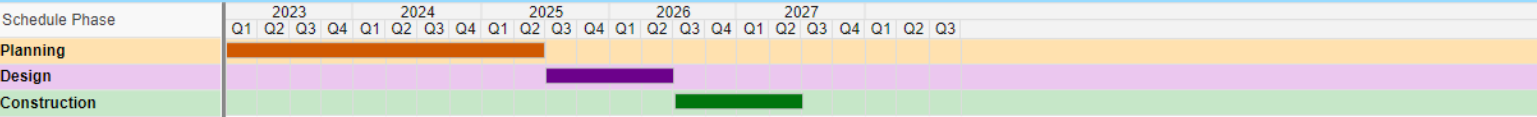
### Project Description

This project will design a solution to reduce backyard flooding risk to the maximum extent practicable on the north side of the block of 95 to 127 South Jordan Street. After the field investigation, reviewing CCTV recordings and reading the consultants recommendations, one small scale project was identified. SWM team to work with private property owners along S Jordan St and 4600 Duke to improve the existing swale and conveyance on private property. The City will plan to obtain a 15-ft. wide permanent easement for the storm drain system in this neighborhood as part of this project. Obtaining an easement will allow the City to provide maintenance to the storm drain system without having to request permission.

### Project Information

**Current Phase:** Planning  
**Total Planned Budget:** \$530,000.00  
**Funding Sources:** SWU

### Schedule - Calendar Year (CY)



- ON-GOING**
- Preparing for design phase project kickoff
- FORECASTED**
- Project kickoff meeting
- Purchase Order issued for Design



# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Valley Drive Storm Drain Improvements

### Project Webpage

<https://www.alexandriava.gov/capital-projects/project/valley-drive-storm-drain-improvements>

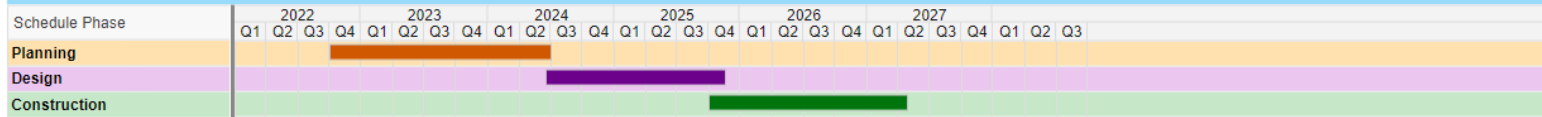
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$3,639,999.29  
**Funding Sources:** SWU

### Project Description

The Valley Drive Storm Drain improvement project aims to improve the local storm drainage system, specifically targeting areas prone to flooding during the City's standard 10-year, 24-hour storm event along Valley Drive, Crestwood Drive, Summit Avenue, and Dogwood Drive. The project seeks to mitigate the impact of larger storm events while ensuring that improvements do not worsen flooding in other parts of the drainage system. Following City Council approval, staff is working on an application for a state Community Flood Preparedness Fund (CFPF) grant for a 60/40 match in the amount of \$2,160,000 with local Stormwater Utility funding of \$1,440,000 identified for the match.

### Schedule - Calendar Year (CY)



### ON-GOING

- Survey crews are on-site collecting data
- Continuing alternative assessment

### FORECASTED

- Design orientation and public engagement

## W. Reed Ave & Dale St Storm Sewer Improvements

### Project Webpage

<https://www.alexandriava.gov/stormwater-management/edison-street-and-dale-street-early-phase>

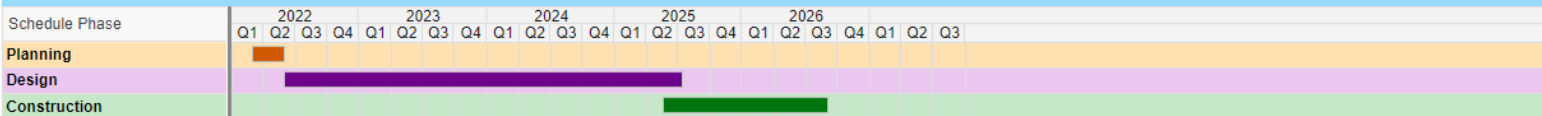
### Project Information

**Current Phase:** Design  
**Total Planned Budget:** \$2,230,000.00  
**Funding Sources:** SWU

### Project Description

W. Reed Ave & Dale St. Storm Sewer Improvements Project proposes new inlets and storm sewer along the 100 block of W. Reed Ave and capacity improvements along the downstream system to the outfall in Four Mile Run Park. These storm sewer improvements are a portion of the future Large Capacity Project – Edison and Dale that have been accelerated with Virginia Community Flood Preparedness Fund (CFPF) prior to the funding becoming available in FY 2026.

### Schedule - Calendar Year (CY)



### ON-GOING

- Reviewing joint permit application
- Continuing 90% design

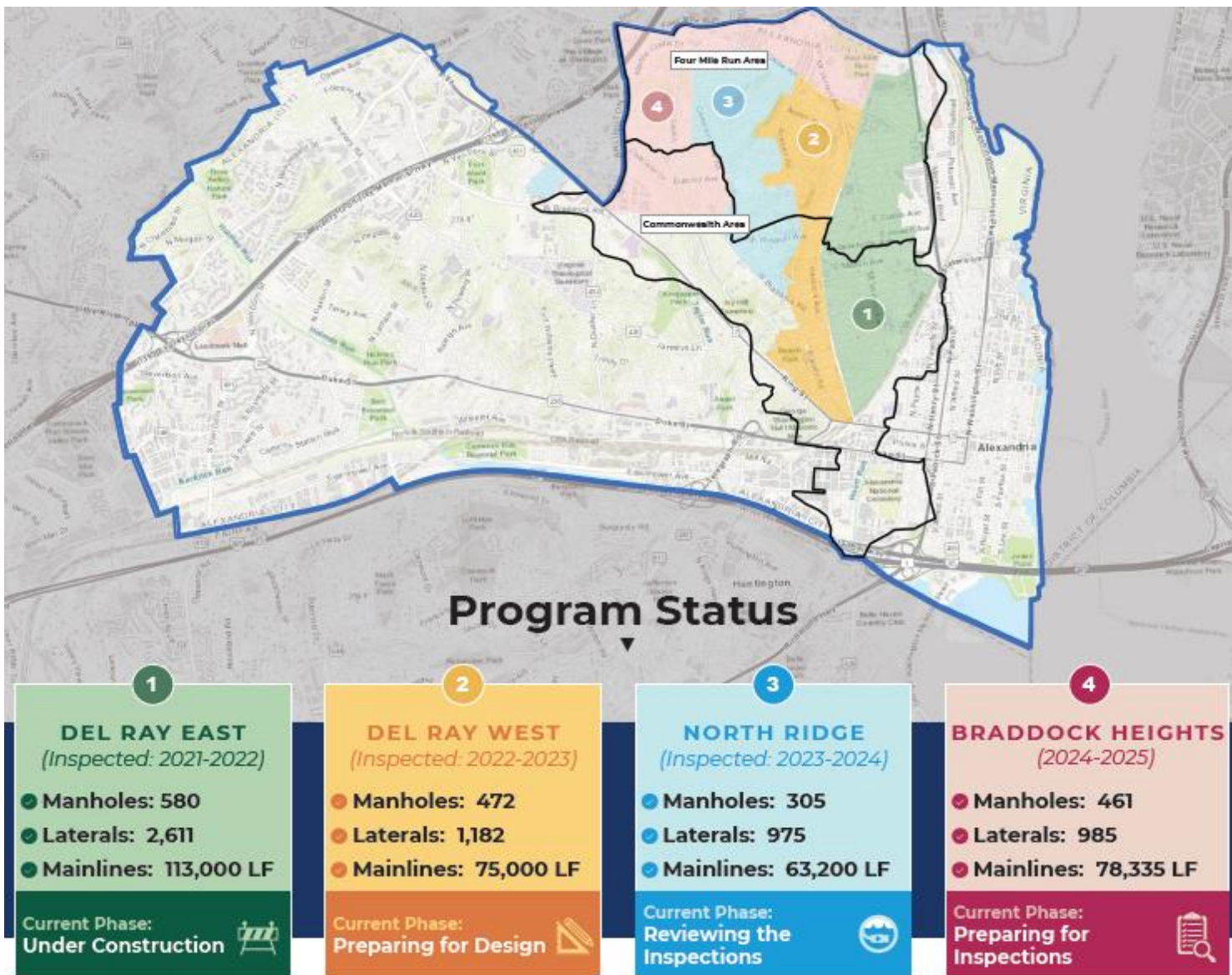
### FORECASTED

- Receive 90% design
- Begin 90% design review

# Sanitary Sewer Asset Renewal Program

- **Del Ray East Sewer Rehabilitation:**

- Contractor issued Notice to Proceed Oct 16, 2023
  - Contract period = 1 year, extended until lining complete (end January)
- Construction progress:
  - 98% pipes lined
  - 100% manholes rehabilitated
  - Lateral sewers under separate contract – Invitation to Bid upcoming (early 2025)



# Sanitary Sewer Backup Mitigation Projects

- Types of projects aimed at mitigating sewer backups:
  - Asset Renewal Program – reduce infiltration and inflow into the sanitary sewer system
  - Sewer Upsizing Projects – replace existing sewers with larger sewers
    - Del Ray Upsizing Project #1 – Construction Notice to Proceed January 2025
    - 300/400 blocks N Alfred Street – Construction Notice to Proceed February 2025
    - Madison and Saint Asaph – Bids received, contract award Jan/Feb 2025
    - 400 block Wolfe Street – 100% design completed, Invitation to Bid Feb/Mar 2025
  - Combined Sewer Separation Projects – disconnection of sanitary sewers from combined sewer system and reconnection to fully separate sanitary sewer
    - 500 block N Pitt Street – construction completed
    - 600 block N Columbus Street – 100% design completed, Invitation to Bid Feb/Mar 2025

# Communications

## November - December

- 10 Total Flood Action/ Stormwater social media posts
  - *SWU Fee Credit Program, National Stormwater Day*
- Impressions: 63,169 increased by 56%
- Engagements: 3,720 increased by 139%
- Post link clicks: 282 increased by 253%  
\*Compared to previous 2 months (September - October)
  
- 5,488 Stormwater Management webpage views  
\*86 total pages under Stormwater Management web group
- Average engagement rate: 57%, Average events per session: 4
- Most popular stormwater webpages:
  - [Flood Map](#) = 986 views
  - [Types of Sewer Systems](#) = 548 views
  - [Flood Action](#) = 496
- Additional Top Ten Pages:
  - [Stormwater Utility Fee](#): 338 views
  - [Flood Mitigation Grant Program](#): 192 views
  - [Watersheds](#): 157 views

# Communications

## Upcoming Communications Priorities

- Flood Mitigation Grant Program
- Commonwealth, Ashby, Glebe
- SWU Fee Credit Program

# Maintenance Activities

- Hooffs Run Culvert Maintenance and Cleaning from Linden Street to Duke Street
  - Maintenance work is underway and expected to continue until April 2025.
  - Barrel 1 is 95% cleaned.
  - Concrete repairs in Barrel 1 are ongoing.
  - Staging areas are located in Linden Street Alley, Mount Vernon Avenue cul-de-sac and Hooffs Run Park

# Flood Mitigation Grant Program

- We have reimbursed a total of \$1,098,021.41 since the start of the program in July 2021.
- So far in FY2025, we have 70 applications in various stages with a total of \$107,174.18 reimbursed.
- In FY2024, we had 101 approved applications for a total of \$235,145.16 reimbursed.
- In FY2023, we had 73 approved applications for a total of \$167,538.49 reimbursed.
- In FY2022, we had 148 approved applications for a total of \$588,163.58 reimbursed.

# Annual SWU Credit Application Window

- Annual credit window is open from December 1 to February 15
- Approved eligible credits are good for 2 years
- Floodproofing practices added to eligibility list
- Residents who applied in the 22/23 cycle received an email to reapply.
- Over 120 applications have been received.
- Next webinar is Wednesday, January 22nd at 7pm. Come with questions!

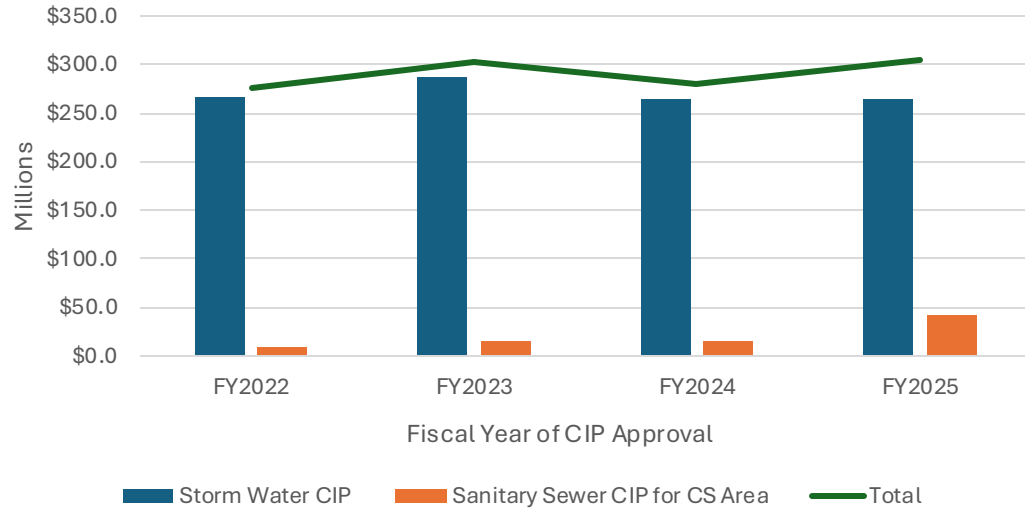




# Preparation for FY2026 Budget Season

AGENDA ITEM #5

### Ten-Year Capital Improvement Program as Approved by Council



### Public Hearing Opportunities for FY2026 Budget

*Note: City Manager's Budget is presented on*

*Tuesday, February 25, at 7pm*

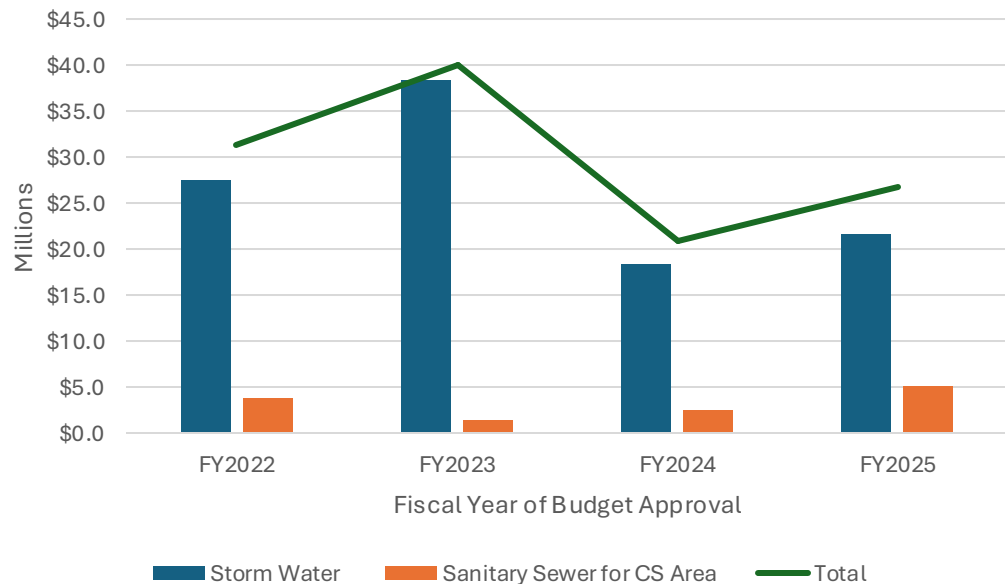
*Monday, March 10, at 5:30pm*

*Saturday, March 15, at 9:30am*

*Tuesday, April 8, at 5:30pm*

*Note: Our next Committee meeting is on Wednesday, March 19, at 7pm*

### Current Year Capital Budget as Approved by Council



# Discussion of recent Virginia law allowing property tax exemption for flood mitigation improvements by homeowners

## AGENDA ITEM #5

## Recent Virginia law permits property tax exemption for flood mitigation improvements

### CHAPTER 754

*An Act to amend the Code of Virginia by adding in Article 3 of Chapter 32 of Title 58.1 a section numbered 58.1-3228.1, relating to partial exemption from real property taxes for flood mitigation efforts.*

[S 1588]

Approved March 21, 2019

1. That the Code of Virginia is amended by adding in Article 3 of Chapter 32 of Title 58.1 a section numbered 58.1-3228.1 as follows:

*§ 58.1-3228.1. Partial exemption from real property taxes for flood mitigation efforts.*

*B. The governing body of any county, city, or town may, by ordinance, provide a partial tax exemption for improved real estate that is subject to recurrent flooding and upon which qualifying flood improvements have been made. No exemption shall be granted for any improvements made prior to July 1, 2018.*

## Alexandria administers a program of tax exemptions for solar energy improvements



### **SOLAR ENERGY EQUIPMENT TAX EXEMPTION** City of Alexandria, Virginia

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#### **General Information**

Property owners can qualify for a tax exemption for the installation of solar equipment that is designed and used primarily for the purpose of providing for the collection and use of solar energy for water heating, space heating or cooling or other applications which would otherwise require a conventional source of energy. Qualifying solar

# Public Comment

AGENDA ITEM #7

# Adjourn

AGENDA ITEM #8