

County of Henrico, Virginia
Capital Improvement Program
FY 2020-21 through FY 2024-25

Public Utilities - Sewer

Fund 51 Enterprise Fund - W&S

Project/Work Phase	Priority	Request FY 20-21	Request FY 21-22	Request FY 22-23	Request FY 23-24	Request FY 24-25	Total Five Year
00782 New Sewer Connections	1	300,000	300,000	300,000	300,000	300,000	1,500,000
00772 Sewer Line Extensions	2	500,000	500,000	500,000	500,000	500,000	2,500,000
00732 Sewer Line Rehabilitation	3	4,000,000	4,000,000	10,000,000	10,000,000	8,000,000	36,000,000
00743 Sewer Pump Station Improvements	4	400,000	400,000	3,000,000	400,000	400,000	4,600,000
00737 Sewer Reloc., Adjustments & Crossings	5	200,000	200,000	200,000	200,000	200,000	1,000,000
00725 Plan Review and Inspection	6	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
06492 Roof Replacement	7	50,000	50,000	50,000	50,000	50,000	250,000
08172 Water Reclamation Facility Improvements	8	500,000	500,000	500,000	500,000	500,000	2,500,000
01076 Strawberry Hill Basin Sewer Rehab	9	5,000,000	10,500,000	10,000,000	10,000,000	10,000,000	45,500,000
06157 Almond Creek Sewer Pump Station Replacement	10	4,600,000	0	0	0	0	4,600,000
06159 Almond Creek Force Main	11	600,000	2,600,000	0	0	0	3,200,000
07027 Rooty Branch Sewers	12	1,500,000	19,500,000	0	0	0	21,000,000
06838 Allens and Rooty Branch Force Main Upgrade	1	0	1,500,000	0	10,000,000	0	11,500,000
06667 Tuckahoe Creek Trunk Sewer Rehab	2	0	5,000,000	0	0	19,000,000	24,000,000
07029 Gillies Creek SPS FEB	3	0	1,200,000	0	5,400,000	0	6,600,000
06450 White Oak Sewer Pump Station Force Main	1	0	0	5,250,000	0	0	5,250,000
06666 Horsepen Br Sew - Broad Street to Rte 33	2	0	0	20,000,000	0	0	20,000,000
07026 Rooty Branch SPS Replacement	3	0	0	3,000,000	0	9,000,000	12,000,000
06154 North Run Trunk Sewer	4	0	0	6,500,000	0	1,500,000	8,000,000
06158 Hungary Creek Trunk Sewer	5	0	0	4,500,000	0	1,000,000	5,500,000
07028 Rooty Branch Force Main	1	0	0	0	600,000	0	600,000
06152 Gambles Mill SPS FEB Modification	2	0	0	0	4,000,000	0	4,000,000
08880 Public Utilities Operations Center	1	0	0	0	0	15,000,000	15,000,000
00735 Water Reclamation Facility Expansion	2	0	0	0	0	34,000,000	34,000,000
Total		19,650,000	48,250,000	65,800,000	43,950,000	101,450,000	279,100,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00782	Project Name: New Sewer Connections
Department: Public Utilities - Sewer	Department Priority: 1
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Design and construct sewer service connections to serve new customers requesting service connections to existing sewer mains.

Purpose and Need

Installation of sewer service connections for owner occupied homes on existing parcels is a service provided by Public Utilities as described in the County Code.

History and Current Status

Ongoing project. Prior year CIP: FY20 - \$250,000. Funding increased to reflect current demands.

Location

Countywide

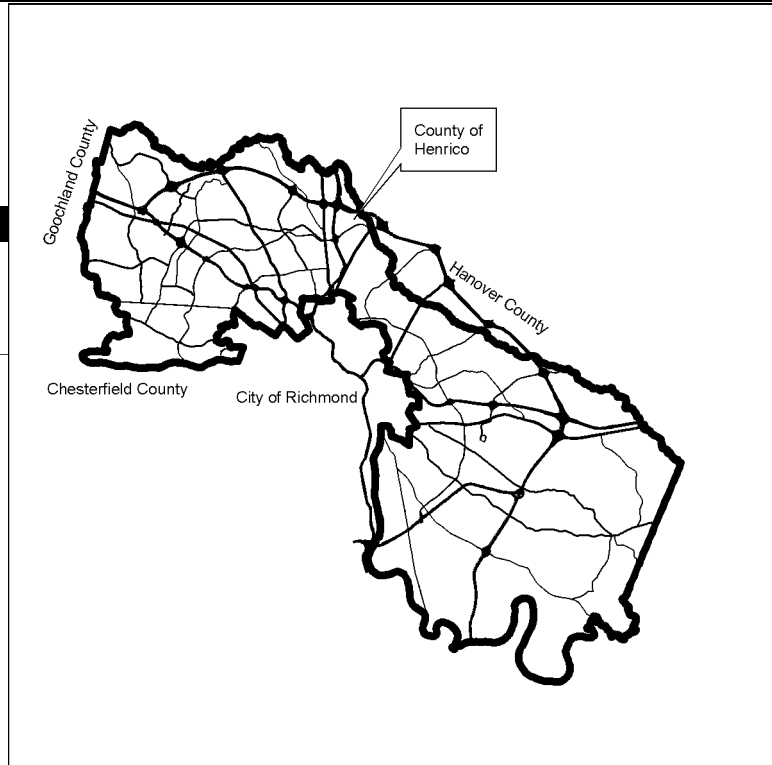
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	300,000	300,000	300,000	300,000	300,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 1
Prior Request Priority:	1
Prior Request Amount:	\$250,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00772	Project Name: Sewer Line Extensions
Department: Public Utilities - Sewer	Department Priority: 2
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Design and construct sewer main extensions from the existing system to serve owner-occupied single-family residences.

Purpose and Need

Installation of sewer main extensions for owner occupied homes is a service provided by Public Utilities as described in the County Code.

History and Current Status

Ongoing project. Funding request remains at \$500,000 annually to reflect current demand.

Location

Countywide

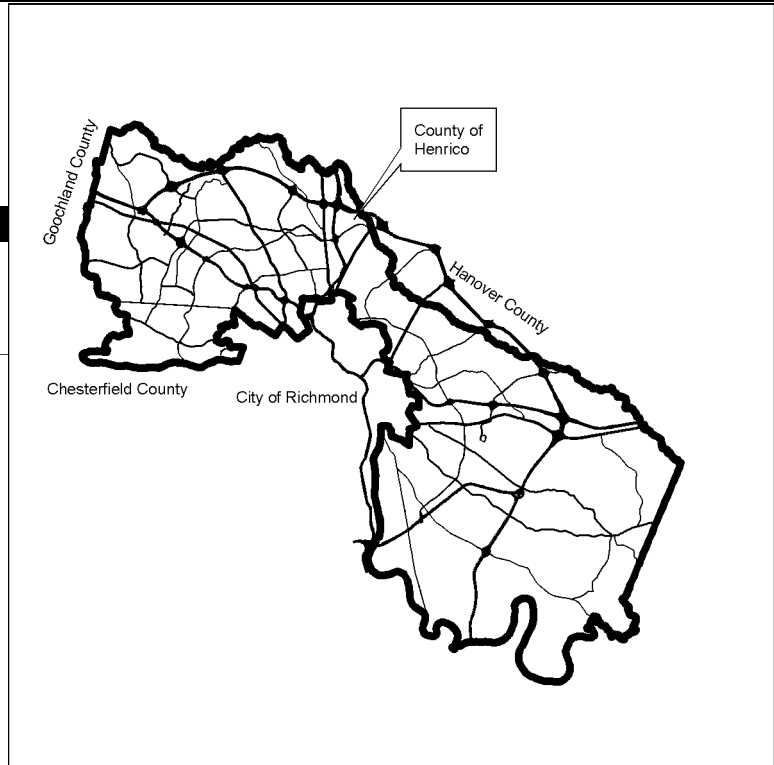
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	500,000	500,000	500,000	500,000	500,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	2
Prior Request Amount:	\$500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00732	Project Name: Sewer Line Rehabilitation
Department: Public Utilities - Sewer	Department Priority: 3
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Rehabilitate or replace deteriorated sewer mains. Rehabilitation includes the use of trenchless technology including sliplined, fold and formed and cured in place techniques.

Purpose and Need

The needs for these individual projects are determined through age analysis (echo curves) and ongoing condition assessments using the Department's asset management system, wet weather flow program, TV inspection program, sewer main cleaning program, and work orders. The priority for each project is based on analysis of the above factors.

History and Current Status

This is an ongoing project for each year of the CIP. Schedule submitted in prior year CIP: FY20 - \$5,000,000; FY21 - \$4,000,000; FY22 - \$4,000,000; FY23 - \$11,000,000; FY24 - \$15,000,000. Funding reflects current project schedules and estimates.

Location

Countywide

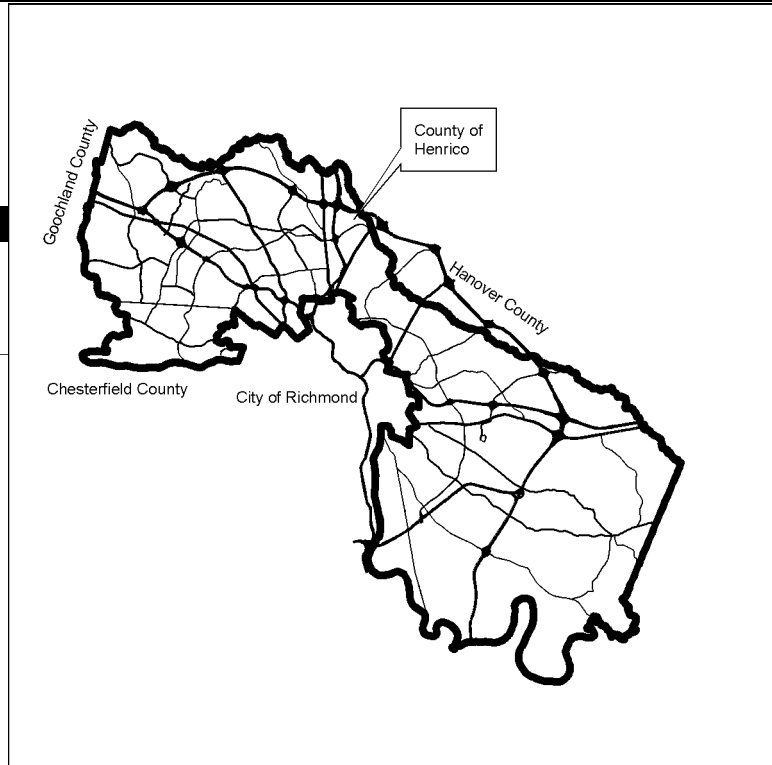
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	800,000	800,000	2,000,000	2,000,000	1,600,000
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	3,200,000	3,200,000	8,000,000	8,000,000	6,400,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$4,000,000	\$4,000,000	\$10,000,000	\$10,000,000	\$8,000,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	3
Prior Request Amount:	\$5,000,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00743	Project Name: Sewer Pump Station Improvements
Department: Public Utilities - Sewer	Department Priority: 4
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Design and construct improvements and major repairs at 26 existing sewage pumping stations. Projects include replacing adjustable frequency drives (AFD), screening and miscellaneous station upgrades at Strawberry Hill Sewage Pumping Station and Holladay Branch Pumping Station.

Purpose and Need

The need for upgrades and repairs to pumping stations is determined from the asset management system, on-going maintenance programs, and facility assessments. Current projects are based on the Pump Station Equipment Report dated September 7, 2017.

History and Current Status

Ongoing project. Schedule submitted in prior year: FY20 - \$1,500,000; FY21 - \$400,000; FY22 - \$400,000; FY23 - \$3,000,000; FY24 - \$400,000. FY21 is for upgrades at Strawberry Hill and Holladay Branch.

Location

Countywide

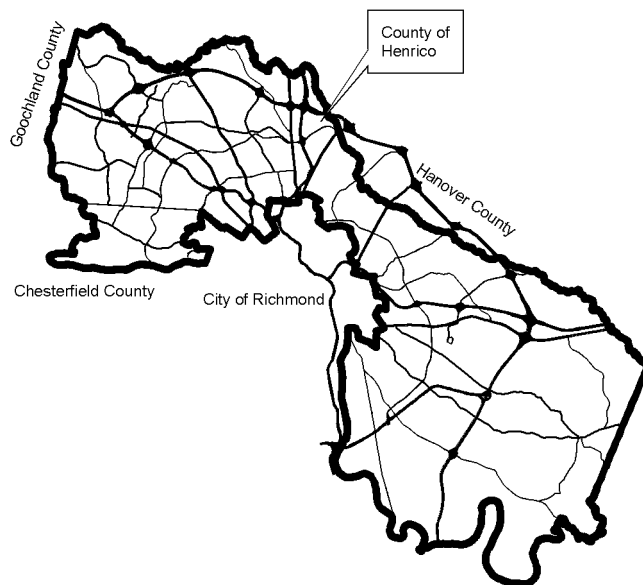
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	600,000	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	400,000	400,000	2,400,000	400,000	400,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$400,000	\$400,000	\$3,000,000	\$400,000	\$400,000

Estimated Operating Costs

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	4
Prior Request Amount:	\$1,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00737	Project Name: Sewer Reloc., Adjustments & Crossings
Department: Public Utilities - Sewer	Department Priority: 5
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Design and construct adjustments to existing sewer lines and extend new sewer lines necessary for coordination with road and drainage projects.

Purpose and Need

Road projects by DPW and VDOT require that existing sewer mains be adjusted or relocated to coordinate with project requirements. Sewer mains are extended with construction of new roads in accordance with the utility master plan. Project requirements are determined using the overall master utility plan. Construction with the DPW and VDOT road projects will minimize future impacts on the roadway.

History and Current Status

Ongoing project. Funding remains at \$200,000 per year.

Location

Countywide

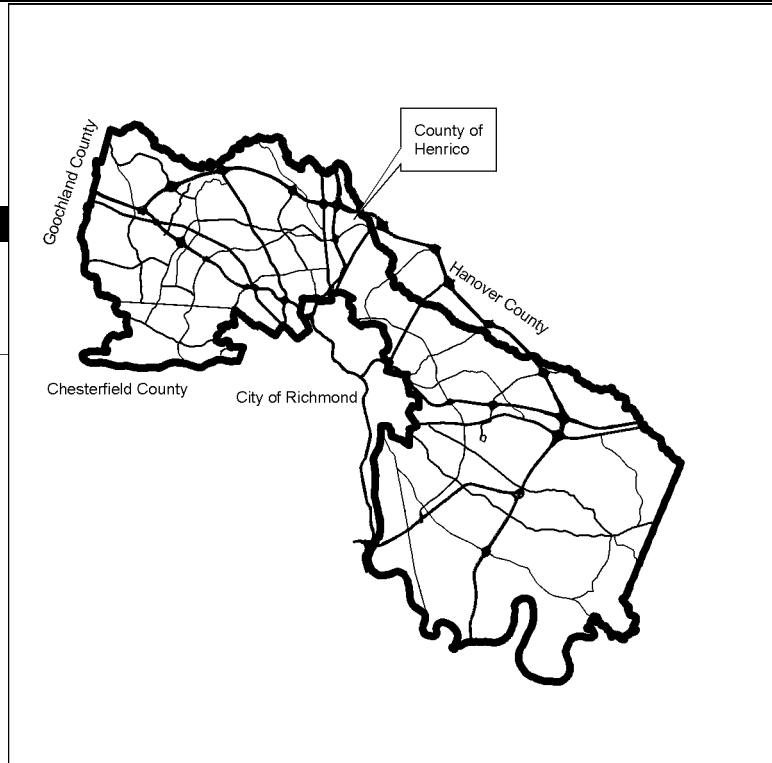
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	200,000	200,000	200,000	200,000	200,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year: Year 1
Prior Request Priority: 5
Prior Request Amount: \$200,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00725	Project Name: Plan Review and Inspection
Department: Public Utilities - Sewer	Department Priority: 6
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Engineering plan review and construction inspection by DPU for installation of water and sewer mains by private developers.

Purpose and Need

This project captures County engineering and construction inspection costs associated with private development and assigns these values to the total costs of donated water and sewer assets.

History and Current Status

Ongoing project. Funding remains at \$2,000,000 per year. Spending in previous years: FY15 - \$1,656,439; FY16 - \$1,545,747; FY17 - \$1,705,459; FY18 - \$2,167,829, and FY19 - \$1,958,242.

Location

Countywide

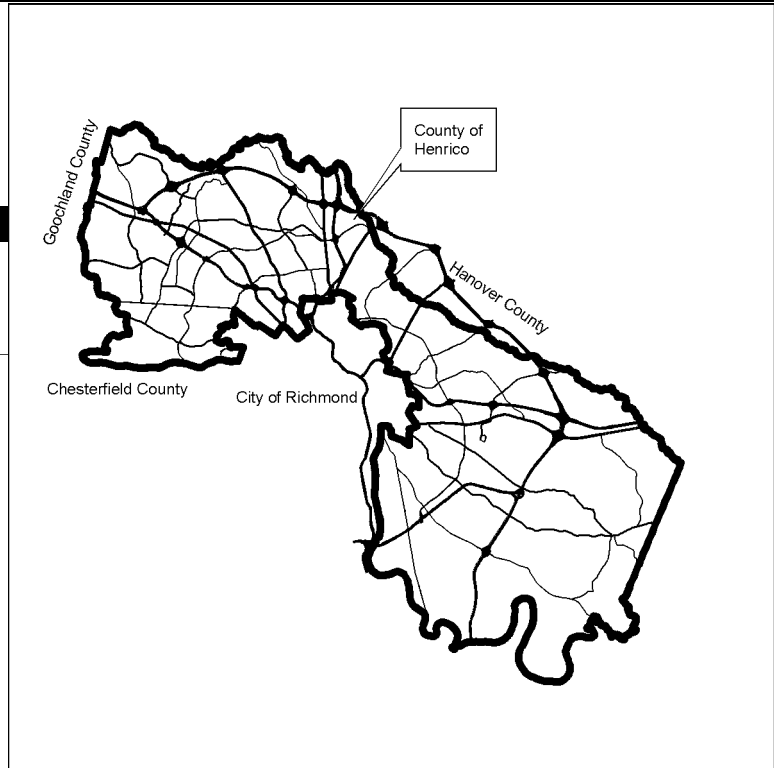
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year: Year 1
Prior Request Priority: 6
Prior Request Amount: \$2,000,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06492	Project Name: Roof Replacement
Department: Public Utilities - Sewer	Department Priority: 7
Project Type: Sewer	Fiscal Year: 2021
District: Countywide	Revenue Source: Enterprise Fund

Description and Scope

Design and construction to allow for scheduled replacement of roofs for water and sewer facilities as they are identified.

Purpose and Need

Roof replacement or refurbishment required at various facilities due to age and condition of roof.

History and Current Status

Ongoing project. Funding remains at \$50,000 annually. Condition assessment needs for buildings at the Water Reclamation Facility is proposed.

Location

Countywide

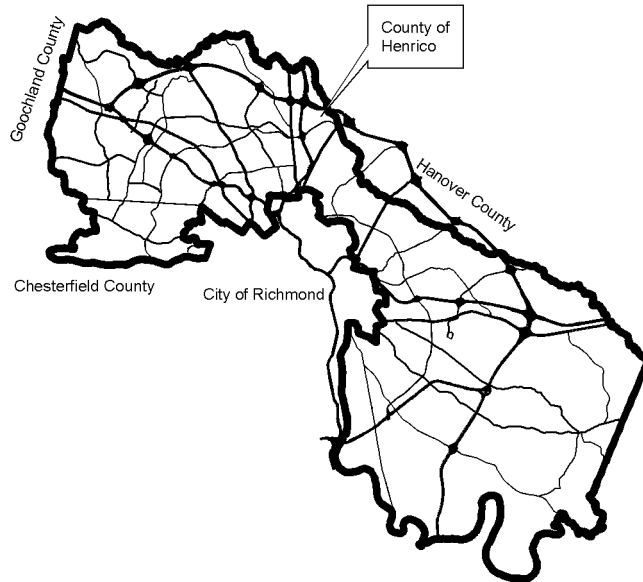
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	50,000	50,000	50,000	50,000	50,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year: Year 1
Prior Request Priority: 7
Prior Request Amount: \$50,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 08172	Project Name: Water Reclamation Facility Improvement
Department: Public Utilities - Sewer	Department Priority: 8
Project Type: Sewer	Fiscal Year: 2021
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct improvements and major repairs and replacements at the Water Reclamation Facility. Projects include development of an asset management program in FY22.

Purpose and Need

Facility improvements are based on condition assessments.

History and Current Status

Ongoing project. Funding for miscellaneous improvements. Funding reflects current projects and schedule.

Location

9101 WRVA Road

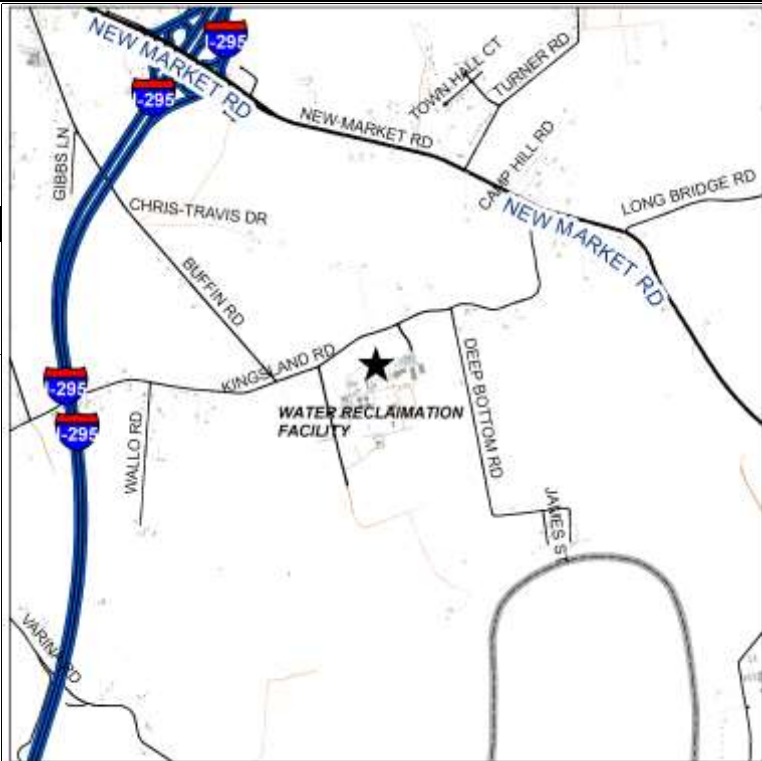
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	100,000	100,000	100,000	100,000	100,000
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	400,000	400,000	400,000	400,000	400,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	8
Prior Request Amount:	\$30,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 01076	Project Name: Strawberry Hill Basin Sewer Rehab
Department: Public Utilities - Sewer	Department Priority: 9
Project Type: Sewer	Fiscal Year: 2021
District: B, F, T, TC	Revenue Source: Enterprise Fund

Description and Scope

In the Strawberry Hill sewer service area, this project will rehabilitate or replace deteriorated sewer pipes to reduce wet weather flows due to infiltration and inflow, prevent overflows, ensure adequate pipe capacity, and improve the overall condition of the sewer system. Work will include sanitary sewer evaluation, design, and construction of system improvements. Work will be prioritized based on the asset management system, maintenance records, and condition assessments.

Purpose and Need

This project is recommended by the Henrico Wet Weather Flow Reduction Plan Update (2004) and updated with the Defective Sewer Line Rehabilitation Program System Wide Prioritization Update in 2011.

History and Current Status

Schedule submitted in prior year CIP: FY20 - \$8,500,000; FY21 - \$9,500,000; FY22 - \$10,500,000; FY23 - \$14,000,000; FY24 - \$13,000,000. Proposed funding reflects current project schedules and construction estimates.

Location

Strawberry Hill Area

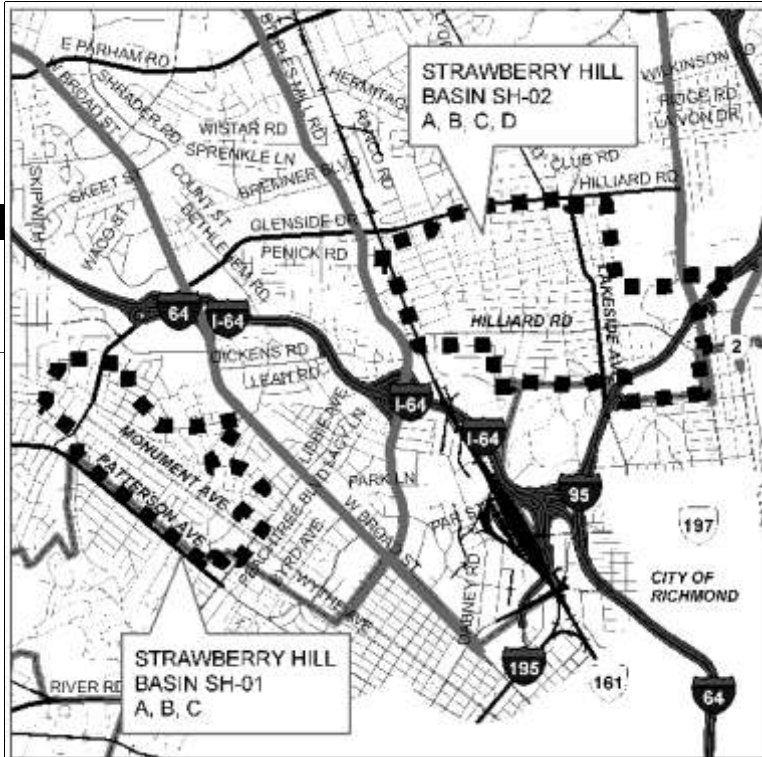
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	800,000	1,600,000	1,600,000	1,600,000	1,600,000
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	4,200,000	8,900,000	8,400,000	8,400,000	8,400,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$5,000,000	\$10,500,000	\$10,000,000	\$10,000,000	\$10,000,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	10
Prior Request Amount:	\$8,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06157	Project Name: Almond Creek Sewer Pump Station Repla
Department: Public Utilities - Sewer	Department Priority: 10
Project Type: Sewer	Fiscal Year: 2021
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct improvements to the existing 2.7 MGD sewer pump station. Pump station capacity will be increased to 7.0 MGD.

Purpose and Need

Provide for additional capacity for increasing growth demands and for wet weather flows as projected in the 2007 Water and Sewer Facility Plan prepared by Greeley and Hansen.

History and Current Status

Schedule submitted in prior year: FY24 - \$1,000,000. Proposed funding reflects current scope and schedule. Project was accelerated due to current condition assessment of the facility.

Location

5700 Old Osborne Turnpike

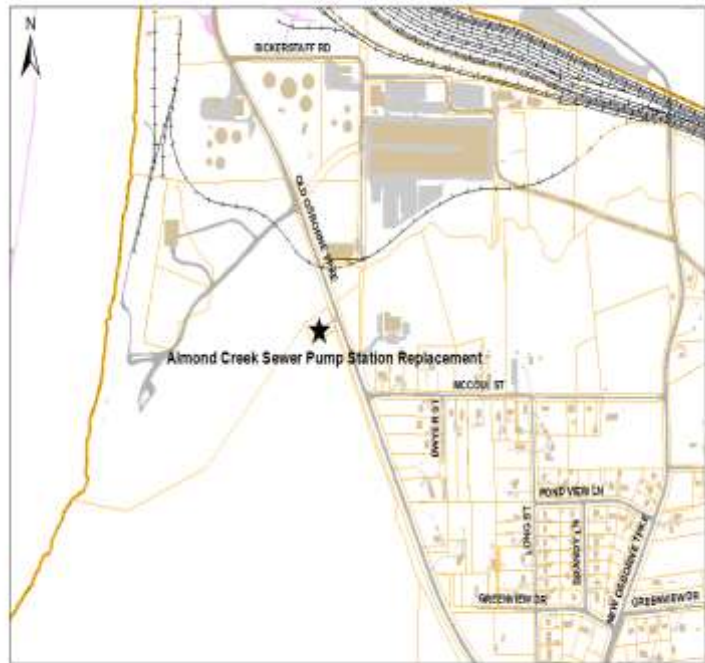
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	4,600,000	0	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$4,600,000	\$0	\$0	\$0	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year: Year 5
Prior Request Priority: 1
Prior Request Amount: \$1,000,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06159	Project Name: Almond Creek Force Main
Department: Public Utilities - Sewer	Department Priority: 11
Project Type: Sewer	Fiscal Year: 2021
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct 11,200 feet of existing force main necessary to increase capacity from 2.7 MGD to 7.0 MGD. The force main extends from the existing Almond Creek SPS to a discharge point at New Market SPS.

Purpose and Need

Provide for additional capacity for increasing growth demands and for wet weather flows as projected in the 2007 Water and Sewer Facility Plan prepared by Greeley and Hansen.

History and Current Status

This is a new project.

Location

5700 Old Osbourne Turnpike

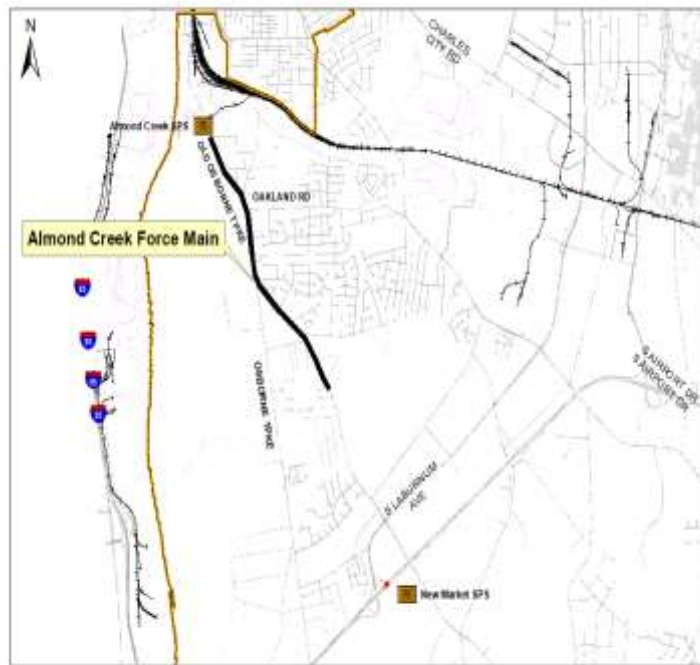
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	600,000	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	2,600,000	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$600,000	\$2,600,000	\$0	\$0	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	New
Prior Request Priority:	New
Prior Request Amount:	\$0

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 07027	Project Name: Rooty Branch Sewers
Department: Public Utilities - Sewer	Department Priority: 12
Project Type: Sewer	Fiscal Year: 2021
District: Three Chopt	Revenue Source: Enterprise Fund

Description and Scope

Design and construct 9,440 feet of 48 inch gravity sewer to replace existing 15 inch - 24 inch sewer pipes.

Purpose and Need

Provide additional capacity for increasing growth demands with implementation of redevelopment planned for Innsbrook and for wet weather flows. Recommended by the Greeley & Hansen Water & Sewer Facility Plan - July 2007.

History and Current Status

Schedule submitted in prior year CIP: FY2024 - \$1,500,000. Funding in FY2021 is for design and land and FY2022 is for construction. Funding reflects current project schedule.

Location

Innsbrook

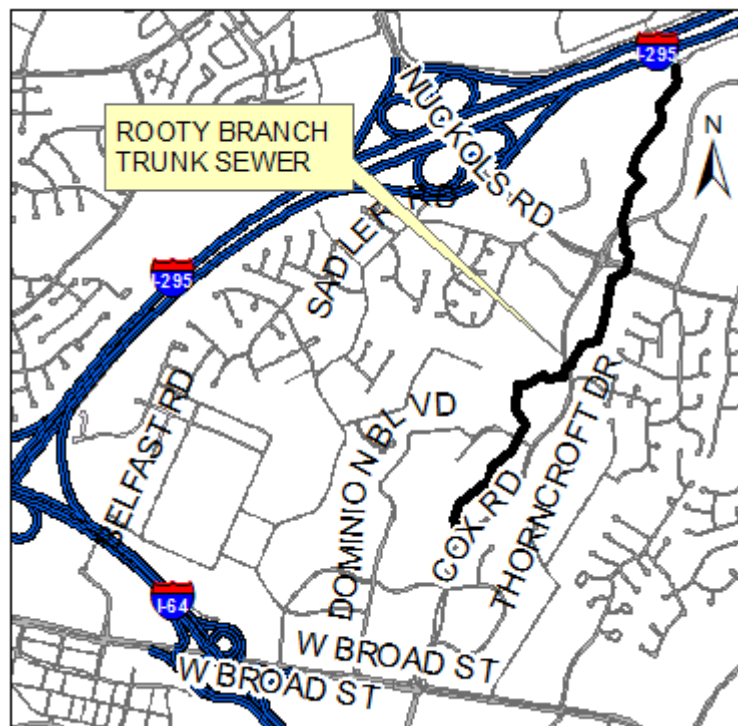
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	1,200,000	0	0	0	0
Land	300,000	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	19,500,000	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$1,500,000	\$19,500,000	\$0	\$0	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 5
Prior Request Priority:	3
Prior Request Amount:	\$1,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06838	Project Name: Allens and Rooty Branch Force Main Upg
Department: Public Utilities - Sewer	Department Priority: 1
Project Type: Sewer	Fiscal Year: 2022
District: B, TC	Revenue Source: Enterprise Fund

Description and Scope

Design and construction of 8,900 feet of 42 inch force main to replace two existing force mains - the 16 inch Rooty Branch FM and the parallel 20 inch Allens Branch FM.

Purpose and Need

Increase existing pipeline size to handle additional flows. The existing capacity is 16 MGD. The new force main capacity will be 49 MGD.

History and Current Status

Schedule submitted in prior year CIP: FY2021 - \$1,500,000; FY2023 - \$7,150,000. Proposed funding reflects current project schedule for design and easement acquisition in FY2022 and for construction in FY2024.

Location

From Rooty Branch SPS & Allens Branch SPS to Meredith Branch SPS

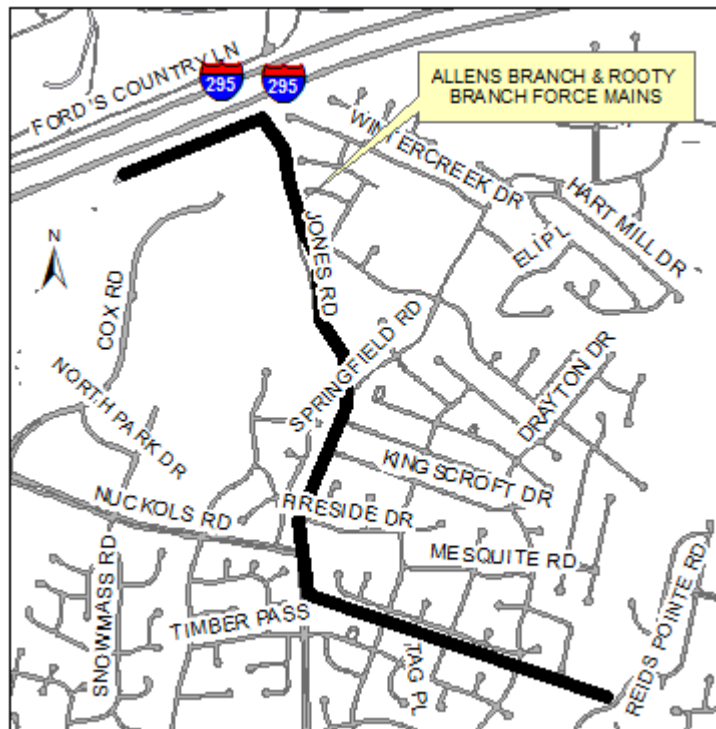
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	1,500,000	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	10,000,000	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$1,500,000	\$0	\$10,000,000	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 2
Prior Request Priority:	1
Prior Request Amount:	\$1,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06667	Project Name: Tuckahoe Creek Trunk Sewer Rehab
Department: Public Utilities - Sewer	Department Priority: 2
Project Type: Sewer	Fiscal Year: 2022
District: TC, T	Revenue Source: Enterprise Fund

Description and Scope

Rehabilitate or replace approximately 32,700 feet of existing 27 inch to 54 inch sewer main. Rehabilitation of deteriorating sewer piping to reduce wet weather flows due to infiltration and inflow, prevent overflows, ensure adequate pipe capacity, and improve the overall condition of the sewer system.

Purpose and Need

Provide additional capacity for increasing growth demands and for wet weather flows. Recommended by URS in the Tuckahoe Creek Trunk Sewer Evaluation June 2010 preliminary engineering report.

History and Current Status

Schedule submitted in prior year CIP: FY2022 - \$5,000,000. Proposed funding reflects current project schedule for design and easement acquisition in FY2022.

Location

From Broad Street to River Road SPS.

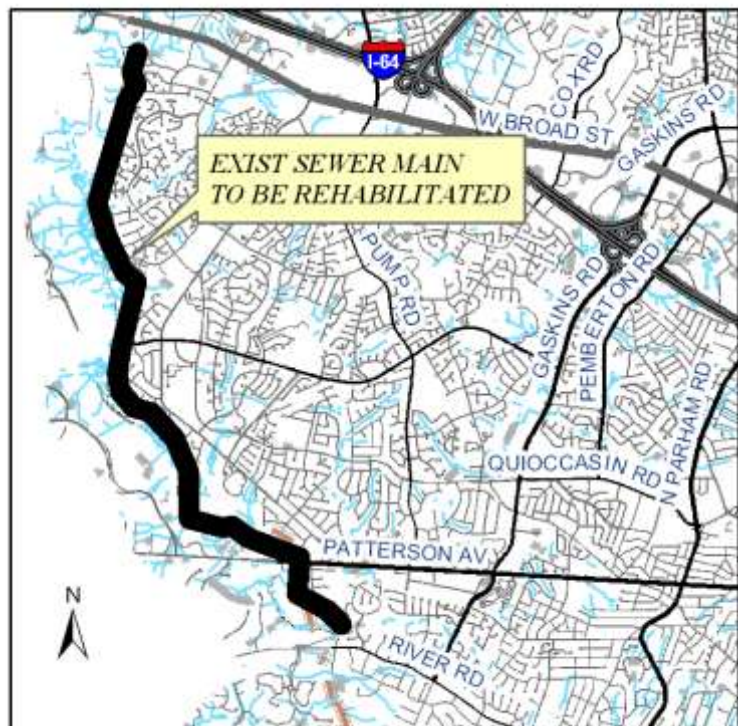
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	5,000,000	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	19,000,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$5,000,000	\$0	\$0	\$19,000,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 3
Prior Request Priority:	5
Prior Request Amount:	\$5,000,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 07029	Project Name: Gillies Creek SPS FEB
Department: Public Utilities - Sewer	Department Priority: 3
Project Type: Sewer	Fiscal Year: 2022
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct additional 4 MG of storage volume for sewer flow equalization basin during wet weather.

Purpose and Need

Provide additional flow equalization storage for wet weather induced flows. Recommended by the Greeley & Hansen Water & Sewer Facility Plan - July 2007.

History and Current Status

Schedule submitted in prior year CIP: FY2022 - \$1,200,000, FY2024 - \$5,400,000. Proposed funding in FY2022 is for design and funding for FY2024 is for construction.

Location

Jennie Scher Road

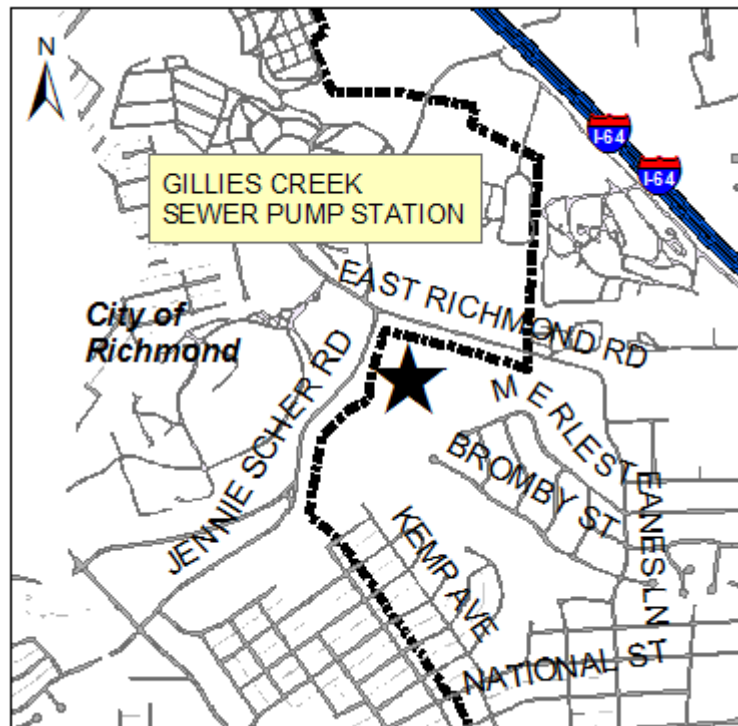
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	1,200,000	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	5,400,000	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$1,200,000	\$0	\$5,400,000	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 3
Prior Request Priority:	6
Prior Request Amount:	\$1,200,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06450	Project Name: White Oak Sewer Pump Station Force Ma
Department: Public Utilities - Sewer	Department Priority: 1
Project Type: Sewer	Fiscal Year: 2023
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct 7,800 feet of 36 inch force main from the existing White Oak Sewer Pump Station at Beulah Road to Portugee Road. The project will also provide connection to the Eastern Force Main instead of the Four Mile Trunk Sewer.

Purpose and Need

Provide for additional capacity for increasing growth demands and for wet weather flows as projected in the 2007 Water and Sewer Facility Plan prepared by Greeley and Hansen.

History and Current Status

Prior Year CIP: FY20 - \$1,300,000; FY22 - \$5,250,000. Funding in FY2023 is for construction.

Location

Beulah Road

Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	5,250,000	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$5,250,000	\$0	\$0

Estimated Operating Costs

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year: Year 1
Prior Request Priority: 12
Prior Request Amount: \$1,300,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06666	Project Name: Horsepen Br Sew - Broad Street to Rte 33
Department: Public Utilities - Sewer	Department Priority: 2
Project Type: Sewer	Fiscal Year: 2023
District: Brookland	Revenue Source: Enterprise Fund

Description and Scope

Design and construct approximately 7,000 feet of 42 inch sewer main.

Purpose and Need

Provide additional capacity for increasing growth demands and for wet weather induced flows. Recommended by the Greeley & Hansen Water & Sewer Facility Plan - July 2007.

History and Current Status

Schedule submitted in prior year CIP: FY2022 - \$13,500,000. Funding in FY2023 is for construction. Proposed funding reflects current project schedule for design and easement acquisition.

Location

From Broad Street near Horsepen Road to Staples Mill Road (Route 33).

Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	20,000,000	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$20,000,000	\$0	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year: Year 3
Prior Request Priority: 4
Prior Request Amount: \$13,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 07026	Project Name: Rooty Branch SPS Replacement
Department: Public Utilities - Sewer	Department Priority: 3
Project Type: Sewer	Fiscal Year: 2023
District: Three Chopt	Revenue Source: Enterprise Fund

Description and Scope

Design and construct a 34 MGD pump station to replace the existing 3.7 MGD station.

Purpose and Need

Provide additional capacity for increasing growth demands with implementation of redevelopment planned for Innsbrook and for wet weather induced flows. Recommended by the Greeley & Hansen Water & Sewer Facility Plan - July 2007.

History and Current Status

Schedule submitted in prior year CIP: FY2024 - \$3,000,000. Proposed funding in FY2023 is for design and FY2025 is for construction.

Location

5200 Cox Road

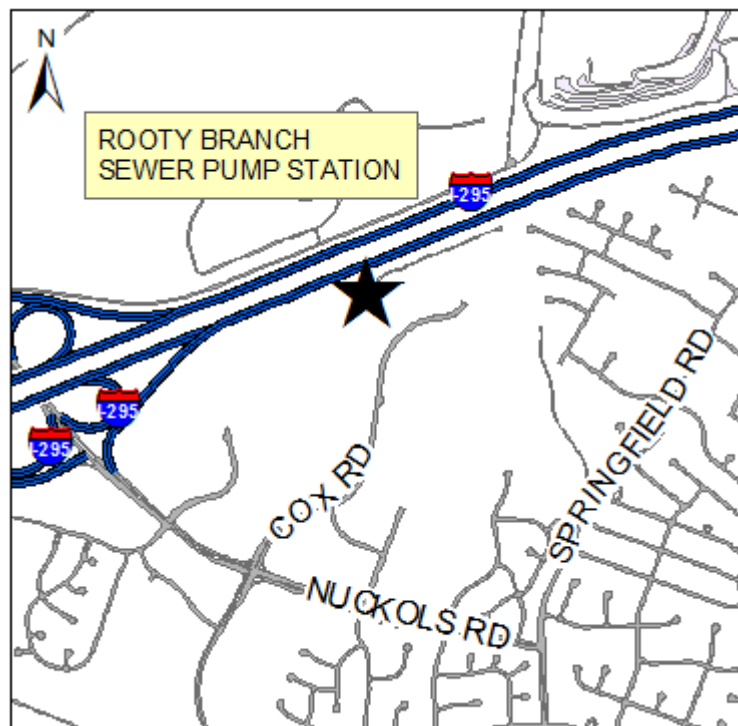
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	3,000,000	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	9,000,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$3,000,000	\$0	\$9,000,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 5
Prior Request Priority:	2
Prior Request Amount:	\$3,000,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06154	Project Name: North Run Trunk Sewer
Department: Public Utilities - Sewer	Department Priority: 4
Project Type: Sewer	Fiscal Year: 2023
District: Fairfield	Revenue Source: Enterprise Fund

Description and Scope

Design and construct 22,350 feet of 54 inch gravity trunk sewer main beginning near Woodman Road and extending downstream along North Run Creek to Brook Road at Upham Brook.

Purpose and Need

The need for this project was initially identified in the 2007 Water and Sewer Facility Plan and modified with the Innsbrook Area Study Special Focus Area Report dated January 2013. Both reports were prepared by Greeley and Hansen.

History and Current Status

New project.

Location

Along North Run Creek from Woodman Road to Brook Road.

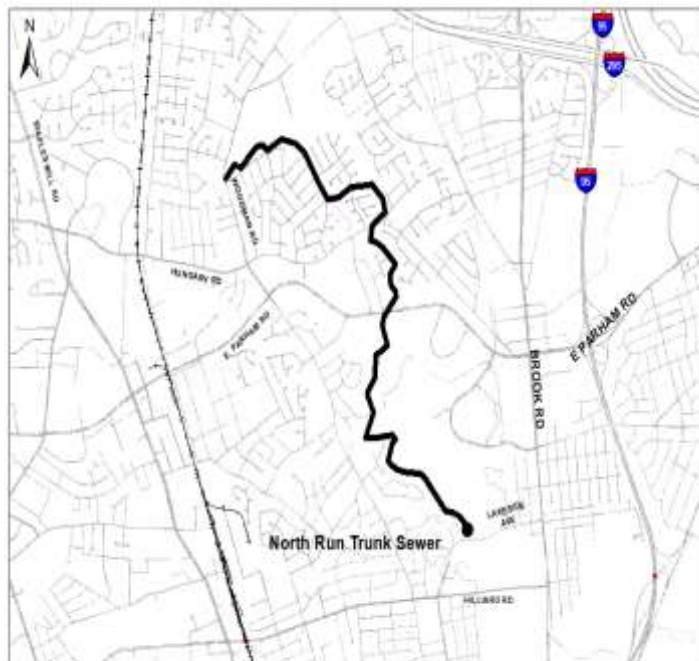
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	6,500,000	0	0
Land	0	0	0	0	1,500,000
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$6,500,000	\$0	\$1,500,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	New
Prior Request Priority:	New
Prior Request Amount:	\$0

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06158	Project Name: Hungary Creek Trunk Sewer
Department: Public Utilities - Sewer	Department Priority: 5
Project Type: Sewer	Fiscal Year: 2023
District: B, F	Revenue Source: Enterprise Fund

Description and Scope

Design and construct 19,100 feet of 48 inch gravity trunk sewer main beginning near Hungary Road west of Staples Mill Road and extending downstream along Hungary Creek to North Run Creek at Woodman Road

Purpose and Need

The need for this project was initially identified in the 2007 Water and Sewer Facility Plan and modified with the Innsbrook Area Study Special Focus Area Report dated January 2013. Both reports were prepared by Greeley and Hansen.

History and Current Status

New project.

Location

Along Hungary Creek from Staples Mill Road to Woodman Road

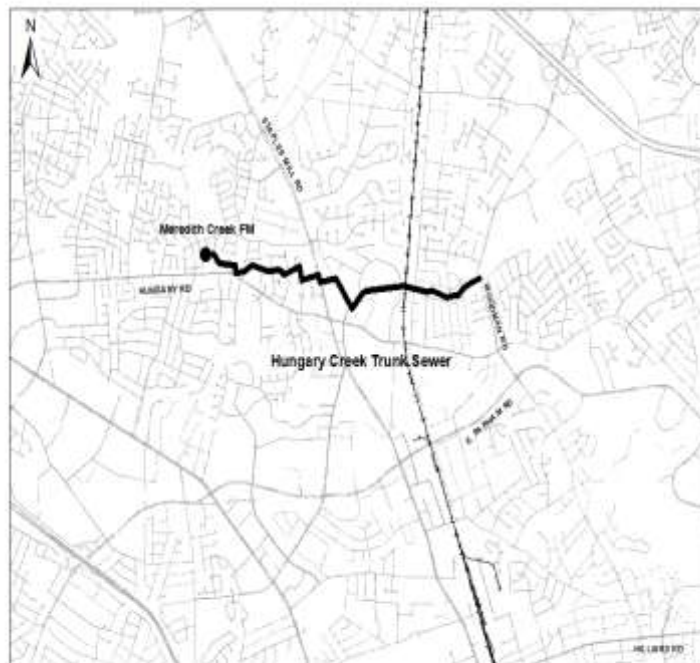
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	4,500,000	0	0
Land	0	0	0	0	1,000,000
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$4,500,000	\$0	\$1,000,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	New
Prior Request Priority:	New
Prior Request Amount:	\$0

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 07028	Project Name: Rooty Branch Force Main
Department: Public Utilities - Sewer	Department Priority: 1
Project Type: Sewer	Fiscal Year: 2024
District: Three Chopt	Revenue Source: Enterprise Fund

Description and Scope

Design and construct approximately 1,600 feet of 36 inch force main to replace existing force main and increase transport capacity to 34 MGD.

Purpose and Need

Provide additional capacity for increasing growth demands with implementation of redevelopment planned for Innsbrook and for wet weather flows. Recommended by the Greeley & Hansen Water & Sewer Facility Plan - July 2007.

History and Current Status

New project.

Location

Ford's Country Lane and I-295

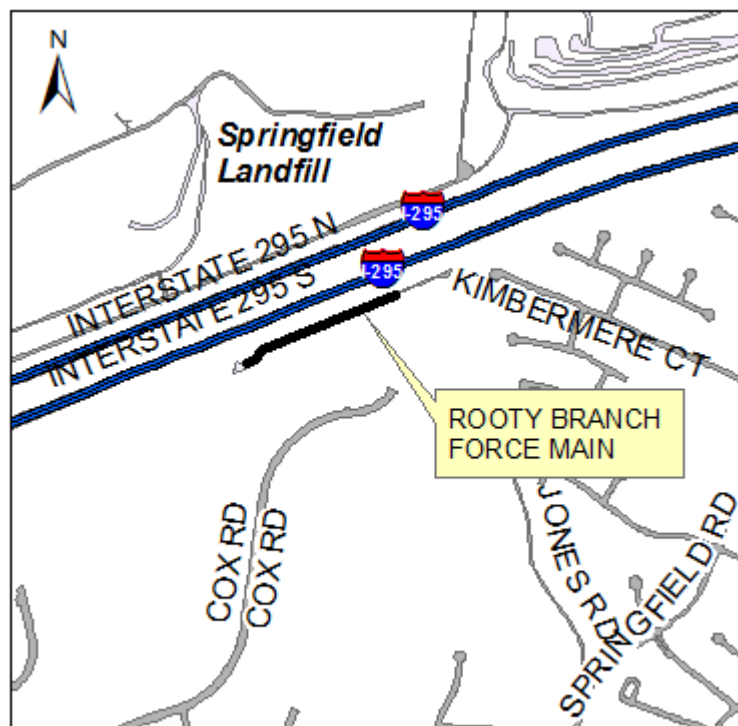
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	600,000	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$0	\$600,000	\$0

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	New
Prior Request Priority:	New
Prior Request Amount:	\$0

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 06152	Project Name: Gambles Mill SPS FEB Modification
Department: Public Utilities - Sewer	Department Priority: 2
Project Type: Sewer	Fiscal Year: 2024
District: Tuckahoe	Revenue Source: Enterprise Fund

Description and Scope

Modify existing overflow basin as required to provide flow equalization capability and add emergency generator(s). Phase 1 is for construction of emergency power. Phase 2 is for modifications to provide covered storage and maintain the existing 3 MG flow equalization capacity.

Purpose and Need

As use of the flow equalization basins increase, the existing basin will be modified as necessary to provide covered storage and allow control of odors. The generator(s) is being added to provide redundancy for emergency operation if the existing primary and secondary power feeds from Dominion VA Power are lost.

History and Current Status

Schedule submitted in prior year CIP: FY22 - \$15,500,000. Proposed funding request reflects current project schedule for phased construction. Phase 1 to be constructed in FY24.

Location

6113 Cary Street

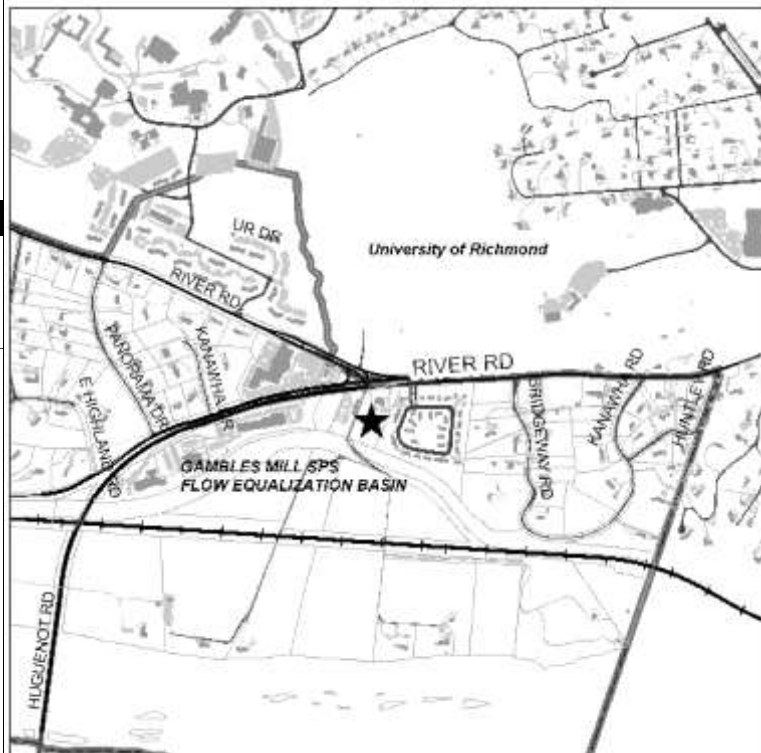
Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	4,000,000	0
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$0	\$4,000,000	\$0

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	Year 3
Prior Request Priority:	2
Prior Request Amount:	\$15,500,000

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 08880	Project Name: Public Utilities Operations Center
Department: Public Utilities - Sewer	Department Priority: 1
Project Type: Sewer	Fiscal Year: 2025
District: Fairfield	Revenue Source: Enterprise Fund

Description and Scope

Design and construct expansion or replacement of the existing Operations Center including offices, warehouse, parking, and equipment storage.

Purpose and Need

The existing Operations Center Facilities exceed capacity for existing staff and equipment and require expansion. Additionally, changes environmental regulations require significant improvements to equipment storage and management facilities. Upgrades to stormwater management facilities are also required.

History and Current Status

New project.

Location

10401 Woodman Road

Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	3,000,000
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	12,000,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$0	\$0	\$15,000,000

Estimated Operating Costs

Map

FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0



Notes

Prior Request Year:	New
Prior Request Priority:	New
Prior Request Amount:	\$0

Capital Improvement Program

FY2020/21 - FY2024/25 - Fund - 51 - Enterprise Fund - W&S

Project No: 00735	Project Name: Water Reclamation Facility Expansion
Department: Public Utilities - Sewer	Department Priority: 2
Project Type: Sewer	Fiscal Year: 2025
District: Varina	Revenue Source: Enterprise Fund

Description and Scope

Design and construct upgrades and/or improvements for facilities and/or treatment processes at the Water Reclamation Facility (WRF). The WRF operates under a permit from the Virginia Department of Environmental Quality (DEQ). DEQ will promulgate revisions to the current waste load allocations for nitrogen and phosphorous discharges for compliance with the Chesapeake Bay Program under yet to be released guidance from Environmental Protection Agency. The regulations could require completion of major modifications to the WRF by as early as 2027. The estimated cost for design and construction of the nutrient upgrades is \$100 million.

Purpose and Need

Facility improvements are based on the asset management system, condition assessments, and preliminary facility master plan in June 2011.

History and Current Status

Schedule submitted in prior year CIP: FY20 - \$8,000,000. Proposed funding reflects phasing of the project to meet proposed regulation changes. Funding in FY25 is for Phase 2 of the nutrient upgrades.

Location

WRVA Rd.

Capital Expenditures

	FY2021	FY2022	FY2023	FY2024	FY2025
Planning and Design	0	0	0	0	0
Land	0	0	0	0	0
Site Improvements	0	0	0	0	0
Construction	0	0	0	0	34,000,000
Direct Equipment	0	0	0	0	0
Vehicle Replacement	0	0	0	0	0
Other project Costs	0	0	0	0	0
Furniture and Fixtures	0	0	0	0	0
Total Request	\$0	\$0	\$0	\$0	\$34,000,000

Estimated Operating Costs

	Map
FY2021	\$0
FY2022	\$0
FY2023	\$0
FY2024	\$0
FY2025	\$0

Map



Notes

Prior Request Year:	Year 1
Prior Request Priority:	9
Prior Request Amount:	\$8,000,000