

SANITARY SEWER

Significant Project Changes in the Sanitary Sewer Section

This chart highlights any project funding that increased or decreased by more than 15%, or \$1 million, since the last Approved CIP.

NOTE, the “Amount Changed” and “Percentage Changed” calculations do not include Fiscal Year (FY) 2024 from the Approved FY 2024 – 2033 CIP, or FY 2034 from this Proposed FY 2025 – 2034 CIP, since FYs 2025 – 2033 are the years that can be directly compared between the two plans.

CIP Subsection	CIP Doc Title	Total FY 2025 - FY 2034	Amount Changed since FY24 Approved CIP*	Percentage Changed since FY24 Approved CIP*
Sanitary Sewers	Pitt and Gibbon Combined Sewer Capacity Project	28,000,000	28,000,000	New Funding; Not in Approved
Sanitary Sewers	Sanitary Sewer Enterprise Maintenance Management System Optimization	10,065,000	10,065,000	New Funding; Not in Approved
Sanitary Sewers	Staff Relocation to AlexRenew	1,500,000	1,500,000	New Funding; Not in Approved

	Prior												FY 2025
	Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034		FY 2034
Sanitary Sewers													
<u>Sanitary Sewers</u>													
AlexRenew Wastewater Treatment Plant Capacity	-	-	2,400,000	-	-	-	-	-	-	-	-	-	2,400,000
Capital Support of CSO Mitigation Projects	1,355,990	-	-	-	-	-	-	-	-	-	-	-	-
Citywide Sewershed Infiltration & Inflow	20,085,086	-	-	-	-	-	-	-	-	-	-	-	-
Combined Sewer Assessment & Rehabilitation	11,505,000	4,130,000	-	-	-	-	-	-	-	-	-	-	4,130,000
Combined Sewer Wet Weather Mitigation	4,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Holmes Run Trunk Sewer	9,002,000	-	-	-	-	-	-	-	-	-	-	-	-
Pitt and Gibbon Combined Sewer Capacity Project	-	-	4,000,000	-	24,000,000	-	-	-	-	-	-	-	28,000,000
Reconstructions & Extensions of Sanitary Sewers	15,996,807	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Sanitary Sewer Asset Renewal Program	13,903,498	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
Sanitary Sewer Enterprise Maintenance Management System Optimization	-	920,000	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	-	10,065,000
Sanitary Sewer Stream Crossing Protection	1,125,000	1,132,700	3,000,000	140,700	-	149,300	-	158,400	-	168,100	-	-	4,749,200
Sanitary Sewer Wet Weather Mitigation	3,500,000	1,500,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	7,000,000
Staff Relocation to AlexRenew	-	1,500,000	-	-	-	-	-	-	-	-	-	-	1,500,000
<i>Sanitary Sewers Total</i>	<i>80,473,381</i>	<i>14,582,700</i>	<i>17,970,000</i>	<i>8,640,700</i>	<i>32,125,000</i>	<i>7,499,300</i>	<i>7,100,000</i>	<i>6,058,400</i>	<i>5,900,000</i>	<i>6,068,100</i>	<i>5,900,000</i>	<i>5,900,000</i>	<i>111,844,200</i>
Sanitary Sewers Total	80,473,381	14,582,700	17,970,000	8,640,700	32,125,000	7,499,300	7,100,000	6,058,400	5,900,000	6,068,100	5,900,000	5,900,000	111,844,200

Sanitary Sewer 10-Year Plan: FY 2025 - FY 2034

Sanitary Sewer Rate	FY 2024 Approved	FY 2025 Proposed	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 25-34
Sanitary Sewer Rate (\$ per 1,000 gallons)	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28
Proposed Rate Increase	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
New Sanitary Sewer Rate	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28	\$2.28

Revenues	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 25-34
Sewer Line Maintenance Fee	10,918,087	10,999,973	11,082,473	11,165,591	11,249,333	11,333,703	11,418,706	11,504,346	11,590,629	11,677,558	11,765,140	113,787,452
Sewer Connection Fee	6,365,400	6,556,362	6,753,053	6,955,644	7,164,314	7,379,243	7,600,620	7,828,639	8,063,498	8,305,403	8,554,565	75,161,343
New Debt Issuance	0	0	0	0	24,475,000	2,250,000	2,380,000	2,510,000	2,655,000	2,805,000	2,355,000	39,430,000
Fund Balance	0	0	0	0	0	0	0	0	0	0	0	0
Existing Funds Reprogrammed from Other Projects*	0	0	0	0	0	0	0	0	0	0	0	0
Use of Fund Balance	1,473,841	9,452,774	12,650,000	3,255,000	2,832,000	2,267,000	1,820,000	595,000	396,000	45,000	0	33,312,774
Total Revenues	18,757,328	27,009,109	30,485,525	21,376,236	45,720,647	23,229,946	23,219,326	22,437,985	22,705,127	22,832,962	22,674,705	261,691,569

All Operating	9,472,795	9,694,314	9,915,868	10,144,154	10,379,056	10,619,591	10,865,778	11,118,635	11,378,180	11,646,432	11,922,413	107,684,420
All Capital Projects	7,492,000	15,586,800	19,045,300	9,748,300	33,265,800	8,674,400	8,310,400	7,305,100	7,184,100	7,390,700	7,262,300	123,773,200
All Debt Service	1,792,533	1,727,995	1,473,213	1,427,870	2,071,364	3,928,540	4,034,871	4,009,317	4,136,907	3,786,592	3,481,847	30,078,516
Total Expenditures	18,757,328	27,009,109	30,434,381	21,320,324	45,716,220	23,222,531	23,211,049	22,433,051	22,699,187	22,823,725	22,666,560	261,536,136

Operating Costs	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 25-34
T&ES Personnel Charges (incl. Worker's Comp)	4,372,212	4,525,537	4,661,000	4,801,000	4,945,000	5,093,000	5,246,000	5,403,000	5,565,000	5,732,000	5,904,000	51,875,537
DEC Personnel Charges	50,216	53,996	56,000	58,000	60,000	62,000	64,000	66,000	68,000	70,000	72,000	629,996
Professional Services												
Additional Consulting Services	357,688	368,000	379,000	390,000	402,000	414,000	426,000	439,000	452,000	466,000	480,000	4,216,000
Leaf Collection in CSO Areas	142,130	142,130	146,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	185,000	1,628,130
Fat, Oil, Grease (FOG Program)	209,000	212,000	215,000	218,000	221,000	224,000	227,000	230,000	233,000	236,000	240,000	2,256,000
Sanitary Sewer Capacity Study - Flow Metering, Sewer Modeling, CMOM	478,000	485,000	492,000	499,000	506,000	514,000	522,000	530,000	538,000	546,000	554,000	5,186,000
Sewer Billing	190,000	193,000	196,000	199,000	202,000	205,000	208,000	211,000	214,000	217,000	220,000	2,065,000
Infrastructure Repairs												
Sewer Jet Cleaning	268,000	272,000	276,000	280,000	284,000	288,000	292,000	296,000	300,000	305,000	310,000	2,903,000
Annual CCTV of Sewers	334,000	339,000	344,000	349,000	354,000	359,000	364,000	369,000	375,000	381,000	387,000	3,621,000
Heavy Cleaning of Sewers	323,000	328,000	333,000	338,000	343,000	348,000	353,000	358,000	363,000	368,000	374,000	3,506,000
Equipment Replacement	633,392	633,392	643,000	653,000	663,000	673,000	683,000	693,000	703,000	714,000	725,000	6,783,392
Corrective Maintenance	163,000	165,000	167,000	170,000	173,000	176,000	179,000	182,000	185,000	188,000	191,000	1,776,000
Other Non-Personnel (Training, Utilities, Rentals, etc.)	267,076	267,076	271,000	275,000	279,000	283,000	287,000	291,000	295,000	299,000	303,000	2,850,076
Building Maintenance												
Rodent Abatement in Sewers	95,000	95,000	96,000	97,000	98,000	99,000	100,000	102,000	104,000	106,000	108,000	1,005,000
Indirect Costs (Tr to G.F.)	1,590,081	1,615,183	1,640,868	1,667,154	1,694,056	1,721,591	1,749,778	1,778,635	1,808,180	1,838,432	1,869,413	17,383,289
Subtotal, Operating Costs	9,472,795	9,694,314	9,915,868	10,144,154	10,379,056	10,619,591	10,865,778	11,118,635	11,378,180	11,646,432	11,922,413	107,684,420

Sanitary Sewer 10-Year Plan: FY 2025 - FY 2034

Capital Projects	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 25-34
Reconstruction and Extension of Sanitary Sewers		900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Sanitary Sewer Asset Renewal Program	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
Combined Sewer Assessment and Rehab	0	4,130,000	0	0	0	0	0	0	0	0	0	4,130,000
AlexRenew WWTP Expansion	0	0	2,400,000	0	0	0	0	0	0	0	0	2,400,000
Sanitary Sewer Wet Weather Mitigation	500,000	1,500,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	7,000,000
Combined Sewer Wet Weather Mitigation	2,500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Sanitary Sewer Stream Crossing Protection	0	1,132,700	3,000,000	140,700		149,300		158,400		168,100	0	4,749,200
Sanitary Sewer Asset Management and Optimization		920,000	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	0	0	0	0	10,065,000
Pitt and Gibbon Combined Sewer Capacity Project		0	4,000,000	0	24,000,000	0	0	0	0	0	0	28,000,000
AlexRenew Relocation		1,500,000										1,500,000
Capitalized DPI Positions	939,000	956,800	1,026,600	1,057,400	1,089,100	1,121,800	1,155,500	1,190,200	1,225,900	1,262,700	1,300,600	11,386,600
Capitalized Sustainability Coordinator	53,000	47,300	48,700	50,200	51,700	53,300	54,900	56,500	58,200	59,900	61,700	542,400
<i>Subtotal, Capital Projects</i>	<i>7,492,000</i>	<i>15,586,800</i>	<i>19,045,300</i>	<i>9,748,300</i>	<i>33,265,800</i>	<i>8,674,400</i>	<i>8,310,400</i>	<i>7,305,100</i>	<i>7,184,100</i>	<i>7,390,700</i>	<i>7,262,300</i>	<i>123,773,200</i>
Debt Service	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 25-34
<i>Debt Service Payments</i>	<i>1,792,533</i>	<i>1,727,995</i>	<i>1,473,213</i>	<i>1,427,870</i>	<i>2,071,364</i>	<i>3,928,540</i>	<i>4,034,871</i>	<i>4,009,317</i>	<i>4,136,907</i>	<i>3,786,592</i>	<i>3,481,847</i>	30,078,516
Total Expenditures, All Categories	18,757,328	27,009,109	30,434,381	21,320,324	45,716,220	23,222,531	23,211,049	22,433,051	22,699,187	22,823,725	22,666,560	261,536,136

ALEXRENEW WASTEWATER TREATMENT PLANT CAPACITY

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 1500 Eisenhower Ave.
 REPORTING AREA: Southwest Quadrant

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 21 - 25 Years

AlexRenew Wastewater Treatment Plant Capacity													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	2,400,000	-	-	2,400,000	-	-	-	-	-	-	-	-	2,400,000
Financing Plan													
Sanitary Sewer Fund	2,400,000	-	-	2,400,000	-	-	-	-	-	-	-	-	2,400,000
Financing Plan Total	2,400,000	-	-	2,400,000	-	-	-	-	-	-	-	-	2,400,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will include a feasibility study and planning level engineering to be performed jointly between the City and AlexRenew, to determine whether the existing AlexRenew facility can be expanded to treat an additional 4 million gallons per day (MGD). A total of \$2.4 million is included in FY 2026 to complete the feasibility study and planning level engineering. It is anticipated that the City will reach its existing treatment capacity around Year 2040; construction of additional wastewater treatment capacity will not be needed until after 2030. It is anticipated that the total cost of the project will be significant.

As a part of the City’s 2021 Sanitary Sewer Master Plan (Master Plan) Update, and in anticipation of future growth, it was recommended that the City seek an additional 4 MGD of wastewater treatment capacity at Alexandria Renew Enterprises (AlexRenew). This future treatment capacity was added to the FY 2014 - 2023 CIP. In 2017, state legislation was passed that required the City to accelerate the mitigation of the impacts of combined sewer overflows (CSO). Following the 2017 CSO legislation that required significant reduction of combined sewer discharges, the City transferred ownership of the combined sewer outfalls to AlexRenew. AlexRenew is currently in the construction phase of the RiverRenew project to meet the CSO legislation. Following the completion of the RiverRenew project, the City and AlexRenew will collectively reassess options for additional wastewater treatment as the RiverRenew facilities take up a sizable footprint of the AlexRenew site.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

COMBINED SEWER ASSESSMENT & REHABILITATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Old Town CSO Area
 REPORTING AREA: Old Town

PROJECT CATEGORY: 3
 ESTIMATE USEFUL LIFE: 30+ Years

Combined Sewer Assessment & Rehabilitation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	15,635,000	11,505,000	4,130,000	-	-	-	-	-	-	-	-	-	4,130,000
Financing Plan													
GO Bonds (Stormwater)	6,505,000	6,505,000	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	7,630,000	3,500,000	4,130,000	-	-	-	-	-	-	-	-	-	4,130,000
Stormwater Utility Fund	1,500,000	1,500,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	15,635,000	11,505,000	4,130,000	-	-	-	-	-	-	-	-	-	4,130,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the condition assessment of sewers in the combined sewer service area in Old Town and remediation of structurally deficient sewers.

The City is close to completing condition assessments including cleaning and televising lines, assessing information to determine condition of lines, and determining if rehabilitation is needed. Structurally deficient sewers are being identified, and the results of the field work will be evaluated to develop remediation projects which are expected to include the relining of sewers and manhole repairs. Project funding may be adjusted upon completion of the assessment period based on the condition of the sewers and need for rehabilitation.

In addition to the health and environmental benefits of this project, completion of this project will repair and renew the City's sewer infrastructure, extend the infrastructure's useful life, and reduce the number of pipe collapses and other emergency repairs.

The City is responsible for the ownership and maintenance of the sewers located in the combined sewer service area. The combined sewer outfalls are owned by Alexandria Renew Enterprises (AlexRenew). AlexRenew is also responsible for compliance with requirements of the combined sewer system permit issued by the Department of Environmental Quality and for complying with the legislation passed by the Virginia General Assembly in 2017, which requires that combined sewer discharges be mitigated to comply with the legislation. The City continues to work with AlexRenew to ensure this deadline is met.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

COMBINED SEWER WET WEATHER MITIGATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Combined Sewer Wet Weather Mitigation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	14,000,000	4,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Financing Plan													
Sanitary Sewer Fund	14,000,000	4,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Financing Plan Total	14,000,000	4,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2034.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds the planning, design, construction and construction management of a variety of sewer capacity projects in combined sewer areas of the City where sewer backups and/or flooding have been documented to occur as a result of extreme wet weather. Currently, a number of areas are under study for potential wet weather mitigation within the combined sewer service area. These studies will evaluate existing system capacity, identify capacity deficiencies and then propose alternatives for capacity improvements. This project is intended to include both capacity improvement projects and combined sewer separation projects.

Projects currently in the planning or design phase include the following areas:

- Nethergate community
- Pitt/Gibbon Streets
- 600 block N Columbus Street
- Colonial Avenue and Powhatan Streets
- 400 block Wolfe Street

For smaller-scale projects, it is anticipated this project will fund all phases of the projects. Larger projects will need to be added to the CIP as a standalone project. For example, the combined sewer upsizing project for Pitt and Gibbon Streets is being added as a standalone project to the FY2025 CIP for both the design and construction phases.

Funding for this project is provided on an annual basis and funding adjustments may be needed each year.

Completion of these projects will help to both reduce flooding and sewer backups in the combined sewer area that occur as a result of extreme wet weather events.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

HOLMES RUN TRUNK SEWER

DOCUMENT SUBSECTION: Sanitary Sewers

PROJECT LOCATION: AlexRenew Plant to the City/Fairfax Border

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Citywide

PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 30+ Years

Holmes Run Trunk Sewer													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	9,002,000	9,002,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	500,000	500,000	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	4,100,000	4,100,000	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	4,402,000	4,402,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	9,002,000	9,002,000	-	-	-	-	-	-	-	-	-	-	-
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for an increase in capacity in the Holmes Run Trunk Sewer (HRTS) line, which is owned and operated by Alexandria Renew Enterprises (AlexRenew). Both the City of Alexandria and Fairfax County send wastewater flows to this sewer and share in the capacity of this sewer. The City has a sanitary sewer Service Agreement with AlexRenew that provides for peak flow capacities in this sewer, as well as the other AlexRenew interceptor sewers.

Increased capacity is required to support development occurring in the Eisenhower Valley, as well as future development and redevelopment in the West End. In 2008, the western portion of the trunk sewer from I-395 to Cameron Run was lined for additional capacity. Additional follow-up engineering and analysis has determined further improvements are needed to address long term capacity issues.

Engineering analysis between the City, Fairfax County, and AlexRenew was completed in FY 2017 which evaluated capacity issues in the HRTS, and provided a recommendation to enlarge an existing parallel, Fairfax County Holmes Run Sewer so that flows from the AlexRenew HRTS could be diverted to this sewer. Enlargement of the Fairfax County Holmes Run Sewer are proposed from the City/County line to Cameron Run, where the Fairfax sewer discharges in the the AlexRenew HRTS. A subsequent study was completed in FY 2019 that confirms construction of this sewer will have sufficient capacity to serve the proposed growth as anticipated in the Eisenhower West Small Area Plan. This study also included analysis of the Fairfax County Backlick Sewers, located in the City, and concluded that no infrastructure improvements would be required. The timing of the capacity upgrades is anticipated sometime after 2025. Design of the capacity upgrades is anticipated to be completed in two years and construction in three years.

The FY 2019 study also identified portions of the HRTS in the East Eisenhower Valley where the City will eventually exceed its peak flow capacities as stated in the Service Agreement. Development forecasting and hydraulic modeling show that the City will not exceed its Service Agreement capacities in this section of the HRTS until after 2035. Capacity improvements in this section of the HRTS have not yet been determined.

A total of \$9.0 million from the sanitary sewer fund has been budgeted in prior fiscal years for this project. The City will coordinate with AlexRenew and Fairfax County regarding implementation of projects, along with cost sharing to resolve remaining capacity issues on the Holmes Run Trunk Sewer. Depending on the outcome of these discussions, additional funding may be required in future years for both design and construction. Activity on this project will accelerate once the River Renew Project is completed.

Completion of this project will improve the City’s sanitary sewer infrastructure, which will help mitigate any potential sanitary sewer overflows during periods of wet weather. Additionally, the project will improve the City’s readiness for accommodating quality economic growth.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

PITT AND GIBBON COMBINED SEWER CAPACITY PROJECT

DOCUMENT SUBSECTION: Sanitary Sewers

PROJECT LOCATION: Gibbon St. between S. Pitt and S. Royal

MANAGING DEPARTMENT: Department of Transportation and Environmental Services

REPORTING AREA: Old Town

PROJECT CATEGORY: Category 3
ESTIMATE USEFUL LIFE: 30+ years

Pitt and Gibbon Combined Sewer Capacity Project													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	28,000,000	-	-	4,000,000	-	24,000,000	-	-	-	-	-	-	28,000,000
Financing Plan													
GO Bonds (Sanitary)	24,000,000	-	-	-	-	24,000,000	-	-	-	-	-	-	24,000,000
Sanitary Sewer Fund	4,000,000	-	-	4,000,000	-	-	-	-	-	-	-	-	4,000,000
Financing Plan Total	28,000,000	-	-	4,000,000	-	24,000,000	-	-	-	-	-	-	28,000,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2025 - FY 2034 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project is for the design and implementation of capacity upgrades of an existing combined sewer along Gibbon Street between South Pitt and South Royal Streets and along Royal Street to the Royal Street combined sewer outfall. This project is in response to stormwater flooding into residential homes that occur as a result of significant wet weather, including flooding events that took place July 2019, July and September 2020, August 2021, and August 2023. During these high intensity storm events, the existing combined sewer capacity is exceeded and overflows out of manholes near the intersection of Pitt and Gibbon Streets, floods Gibbon Street and then into adjacent homes (basements and first floors). A total of 2,520 feet of new combined sewer infrastructure is proposed with this project in order to alleviate flooding. This project is being implemented as part of the City’s Flood Action Program.

Work done to date includes an initial planning study to identify alternatives aimed at addressing the flooding, which lead to an alternatives evaluation. Alternatives evaluated included storage, storm sewer separation, pipe upsizing and a combination of these alternatives. The recommended alternative is upsizing of the existing combined sewer, which was selected based on effectiveness and constructability. The planning level work is being completed under the City’s Combined Sewer Wet Weather Mitigation program. Due to the cost and complexity to design and implement this project, this project is being added as a standalone project to the CIP.

A total of \$4 million is programmed for design in FY 2026 and \$24 million for construction in FY2028. In FY 2025, the City will be procuring an engineering design consultant through a Request for Proposals (RFP). The City continues to provide updates on this project to the Stormwater Utility and Flood Mitigation Advisory Group, along with neighboring residents.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

RECONSTRUCTIONS & EXTENSIONS OF SANITARY SEWERS

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 1
 ESTIMATE USEFUL LIFE: 30+ Years

Reconstructions & Extensions of Sanitary Sewers													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	24,996,807	15,996,807	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Financing Plan													
Cash Capital	2,173,980	2,173,980	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	3,424,237	3,424,237	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	19,148,590	10,148,590	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
GO Bond Interest Earnings	250,000	250,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	24,996,807	15,996,807	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	9,000,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2034.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the construction of new sewer mains, the replacement of old sewer lines as needed, sewer improvements that can help address capacity constraints, repairs to City streets disturbed by sewer line repairs, and reconstruction and funds for the City's share of the cost of sewer extensions required for development.

Some projects are in early planning stages, while others are currently in design and construction. Obstacles to construction may include the moving of buried utility lines, such as power, water, and gas lines by the various utility owners that if not moved would interfere with the construction.

Projects currently under design and scheduled for construction in FY 2025 or FY2026 include:

- N Saint Asaph Street/Madison Street Sewer Improvements
- 300/400 block N Alfred Street Sewer Improvements
- 500 block S Lee Street Sewer Replacement
- Taylor Run Sewer Relocation to accommodate the CSX 4th Rail Project
- Miscellaneous Sanitary Sewer Replacement Projects

Completion of these projects improves the City's sanitary sewer infrastructure while reducing the frequency of unplanned repairs due to deferred maintenance.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER ASSET RENEWAL PROGRAM

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE: 30+ Years

Sanitary Sewer Asset Renewal Program													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	48,903,498	13,903,498	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
Financing Plan													
Cash Capital	37,229	37,229	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Sanitary)	16,680,000	1,250,000	-	-	-	475,000	2,250,000	2,380,000	2,510,000	2,655,000	2,805,000	2,355,000	15,430,000
Sanitary Sewer Fund	32,186,269	12,616,269	3,500,000	3,500,000	3,500,000	3,025,000	1,250,000	1,120,000	990,000	845,000	695,000	1,145,000	19,570,000
Financing Plan Total	48,903,498	13,903,498	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	35,000,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2034.

PROJECT DESCRIPTION & JUSTIFICATION

The City’s sanitary sewer system is comprised of over 240 miles of sewer line, some lines dating back over 100 years. This program provides for annual inspection, condition assessment, and rehabilitation of sanitary sewers, City-owned lateral sewers, and sewer appurtenances as part of an ongoing sewer asset management initiative.

This program provides for closed circuit television (CCTV) inspection of all sewers and City-owned laterals and visual inspection of all sewer appurtenances (manholes and other structures). Inspections will be performed with a goal of inspecting 10 percent of the system each year. The condition of all sewers and sewer appurtenances will be assessed using industry standards of cataloguing inspections and recommendations will be made as to which sewers and sewer appurtenances are vulnerable to breakage or collapse. Sewers and sewer appurtenances that are vulnerable will be rehabilitated primarily using trenchless technologies, which are significantly less costly than dig-and-replace repairs.

A summary of ongoing work related to the program is provided below:

- Phase 1 (areas generally east of Commonwealth Avenue) – rehabilitation (construction) phase began October 2023.
- Phase 2 (areas generally between Commonwealth Avenue and Russell Road) – inspections completed and are currently being reviewed for rehabilitation recommendations. Construction is anticipated to begin in FY 2025-2026.
- Phase 3 (areas generally within the North Ridge neighborhood) – inspections ongoing through FY 2024 and review of inspection data to be completed in FY 2025.
- Phase 4 inspections to begin in FY 2025.

Implementation of this project improves the City’s sanitary sewer infrastructure and extends the infrastructure’s useful life by reducing the potential of pipe collapse and other emergency repairs. Additionally, this project will help reduce the amount of infiltration and inflow (I&I) into the sanitary sewer system, which helps reduce the frequency and magnitude of sanitary sewer overflows and sewer back-ups into homes and businesses.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Sanitary Sewer Master Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER ENTERPRISE MAINTENANCE MANAGEMENT SYSTEM OPTIMIZATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Enterprise Maintenance Management System Optimization													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	10,065,000	-	920,000	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	10,065,000
Financing Plan													
Sanitary Sewer Fund	10,065,000	-	920,000	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	10,065,000
Financing Plan Total	10,065,000	-	920,000	2,170,000	2,100,000	2,225,000	1,450,000	1,200,000	-	-	-	-	10,065,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2025 - FY 2034 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides for the development and implementation of a plan to optimize how Cityworks (City's enterprise maintenance management system) is utilized to meet existing asset management needs related to over 240 miles of sanitary and combined sewer located in the City. Due to the similarities between sanitary, combined, and stormwater infrastructure, this project will also include asset management optimization for stormwater infrastructure. Ultimately, this effort will result in a system that can also be used for asset management of other City public infrastructure, including transportation.

Funding is programmed for this initiative, starting in FY 2025, with much of the initial work being performed by outside technical consultants and being managed jointly between T&ES and IT departments. Funding will also be required at the project startup to invest in additional Cityworks software modules and programming, along with other programs that support Cityworks, including GIS. It is anticipated that additional positions will be needed in a future year CIP, which have been included in the project funding. This project aims to achieve the following:

- Develop a robust asset inventory of City-owned sewers.
- Identify the risk for failure for sewer assets, including the likelihood and failure and the consequence.
- Utilize the asset management system, along with subject matter expertise, to optimize schedules for inspections and preventative maintenance.
- Facilitate efficient capital improvement planning over the long term.
- Make information accessible within the organization and with stakeholders, including the community.

The benefit of having an optimized asset management program is to save money in the long-term by optimizing funding towards proactive maintenance rather than reactive maintenance, including costly sewer point repairs and replacement projects. It will also allow staff to make more data-based decisions by utilizing predictive modeling.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER STREAM CROSSING PROTECTION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Stream Crossing Protection													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	5,874,200	1,125,000	1,132,700	3,000,000	140,700	-	149,300	-	158,400	-	168,100	-	4,749,200
Financing Plan													
Sanitary Sewer Fund	5,874,200	1,125,000	1,132,700	3,000,000	140,700	-	149,300	-	158,400	-	168,100	-	4,749,200
Financing Plan Total	5,874,200	1,125,000	1,132,700	3,000,000	140,700	-	149,300	-	158,400	-	168,100	-	4,749,200
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding totaling \$3.0 million moved from FY 2025 to FY 2026.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund sanitary sewer inspections in stream areas, along with design, construction, and construction management for those sanitary sewers at risk of breakage due to erosion of stream areas. In 2020, the City embarked on a project to inspect all sanitary sewers located in stream areas. These inspections included CCTV inspections of sanitary sewers, along with checking performing field inspections where each stream area was walked to review the external condition of the sanitary sewer and sewer assets. A report was finalized in 2023 that provided an analysis of the likelihood and consequence of potential failure of the sanitary sewers and prioritized a list of sewer segments to be considered for enhanced protection.

The sanitary sewer determined most at-risk crosses Holmes Run just upstream of I-395. The pipe is exposed within the stream as the concrete armoring has cracked with portions broken off. The downstream sewer segment has also been undermined by erosive forces as well. It is recommended that these two sewer segments be protected and encased. . Funding in FY 2025 will be used for the design and funding in FY 2026 will be used for construction. A portion of these funds may also be used to provide sewer armoring for two crossings along Taylor Run.

This project also provides for periodic inspections of these sewers. The CIP may be updated in the future to include additional projects based on the results of these inspections.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SANITARY SEWER WET WEATHER MITIGATION

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: Citywide
 REPORTING AREA: Citywide

PROJECT CATEGORY: 2
 ESTIMATE USEFUL LIFE:

Sanitary Sewer Wet Weather Mitigation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	10,500,000	3,500,000	1,500,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	7,000,000
Financing Plan													
GO Bonds (Sanitary)	3,000,000	3,000,000	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	7,500,000	500,000	1,500,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	7,000,000
Financing Plan Total	10,500,000	3,500,000	1,500,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	7,000,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2034.

PROJECT DESCRIPTION & JUSTIFICATION

This project will fund the design, construction, and construction management of a variety of sanitary sewer upsizing projects in areas of the City where sewer backups have been documented to occur as a result of extreme wet weather. This project follows a study that was completed in 2021 which identified areas where sewer upsizing may be feasible in an effort to reduce the impacts of sanitary sewer backups. Survey data was collected for five of the identified areas and moved forward for design. Detailed design for 4 areas was recently completed and planned for construction in FY 2025:

- 300 block Ashby Street
- 500 block E Alexandria Avenue
- 000-100 block E Maple Avenue
- 200-300 block E Oak Street

It should be noted that the 100 block of Raymond Avenue was removed from the above project and upsizing of this sewer has been included as part of the Hume Avenue Storm Drain Bypass Project, which is currently in the design phase.

A review of other areas subject to sanitary sewer backups is currently ongoing and will be added to the CIP as these projects are identified and developed. Completion of these projects will help to reduce the potential for sanitary sewer backups that occur as a result of extreme wet weather events. Funding is provided for on an annual basis and funding adjustments may be needed each year based on the identification of future projects.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STAFF RELOCATION TO ALEXRENEW

DOCUMENT SUBSECTION: Sanitary Sewers
 MANAGING DEPARTMENT: Department of Transportation and Environmental Services

PROJECT LOCATION: 1500 Eisenhower Ave.
 REPORTING AREA: Southwest Quadrant

PROJECT CATEGORY: Category 3
 ESTIMATE USEFUL LIFE: Varies

Staff Relocation to AlexRenew													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total FY 2025 - FY 2034
Expenditure Budget	1,500,000	-	1,500,000	-	-	-	-	-	-	-	-	-	1,500,000
Financing Plan													
Sanitary Sewer Fund	1,500,000	-	1,500,000	-	-	-	-	-	-	-	-	-	1,500,000
Financing Plan Total	1,500,000	-	1,500,000	-	-	-	-	-	-	-	-	-	1,500,000
Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

New project added to FY 2025 - FY 2034 CIP.

PROJECT DESCRIPTION & JUSTIFICATION

AlexRenew, the wastewater treatment authority of the City of Alexandria and parts of Fairfax County has offered to enter into an agreement that will provide the City 5,600 square feet of office space in the Environmental Center at the AlexRenew headquarters located at 1800 Limerick Street. The space would provide for the relocation of the Department of Transportation and Environmental Services' (TES) Office of Environmental Quality, including approximately 30 staff, from their current location at 2900 Business Center Drive. The 10-year agreement with AlexRenew is estimated to begin in 2025 with funds to be provided to AlexRenew's Lifeline Emergency Assistance Program (LEAP) in lieu of rent. There will be no operating costs incurred by the City for the use of this space.

The relocation of these City operations from 2900 Business Center Drive will not only allow for regular City engagement with relevant AlexRenew operations but will provide the space required to relocate other TES operations from City Hall to the vacated space at 2900 Business Center Drive. The relocation of TES staff from City Hall will provide additional space to accommodate the results of the space planning and reconfiguration that will occur during the City Hall renovation project.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.