

2021-2022 Biennial Budget

Section E

Capital Improvement Program



Adopted Budget

Section E. Capital Improvement Program

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CAPITAL IMPROVEMENT PROGRAM

Every two years the City of Mercer Island staff develops a Capital Improvement Program (CIP) for the City Council's review and approval as part of the biennial budget process. The CIP is a six-year financial plan for the acquisition, expansion, or rehabilitation of land, technology, buildings, and other major public infrastructure. Projects included in the CIP budget are those with costs in excess of \$50,000 during the biennium and with a minimum useful life of three years.

The two plans that make up the 2021-2026 CIP include the Capital Reinvestment Plan (CRP) and Capital Facilities Plan (CFP). Projects that focus improvements on the City's current infrastructure fall are included in the CRP. Projects that involve creating new facilities or new additions to current infrastructure are included in the CFP.

This CIP covers fiscal year 2021 through 2026. Although the program spans six years, only funds for the first two years are approved and appropriated as part of the biennial budget process. Capital projects are submitted via an application process for review by an interdepartmental CIP Committee. The committee reviews and prepares funding recommendations for the City Manager.

The 2021-2022 CIP is comprised mostly of CRP reinvestment projects - \$36.7 million (97%) to maintain the City's existing infrastructure. CFP projects make up \$1.2 million (3%) of the proposed CIP projects.

Plan Components

The 2021-2026 **CIP Program Summary (E-9)** provides a summary of project costs, timing, and funding sources. In this summary, projects are organized by project category:

1. General Government (Equipment, Public Buildings, and Technology)
2. Parks, Recreation and Open Space
3. Streets, Pedestrian and Bicycle Facilities
4. Sewer Utility
5. Storm Water Utility
6. Water Utility

The **Individual Project Sheets (E-13)** include a project description and project justification. Detailed expenditure information and staff time estimates in 2021 and 2022 are described as well. Where appropriate, a map that specifies the project location is also presented.

For the long-range view, the **Funding by Capital Projects (E-151)** summary and the **Capital Projects by Fund (E-159)** summary show projects planned through future years (2022-2026) and the long-term funding strategy, both by project and by Fund. Six-year funding plans are presented for the following City Funds:

1. General Fund
2. Street Fund
3. Capital Improvement Fund
4. Technology and Equipment Fund
5. Computer Replacement Fund
6. Equipment Rental Fund
7. Water Fund
8. Sewer Fund
9. Storm Water Fund

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Finally, the **Project Hours by Department (E-162)** summary details time commitment estimates for each department within a respective project over the two-year period. Staff time estimates were a key consideration when evaluating and selecting capital projects to establish a realistic body of work focused on the City's top infrastructure priorities.

CIP Committee – Project Recommendations

The CIP Committee – comprised of a small group of Department Directors – evaluated and ranked projects and was tasked with approving projects that best reflect the City's infrastructure maintenance priorities. Capital funds not spent or committed at the end of the budget cycle will be reallocated. Projects not considered a priority were postponed or eliminated.

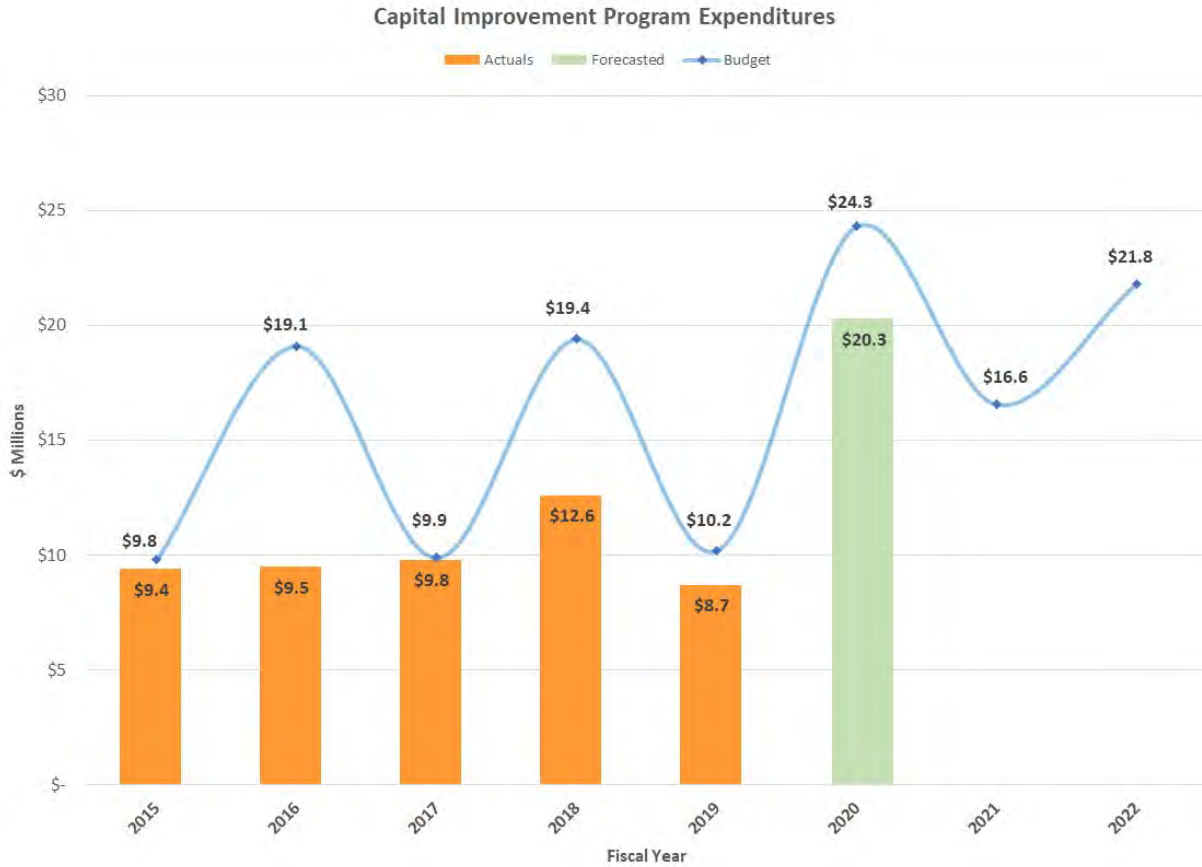
The CIP Committee subjected project applications to numerous considerations to ensure proposed projects address the most pressing priorities, effectively utilized limited capital resources, and represent a tangible work plan given proposed staffing levels. Each submitted project was provided a weighted score against five criteria, including:

1. **Mandated Activities:** Whether the project was a regulatory requirement or necessary to maintain existing facilities.
2. **Public Health and Safety:** Whether the project addressed an existing or potential hazard, and whether that issue was minor or severe.
3. **Fiscal Responsibility:** Whether the project decreased operating or maintenance costs, increased ongoing revenue, levered outside funding, or required a municipal subsidy.
4. **Environmental Impact:** Whether the project enhances the environment, yielded no environmental impact, or created a negative impact.
5. **Conformity to City Goals:** Whether the project achieves priorities outlined by the City Council, a master planning document, or recommended by a board or commission.

Expenditure Trend

The proposed CIP budget for the biennium is \$38.4 million – \$16.6 million in 2021 and \$21.8 million in 2022. This represents an increase of \$3.9 million compared to the 2019-2020 Adopted Budget of \$34.5 million. This increase reflects delayed capital work carrying forward from the 2019-2020 adopted budget due to staffing changes and a work plan that outpaced staffing capacity. These delays were primarily caused by impacts of the COVID-19 Pandemic.

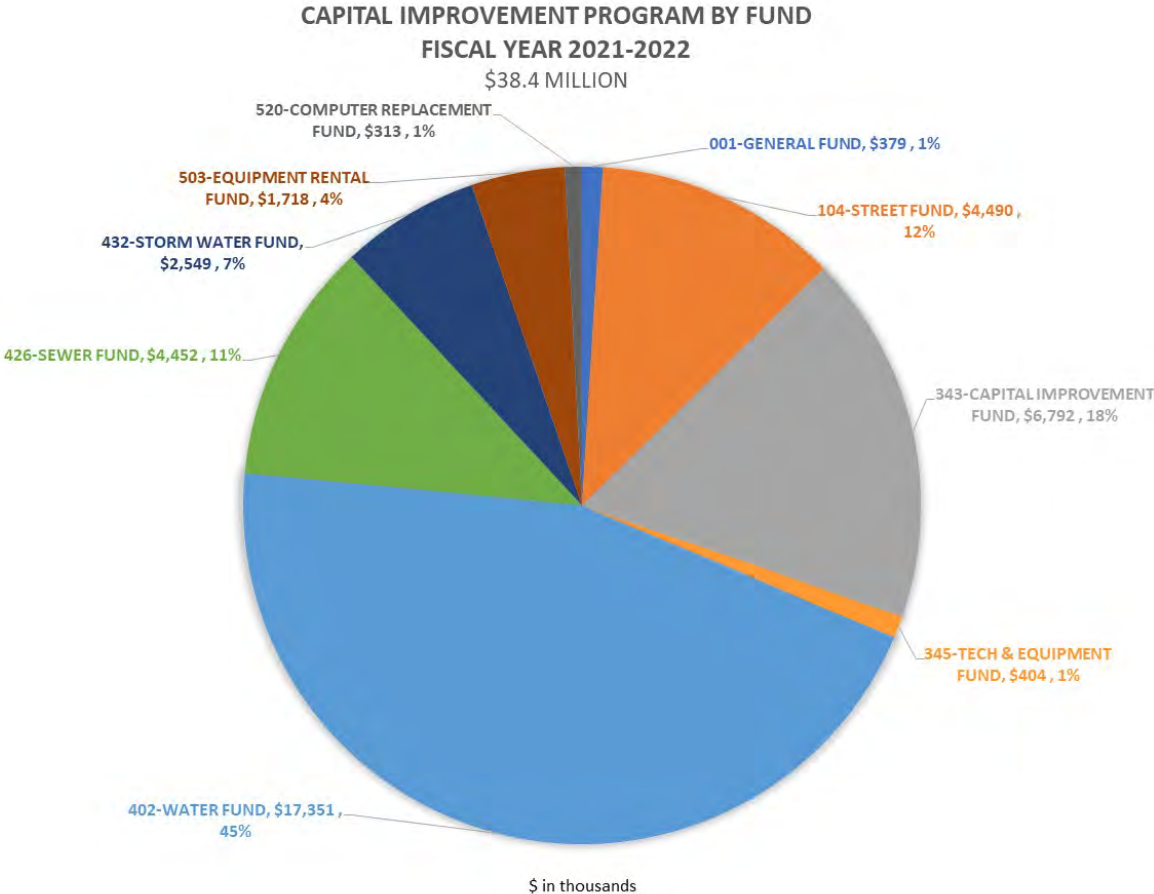
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The CIP incorporates a variety of funding sources including current revenues, utility rates, real estate excise tax (REET), impact fees, internal service cost allocations, Sound Transit mitigation dollars, grants, tax levies, debt, and the General Fund. The City actively seeks grants from federal, state, and local sources to support the capital program.

The chart on the next page conveys how the proposed CIP will be funded over the next two years. The majority of the capital program is covered by the Utility Funds (65%) and the Capital Improvement Fund (16%).

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Capital Improvement Financing Strategy

Each biennial capital budget is part of a broader CIP financing plan that looks into the future to match capital investments with realistic financing strategies.

Consistent with established budget policies and past Council financing strategies, CIP funding for the next two years relies on existing, available fund balances and projected revenues from Real Estate Excise Taxes (REET), Fuel Taxes (State shared revenues), and utility rates. The General Fund continues to be the sole source of funding for technology and equipment capital investments.

Most revenues for capital projects come with restrictions. Utility rates may only be used for projects of the respective utility; fuel taxes may only be used for street and trail projects; and REET is reserved for capital projects to help develop a community’s public infrastructure (e.g., parks, open space, and streets). The City’s capital financing strategy has been to use these restricted revenues on a “pay as you go” basis for needed improvements.

This strategy remains unchanged, except for costly utility and public building projects for which debt financing is used to “smooth” utility rate spikes or to match the costs of the project more equitably to the benefit period. Over the next biennium, the 2021-2026 CIP includes the issuance of debt in 2022 of \$3,500,000 in the Water Fund and \$2,500,000 in the Sewer Fund. This debt provides adequate funding for the Booster Chlorination Station (WU0101), SCADA sewer and water system replacement (WU0102 and SU0113), and the Meter Replacement Project (WU0117).

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REET is the 0.5% tax paid by the seller in property transactions. State law restricts the use of REET for specific capital purposes:

- REET-1 (the 1st quarter of 1% of the sale price) may be used for streets, parks, utilities, or facilities.
- REET-2 (the 2nd quarter of 1% of the sale price) may be used for streets, parks, or utilities, but may not be used for facilities.
- Neither REET-1 nor REET-2 may be used for equipment or technology.

REET is the largest revenue source for the projects in the Street and Capital Improvement Funds. REET revenue can vary significantly from year to year as its base (property sales) is highly dependent on economic conditions and interest rates.

The City's CIP financing strategy for REET 1 and 2 was modified in 2019. All REET-1 revenues go to the CIP Fund to pay for parks, open space, and public building maintenance projects and to pay the debt service on construction of the Community Center. REET-2 was split, with 10% of REET-2 going to the CIP Fund and the remaining 90% going to the Street Fund to pay for construction and maintenance of streets and pedestrian and bicycle facilities.

Expenditures for new vehicles, equipment, and technology come from general purpose revenue, reserve, or grant funding sources. Utility capital improvements are funded from utility rates, primarily on a pay-as-you-go basis.

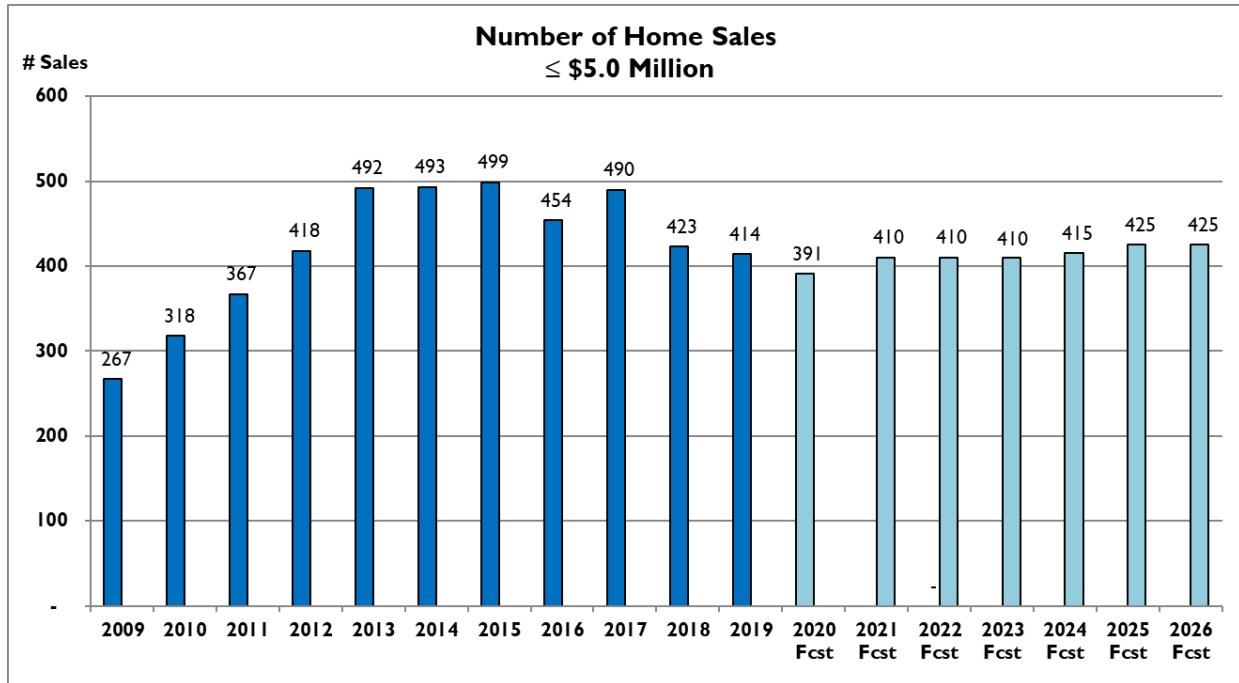
The following table provides an overview of the CIP financing strategy.

Capital Improvement Program Financing Strategy			
REET 1	REET 2	General Purpose Revenues	Utilities
Parks <ul style="list-style-type: none"> • Construction • Maintenance Open Space <ul style="list-style-type: none"> • Property Acquisition • Planning • Improvements Public Buildings <ul style="list-style-type: none"> • Repair • Maintenance • Planning and Design 	Streets <ul style="list-style-type: none"> • Construction • Maintenance Pedestrian / Bike Facilities <ul style="list-style-type: none"> • Construction • Maintenance Parks <ul style="list-style-type: none"> • Construction • Maintenance 	Equipment <ul style="list-style-type: none"> • Vehicle Replacement • Public Safety Equipment Technology <ul style="list-style-type: none"> • Computers • Software • Communications 	Sanitary Sewer <ul style="list-style-type: none"> • Construction • Maintenance Storm Water <ul style="list-style-type: none"> • Construction • Maintenance Water <ul style="list-style-type: none"> • Construction • Maintenance

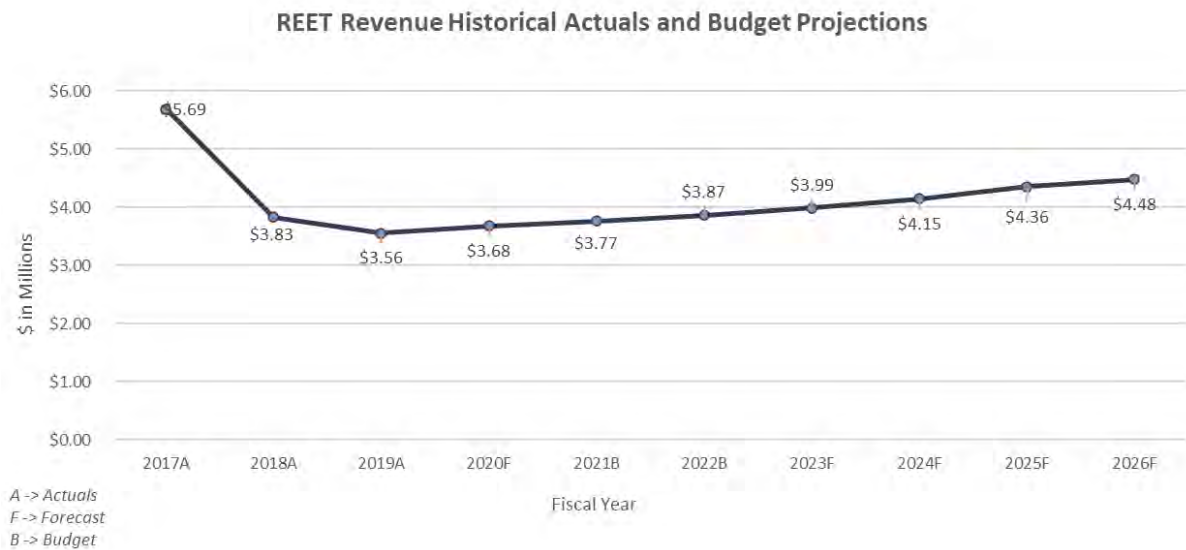
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Real Estate Excise Tax (REET) Forecast

The REET forecast for 2021-2026 is provided below. Historical home sales (2009-2019) with a sales price equal to or less than \$5.0 million and the forecasted number of home sales (2020-2026) are shown in the chart below. Home sales have been between 400 and 500 for the last 5 years, with the forecast number of sales at 391 in 2020.



The line graph below shows the REET revenue (in millions) from 2017-2019 and the forecast from 2020-2026. The peak in 2017 is associated with the sale of three commercial properties, including the Shorewood Heights Apartments, which generated about \$2.5 million in REET.



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The REET Forecast used for the 2021-2022 Preliminary Budget is summarized in the following table:

(\$ in thousands)	2020	2021	2022	2023	2024	2025	2026
Property Sales ≤\$5.0M:							
Forecasted average sales price	\$1,680	\$1,722	\$1,765	\$1,818	\$1,873	\$1,929	\$1,987
Change in average sales price	3.6%	2.5%	2.5%	3.0%	3.0%	3.0%	3.0%
Forecasted number of sales	391	410	410	410	415	425	425
Forecasted REET Revenue	\$3,252	\$3,495	\$3,582	\$3,690	\$3,847	\$4,058	\$4,179
Property Sales >\$5.0M:							
	\$433	\$282	\$290	\$300	\$300	\$300	\$300
Total REET Revenue	\$3,685	\$3,777	\$3,872	\$3,990	\$4,147	\$4,358	\$4,479

CIP Project Highlights (2021-2022)

The projects included in the 2021-2026 CIP are detailed on the following pages. A number of the projects are highlighted below.

- GT0106-Enterprise Resource Planning System Scoping** – The City's current accounting software is over ten-years old. Although still functional, the current accounting system does not integrate with other software used in the City and lacks functionality and integration, making processes less than efficient. By evaluating the City's current needs and conducting a request for qualifications, staff will take the first step to implement an enterprise-wide improvement that serves as the backbone for City operations.
- GT0110-Permitting System Upgrade** – The software upgrade slated for 2022 provides an enhanced suite of services to community members seeking development services. The upgrade will provide for improved electronic plan review, online payments, and improved functionality for staff tracking the services being provided.
- PA0109-Aubrey Davis Park Trail Improvements** – Funded by a Department of Commerce grant, this project furthers the work underway to construct trail safety improvements on the Mountains to Sound Regional trail in Aubrey Davis Park.
- PA0122-Luther Burbank Dock Improvements** – Project entails replacing, renovating, and reconfiguring the docks at Luther Burbank Park to support current uses including small powerboats, recreational sailing, and kayak camps.
- SP0100-Residential Street Resurfacing** – This annual program repairs and resurfaces residential streets. The program is fully funded through the biennium. Minor underground utility work will coincide in tandem to capitalize on the residential street resurfacing efforts.
- SU0113/WU0102-Supervisory Control and Data Acquisition (SCADA) System** – SCADA water and sewer management equipment and software are obsolete and no longer available or supported by the manufacturer. This infrastructure provides system critical information and communication between sewer pump stations, the water reservoir, and the Public Works building. Replacement of the system is planned through 2023 with a \$3.3 million investment in the 2021-2022 biennium financed by the Utility Funds and with debt issuance. The cost will be shared by the Water and Sewer utilities.

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- **WU0101-Booster Chlorination Station** – One of the Department of Health (DOH) follow-up steps to the water contamination event of 2014 entailed the design of a booster disinfection system at the City's reservoir to help reduce the risk of potential future contamination of the water system. Final design and construction of the permanent booster disinfection system for the City's Reservoir and Main Pump Station is slated in the 2021-2022 biennium, reducing the risk of future contamination by providing reliable and cost-effective distribution of drinking water.
- **WU117-Water Meter Replacement Program** – This project continues efforts from the prior biennium to replace the nearly 7,600 water meters on the island. The City will replace varied and antiquated meters with the latest meter technology on a single platform, ensuring far more efficient and effective water service.

ID	Description	Plan	Target Completion Date	2021	2022	2023	2024	2025	2026	TOTAL	General Fund	Street Fund	Capital Imp Fund	Tech & Equip Fund	Water Fund	Sewer Fund	Storm Water Fund	Grant	King County Levy	Dept Fees	Other	
GB0100	City Hall Building Repairs	CRP	ONGOING	206,500	400,000	547,947	466,011	301,911	233,631	2,156,000			2,156,000									
GB0101	Public Works Building Repairs	CRP	ONGOING	261,400	64,800	83,074	107,541	67,142	71,125	655,082			163,620		196,664	196,664	98,134					
GB0102	MICEC Building Repairs	CRP	ONGOING	263,000	113,000	327,175	199,150	150,785	148,168	1,201,278			1,201,278									
GB0103	FS91 and FS92 Building Repairs	CRP	ONGOING	105,000	124,000	129,732	124,839	128,219	380,320	992,110			992,110									
GB0104	Luther Burbank Administration Repairs	CRP	ONGOING	131,000	64,000	125,180	72,263	73,970	54,055	520,468			520,468									
GB0105	Thrift Shop Building Repairs	CRP	ONGOING	43,000	24,000	133,146	66,573	40,968	44,382	352,069			352,069									
GB0107	Honeywell Site Remediation	CRP	Q4 2022	200,000	150,000					350,000	129,500				21,000	10,500	14,000				175,000	
GB0108	FS91 Site Characterization & Fuel Tank Evaluation	CRP	Q1 2022	100,000						100,000	74,000				12,000	6,000	8,000					
8	GENERAL GOVERNMENT PUBLIC BUILDINGS TOTAL			1,309,900	939,800	1,346,254	1,036,377	762,995	931,681	6,327,007	203,500	-	5,385,545	-	229,664	213,164	120,134	-	-	-	175,000	
GE0101	Fire Training Tools and Equipment	CRP	Q2 2022	39,000	41,000					80,000				80,000								
GE0103	Purchase New MIDI Pumper - 2024	CRP	2024				440,000			440,000											440,000	
GE0106	Purchase New MAXI Pumper - 2024	CRP	2024				800,000			800,000											800,000	
GE0107	Fleet Replacements	CRP	ONGOING	905,854	732,536	531,307	606,836	794,055	944,190	4,514,778											4,514,778	
4	GENERAL GOVERNMENT EQUIPMENT TOTAL			944,854	773,536	531,307	1,846,836	794,055	944,190	5,834,778	-	-	-	80,000	-	-	-	-	-	-	-	5,754,778
GT0101	City Information via Web Based GIS	CRP	Q4 2021	38,860				40,000		78,860				78,860								
GT0102	ArcGIS Enterprise Deployment with GeoEvent Server	CRP	Q3 2021	34,200						34,200				34,200								
GT0103	ArcGIS Urban Deployment	CRP	Q1 2021							-				-								
GT0104	Mobile Asset Data Collection	CRP	Q2 2022		78,000				78,000	156,000		156,000										
GT0105	High Accuracy Orthophotos	CRP	Q2 2022			35,000			35,000	70,000				70,000								
GT0106	Enterprise Resource Planning System Scoping	CRP	Q3 2022	75,000						75,000				75,000								
GT0107	Public Safety Distributed Antenna System - City Hall Replacement	CRP	Q4 2021	80,000						80,000											80,000	
GT0108	Technology Equipment Replacement	CRP	ONGOING	112,850	200,100	123,000	199,300	150,000	200,000	985,250											985,250	
GT0109	Fiber Conduit Installation	CFP	Q4 2022	75,000	75,000	90,000	90,000			330,000			330,000									
GT0110	Permitting System Upgrade/Replacement	CRP	Q4 2022		95,000	40,000				135,000				135,000								
10	GENERAL GOVT TECHNOLOGY TOTAL			415,910	448,100	288,000	289,300	268,000	235,000	1,944,310	-	156,000	330,000	393,060	-	-	-	-	-	-	-	1,065,250
PA0100	Open Space Management	CRP	ONGOING	338,000	338,000	338,000	338,000	338,000	338,000	2,028,000			1,818,400					14,600	195,000			
PA0101	Recurring Parks Minor Capital	CRP	ONGOING	140,000	140,000	140,000	140,000	140,000	140,000	840,000			840,000									
PA0103	Trail Renovation and Property Management	CRP	ONGOING	58,550	60,850	63,150	65,450	67,750	70,050	385,800			199,200						186,600			
PA0104	Lake Water Irrigation Development	CFP	2024			75,000	20,000			95,000			95,000									
PA0105	Aubrey Davis Park Lid A Playground Replacement	CRP	2026						20,000	20,000			20,000									
PA0106	Aubrey Davis Park Lid B Playground Replacement	CRP	2023			200,000				200,000			200,000									
PA0107	ADP Outdoor Sculpture Gallery Improvements	CFP	2025			28,000	60,000	168,000		256,000	26,000		105,000					70,000			55,000	
PA0108	Aubrey Davis Park Luther Lid Connector Trail	CFP	2024			52,000	240,000			292,000			292,000									
PA0109	Aubrey Davis Park Trail Safety Improvements	CFP	Q4 2022	200,000	315,000					515,000								490,000	25,000			
PA0110	Aubrey Davis Park Lid A Backstop Lifecycle Replacement	CRP	2026					100,000	770,000	870,000											870,000	
PA0111	Aubrey Davis Park Vegetation Management	CRP	ONGOING	37,000	65,000	115,000	115,000	115,000	115,000	562,000			37,000								525,000	
PA0112	Clarke Beach Shoreline Repair/Restoration	CRP	2026			85,000	25,000		1,000,000	1,110,000			554,000					556,000				
PA0113	Clarke Beach Restroom Fixture Replacement	CRP	2023			53,000				53,000			53,000									
PA0114	Groveland Beach Bulkhead Replacement and Beach Upgrade	CRP	2026				100,000	20,000	2,000,000	2,120,000			2,120,000									
PA0115	Hollerbach SE 45th Trail System	CFP	2024			85,400	376,688			462,088			262,088						200,000			
PA0116	ICP South Lights and Backstop Lifecycle Replacement and Upgrade	CRP	2026					90,000	1,010,000	1,100,000											1,100,000	
PA0117	Island Crest Park North Infield and Backstop Replacement	CRP	Q4 2022		381,000					381,000			251,000								130,000	
PA0118	Lincoln Landing Watercourse Renovation	CRP	Q4 2021	300,000	301,000					601,000								601,000				
PA0119	Luther Burbank Tennis Court Renovation	CRP	2024			85,000	353,184			438,184			438,184									
PA0120	Luther Burbank Park Parking Lot Lighting	CFP	2023			123,000				123,000			123,000									
PA0121	Luther Burbank Park Swim Beach Renovation	CRP	2026				116,600	30,000	875,400	1,022,000			622,000					400,000				
PA0122	Luther Burbank Dock Repair and Reconfiguration	CRP	2024	171,000	48,000	442,100	2,975,000			3,636,100			334,000					2,462,725	539,375	300,000		
PA0123	Luther Burbank Minor Capital Levy	CRP	2023	95,000	104,000					199,000									199,000			
PA0124	Luther Burbank Boiler Building Roof and Seismic Retrofit	CRP	2023		365,000					365,000			244,550					120,450				
PA0125	Mercerdale Playground Replacement	CRP	2023	490,000						490,000			490,000									
PA0126	Mercerdale Park Master Plan	CFP	2023			90,000				90,000			90,000									
PA0127	Mercer Island Community and Events Center Annex Facilities Plan	CFP	2024				90,000			90,000			90,000									
PA0128	Pioneer Park Bike Trail Path Lighting	CFP	2023			100,000				100,000											100,000	

ID	Description	Plan	Target Completion Date	Target							TOTAL	General Fund	Street Fund	Capital Imp Fund	Tech & Equip Fund	Water Fund	Sewer Fund	Storm Water Fund	Grant	King County Levy	Dept Fees	Other
				2021	2022	2023	2024	2025	2026	2027												
PA0129	Pioneer Park/Engstrom OS Forest Management	CRP	ONGOING	191,200	191,200	191,200	191,200	191,200	191,200	1,147,200			916,200						231,000			
PA0130	Roanoke Playground Replacement	CRP	2024			27,500	176,000			203,500			203,500									
PA0131	South Mercer Playfields Ballfield Backstop Upgrade	CFP	2023			995,000				995,000			308,000							400,000	287,000	
PA0132	Upper Luther Ravine Trail Phase 2	CFP	2024			58,947	150,043			208,990			208,990									
PA0133	MICEC Technology and Equipment Replacement	CRP	ONGOING	20,500	20,500	60,500	60,500	60,500	60,500	283,000											283,000	
PA0134	Aubrey Davis Park Lid C Field Drainage Renovation	CRP	2026				990,000			990,000			990,000									
PA0135	Town Center Micro Precinct Placeholder	CFP	Q4 2022	50,000						50,000			50,000									
PA0136	Luther Burbank South Shoreline Restoration	CRP	Q4 2022	47,000	660,000					707,000			357,000					250,000	100,000			
36	PARKS, RECREATION, & OPEN SPACE TOTAL			2,138,250	2,989,550	3,407,797	6,582,665	1,320,450	6,590,150	23,028,862	26,000	-	12,312,112	-	-	-	-	4,964,775	1,675,975	830,000	3,220,000	
SP0100	Residential Street Resurfacing	CRP	ONGOING	900,000	900,000	900,000	900,000	900,000	900,000	5,400,000		4,020,000			630,000	90,000	660,000					
SP0101	Arterial Preservation Program	CRP	ONGOING	75,000	75,000	75,000	75,000	75,000	75,000	450,000		390,000			12,000	30,000	18,000					
SP0102	East Mercer Way Overlay (SE 53rd Place to SE 68th Street)	CRP	Q4 2021	1,185,000						1,185,000		880,000			175,000	40,000	90,000					
SP0103	SE 68th Street and SE 70th Place Overlay (ICW to EMW)	CRP	Q4 2022		680,000					680,000		525,000			50,000	5,000	100,000					
SP0104	North Mercer Way Overlay (7500 block to Roanoke Way)	CRP	2023			557,000				557,000		369,000			105,000	8,000	75,000					
SP0105	West Mercer Way Resurfacing (SE 56th to EMW)	CRP	2023			545,000				545,000		440,000			10,000	45,000	50,000					
SP0106	Gallagher Hill Road Overlay (SE 36th to SE 40th Streets)	CFP	2025					534,000		534,000		431,000			35,000	8,000	60,000					
SP0107	SE 40th Street Overlay (88th Ave SE to Gallagher Hill Rd)	CRP	2024				200,000			200,000		186,000			10,000	2,000	2,000					
SP0108	SE 36th Street Overlay (Gallagher Hill Rd to EMW)	CRP	2025				548,000			548,000		445,000			45,000	8,000	50,000					
SP0109	North Mercer Way Overlay (8400 Block to SE 35th Street)	CRP	2026					776,000		776,000		598,000			95,000	8,000	75,000					
SP0110	SE 27th Street Overlay (76th Ave SE to 80th Ave SE)	CRP	2024				548,000			548,000		460,000			25,000	13,000	50,000					
SP0111	80th Ave SE Sidewalk Improvements (SE 28th to SE 32nd Street)	CRP	2023			1,080,000				1,080,000		995,000			25,000		60,000					
SP0112	78th Ave SE Sidewalk Improvements (SE 32nd to SE 34th Street)	CRP	2023			712,000				712,000		647,000			25,000		40,000					
SP0113	Roadside Shldr Improvements - EMW Ph 11 (SE 79th St. to Avalon Dr.)	CFP	2024				475,000			475,000		320,000			65,000		90,000					
SP0114	Roadside Shldr Improvements - WMW Ph 3 (SE 70th to SE 65th St.)	CFP	Q4 2022	485,000						485,000		233,000			75,000	2,000	175,000					
SP0115	Gallagher Hill Road Sidewalk Improvements (SE 36th to SE 40th Streets)	CFP	2025				474,000			474,000		474,000										
SP0116	SE 40th Street Sidewalk Improvements (Gallagher Hill to 93rd Ave)	CRP	2024				920,000			920,000		825,000			35,000	5,000	55,000					
SP0117	92nd Ave SE Sidewalk Improvements (SE 40th to SE 41st Streets)	CFP	2026					540,000		540,000		450,000			25,000		65,000					
SP0118	ADA Compliance Plan Implementation	CRP	ONGOING		100,000		100,000		100,000	300,000		300,000										
SP0119	N-S Bike Route Completion ICW (90th Ave SE - SE 63rd St)	CRP	2023		50,000	50,000	200,000			300,000											300,000	
SP0120	Sunset Hwy/77th Ave SE Improvements	CRP	2023	100,000	600,000					700,000											700,000	
SP0121	Mid-block crosswalk 76th Ave SE between SE 24th and SE 27th	CRP	Q4 2022	65,000	203,704					268,704					12,000		3,000				253,704	
SP0122	Minor Capital - Traffic Operations Improvements	CRP	ONGOING	100,000		100,000		100,000		300,000		300,000										
SP0123	North Mercer Way - MI P&R Frontage Improvements	CRP	2024				1,177,000			1,177,000		1,177,000										
SP0125	PBF Plan Implementation	CRP	ONGOING	50,000	50,000	50,000	50,000	50,000	50,000	300,000		300,000										
25	STREETS, PEDESTRIANS, & BICYCLE FACILITIES TOTAL			2,475,000	3,143,704	4,069,000	4,645,000	2,681,000	2,441,000	19,454,704	-	14,765,000	-	-	1,454,000	264,000	1,718,000	-	-	-	1,253,704	
SU0100	Emergency Sewer Repairs	CRP	ONGOING	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000						1,800,000						
SU0102	Pump Station R&R Improvements	CRP	ONGOING	200,000		750,000		750,000		1,700,000						1,700,000						
SU0103	Easement, Access Codes and Standards Review	CRP	2023	150,000	150,000					300,000						300,000						
SU0104	Pump Station & HGMH Flow Monitoring	CRP	2025			300,000	300,000	1,000,000		1,600,000						1,600,000						
SU0105	Pipe Flow Monitoring	CRP	ONGOING			280,000	280,000		150,000	710,000						710,000						
SU0106	Lake Line Locating and Marking	CRP	2025			950,000	1,025,000	925,000		2,900,000						2,900,000						
SU0107	Lake Line Condition Assessment	CRP	2026					2,000,000		2,000,000						2,000,000						
SU0108	Comprehensive Pipeline R&R Program	CRP	ONGOING	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000						3,000,000						
SU0109	Sewer System Generator Replacement	CRP	ONGOING	150,000	150,000					300,000						300,000						
SU0110	Pump Station Accessibility Improvements	CRP	ONGOING	100,000	100,000		100,000		100,000	400,000						400,000						
SU0111	Comprehensive Hydraulic Model Development	CRP	2026					250,000		250,000						250,000						
SU0112	Comprehensive I/I Evaluation	CRP	2026					150,000		150,000						150,000						
SU0113	SCADA System Replacement (Sewer)	CRP	2023	675,000	975,000	1,275,000				2,925,000						2,925,000						
13	SEWER UTILITY TOTAL			2,075,000	2,175,000	4,355,000	2,505,000	5,475,000	1,450,000	18,035,000	-	-	-	-	-	18,035,000	-	-	-	-	-	

ID	Description	Plan	Target Completion Date	2021	2022	2023	2024	2025	2026	TOTAL	General Fund	Street Fund	Capital Imp Fund	Tech & Equip Fund	Water Fund	Sewer Fund	Storm Water Fund	Grant	King County Levy	Dept Fees	Other
SW0100	Sub Basin 42.1 and 42.1a Watercourse Stabilization	CRP	Q3 2021	389,657						389,657							389,657				
SW0101	Sub basin 23.2 Watercourse Stabilization	CRP	Q3 2021	202,157						202,157							202,157				
SW0102	Sub basin 45b.1 Watercourse Stabilization	CRP	Q3 2022	36,157	188,500					224,657							224,657				
SW0103	Sub basin 27a.10 Watercourse Stabilization	CRP	Q3 2022	22,157	79,000					101,157							101,157				
SW0104	Sub basin 22.1 Watercourse Stabilization	CRP	2023		24,157	139,100				163,257							163,257				
SW0105	Sub basin 50b.4 (a & e) Watercourse Stabilization	CRP	2023		17,657	46,000				63,657							63,657				
SW0106	Sub basin 25b.2 Watercourse Stabilization	CRP	2023		46,657	145,000				191,657							191,657				
SW0107	Sub basin 47.4 and Sub basin 10.4 Watercourse Stabilization	CRP	2023			55,514	292,500			348,014							348,014				
SW0109	Sub basin 24a.1 Watercourse Stabilization	CRP	2024			17,157	56,500			73,657							73,657				
SW0110	Sub basin 39a.2 Watercourse Stabilization	CRP	2024			16,157	40,000			56,157							56,157				
SW0111	Sub basin 46a.3 Watercourse Stabilization	CRP	2024			48,657	371,500			420,157							420,157				
SW0112	Sub basin 34.1 Watercourse Stabilization	CRP	2025				24,157	92,200		116,357							116,357				
SW0113	Sub basin 45b.4 Watercourse Stabilization	CRP	2025				28,157	83,600		111,757							111,757				
SW0114	Sub basin 29.3 Watercourse Stabilization	CRP	2025				45,157	116,500		161,657							161,657				
SW0115	Sub-Basin 42.2, 42.3, 42.8, 42.8a	CRP	2026					87,157	333,500	420,657							420,657				
SW0116	Sub basin 44b.3 Watercourse Stabilization	CRP	2026					29,157	67,700	96,857							96,857				
SW0117	Sub-Basin 32b.1 & 32.2 Watercourse Stabilization	CRP	2026					48,157	150,000	198,157							198,157				
SW0118	Watercourse Minor Repairs/Maintenance	CRP	2025					100,000		100,000							100,000				
SW0119	Conveyance System Assessments	CRP	2026	112,000	50,000	112,000	50,000	112,000	50,000	486,000							486,000				
SW0120	East Mercer Way Trenchless Culvert Replacements	CRP	Q4 2022	112,657	503,500					616,157							616,157				
SW0121	Conveyance System Improvement - Drainage Repair and Replacement	CRP	ONGOING			300,000	300,000	300,000	300,000	1,200,000							1,200,000				
SW0126	Emergency Stormwater Conveyance Repairs	CRP	Q4 2022	50,000	50,000					100,000							100,000				
22	STORM WATER UTILITY TOTAL			924,785	959,471	879,585	1,207,971	968,771	901,200	5,841,783	-	-	-	-	-	-	5,841,783	-	-	-	-
WU0100	Emergency Water System Repairs	CRP	ONGOING	150,000	150,000	150,000	150,000	150,000	150,000	900,000					900,000						
WU0101	Booster Chlorination Station	CRP	Q4 2022	995,000	2,510,000					3,505,000					3,505,000						
WU0102	SCADA System Replacement (Water)	CRP	2023	675,000	975,000	1,275,000				2,925,000					2,925,000						
WU0103	Water Reservoir Improvements	CRP	2023	375,000	1,735,000	1,715,000				3,825,000					3,825,000						
WU0104	82nd Ave and Forest Ave Water System Improvements - Construction	CRP	2024			145,000	810,000			955,000					955,000						
WU0105	74th Ave, SE 29th, & 73rd Ave Water System Improvements - Design	CRP	2026						188,000	188,000					188,000						
WU0106	Madrona Crest East Addition Water System Improvements	CRP	Q4 2022	350,000	2,448,000					2,798,000					2,798,000						
WU0107	77th & 78th Ave SE (SE 27 - SE 29) Water System Improv (Town Center)	CRP	2025				204,000	950,000		1,154,000					1,154,000						
WU0108	Avalon Dr and Benotho Pl Neighborhoods Water System Improvements	CRP	2026					279,000	1,775,000	2,054,000					2,054,000						
WU0109	60 Ave SE, btw SE 27 and SE 32, and 62 Ave Water System Improv.	CRP	2023		229,000	1,456,000				1,685,000					1,685,000						
WU0110	82nd Ave SE, N of SE 24th St Water System Improv - Construction	CRP	Q4 2021	1,087,000						1,087,000					1,087,000						
WU0111	Hydrant Replacement (contract work)	CRP	2023			250,000		250,000		500,000					500,000						
WU0112	Water System Components (valve, air vac, blow off, and etc.)	CRP	ONGOING	35,000	35,000	35,000	35,000	35,000	35,000	210,000					210,000						
WU0114	Abandonment of 1955 12" water main (Reservoir to First Hill)	CRP	2023			320,000				320,000					320,000						
WU0115	Water Model Updates/Fire Flow Analysis	CRP	ONGOING	15,000	50,000	15,000	50,000	15,000	50,000	195,000					195,000						
WU0116	RRA, ERP Updates, and Water System Plan Updates	CRP	Q4 2022	200,000	100,000					300,000					300,000						
WU0117	Meter Replacement Implementation	CRP	Q4 2022	2,050,000	2,050,000					4,100,000					4,100,000						
WU0119	Reservoir Generator Replacement	CRP	2024	240,000	120,000					360,000					360,000						
WU0120	Mercerwood - Water System Improvements	CRP	2024			229,000	1,456,000			1,685,000					1,685,000						
WU0124	Solutions for Water System Deficiencies - Consultant Services	CRP	Q4 2021	120,000						120,000					120,000						
20	WATER UTILITY TOTAL			6,292,000	10,402,000	5,590,000	2,705,000	1,679,000	2,198,000	27,966,000	-	-	-	-	27,966,000	-	-	-	-	-	-
138	TOTAL			\$ 16,575,699	\$ 21,831,161	\$ 20,466,943	\$ 20,818,149	\$ 13,949,271	\$ 15,691,221	\$ 108,432,444	\$ 229,500	\$ 14,921,000	\$ 18,027,657	\$ 473,060	\$ 29,649,664	\$ 18,512,164	\$ 7,679,917	\$ 4,964,775	\$ 1,675,975	\$ 830,000	\$ 11,468,732
TOTAL FUNDED PROJECTS 2021-2022				62	60																

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Capital Improvement Program

City Hall Building Repairs

Project ID
GB0100

Program Plan
CRP

Target Completion Date
ONGOING

2021 Labor Hour Estimate
525

2022 Labor Hour Estimate
490

2021-2022 Project Budget
\$606,500

Department
Public Works



Project Description

Improvements include replacing aged/failing carpet, improve swing gate security around front customer service counters, addition of privacy/comfort room, door connection to EOC from registration room. Conduct baseline assessment of HVAC systems to determine appropriate equipment, capacity needed, and design parameters that account for cooling/heating load, ventilation, and filtration requirements are met.

Project Justification

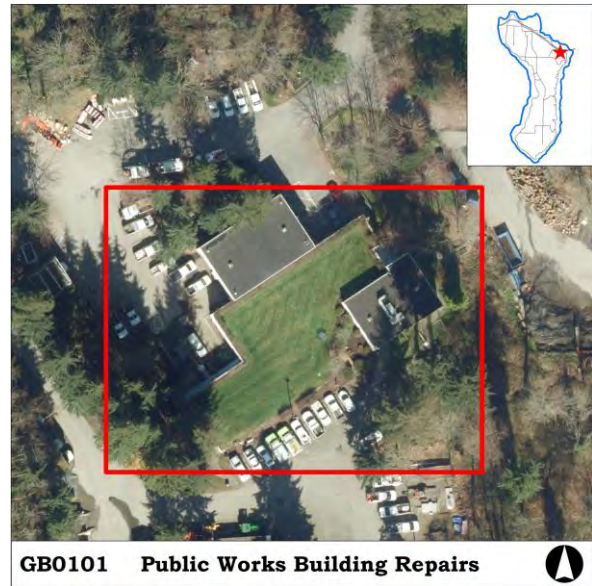
Carpet last replaced in 2001 and shows signs of failure. The Customer Service area needs security enhancements to ensure staff and customer safety. A considerable amount of money/time is spent servicing aged HVAC system. Conduct an audit of the buildings conditioning requirements and replacement schedules. The EOC registration room does not have access to the EOC. Staff need a comfort room for new parents.

Expenditures	2021	2022	2023	2024	2025	2026
GB0100	\$206,500	\$400,000	\$547,947	\$466,011	\$301,911	\$233,631

Capital Improvement Program

Public Works Building Repairs

Project ID
 GB0101
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 440
2022 Labor Hour Estimate
 110
2021-2022 Project Budget
 \$326,600
Department
 Public Works



Project Description

The leaking grass lawn roof over the lower floors needs to be replaced before it does damage to the structure. Interior paint is needed. Administration rooftop HVAC unit is due for replacement. Staff will conduct a baseline assessment of HVAC systems to determine appropriate equipment, capacity needed, and design parameters that account for cooling/heating load, ventilation, and filtration requirements are met. This project will also look to install a privacy/nursing room for new parents.

Project Justification

Replacement of the lawn roof over the lower offices insures that there is no structural damage due to leakage to the roof or in the floors below. The HVAC unit is past useful life expectancy. Staff will conduct an audit of the buildings HVAC conditioning requirements and replacement schedules, would also determine if addition of equipment on lower level would alleviate complaints of inadequate temperatures. Interior paint is needed.

Expenditures	2021	2022	2023	2024	2025	2026
GB0101	\$261,400	\$64,800	\$83,074	\$107,541	\$67,142	\$71,125

Capital Improvement Program

MICEC Building Repairs

Project ID

GB0102

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

440

2022 Labor Hour Estimate

200

2021-2022 Project Budget

\$376,000

Department

Public Works



GB0102

MICEC Building Repairs



Project Description

Improvements include: Upper level carpet replacement, HVAC software upgrades, gym and dance floor seal coatings, hot water tank replacements for community center and annex building. LED replacements to exterior sconces and bollards. Conduct baseline assessment of HVAC systems to determine appropriate equipment, capacity needed, and design parameters that account for cooling/heating load, ventilation, and filtration requirements are met.

Project Justification

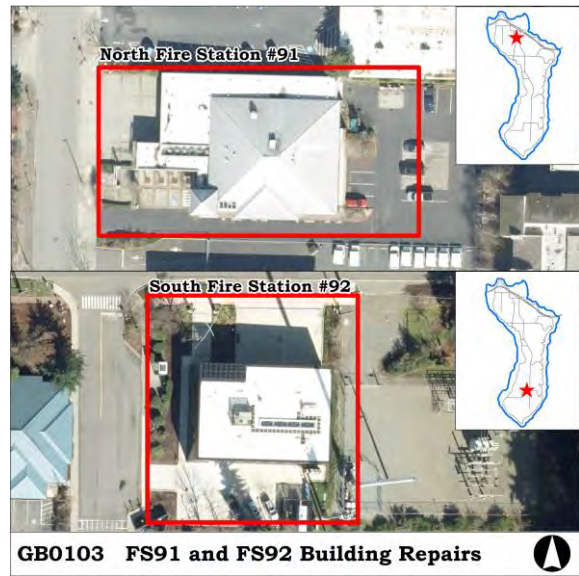
Carpet is worn and due for replacement. The software program controlling the HVAC functions is outdated, and technology needs to be replaced. Hot Water tanks are due for replacement at the MICEC and Annex buildings. The exterior fixtures will be converted to LED, for energy savings. The gym and dance room must be recoated every year to maintain functionality, safety, and durability of surfaces.

Expenditures	2021	2022	2023	2024	2025	2026
GB0102	\$263,000	\$113,000	\$327,175	\$199,150	\$150,785	\$148,168

Capital Improvement Program

FS91 and FS92 Building Repairs

Project ID
 GB0103
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 175
2022 Labor Hour Estimate
 160
2021-2022 Project Budget
 \$229,000
Department
 Public Works



Project Description

Improvements include - FS91- Exterior paint, equipment compressor, casework refurbishment, interior lighting upgrade to LED, Apparatus bay recoat, Front Apparatus bay apron restrain/stripe. FS92- interior paint, HVAC software upgrades, restriping parking lot, apparatus bay door repairs, and lighting control upgrades. Conduct baseline assessment of HVAC systems.

Project Justification

FS91 needs exterior paint, casework is damaged and needs replacement for continuity of business, apparatus bay needs the floor recoated to maintain a safe, nonslippery surface and floor protection, front app bay restripe for safety for pedestrians and backing trucks into the station. FS92 needs interior paint, restriping of the parking lot for safety, and HVAC and Lighting control upgrades for functionality. Conduct an audit of the buildings conditioning requirements and replacement schedules.

Expenditures	2021	2022	2023	2024	2025	2026
GB0103	\$105,000	\$124,000	\$129,732	\$124,839	\$128,219	\$380,320

Capital Improvement Program

Luther Burbank Administration Repairs

Project ID

GB0104

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

220

2022 Labor Hour Estimate

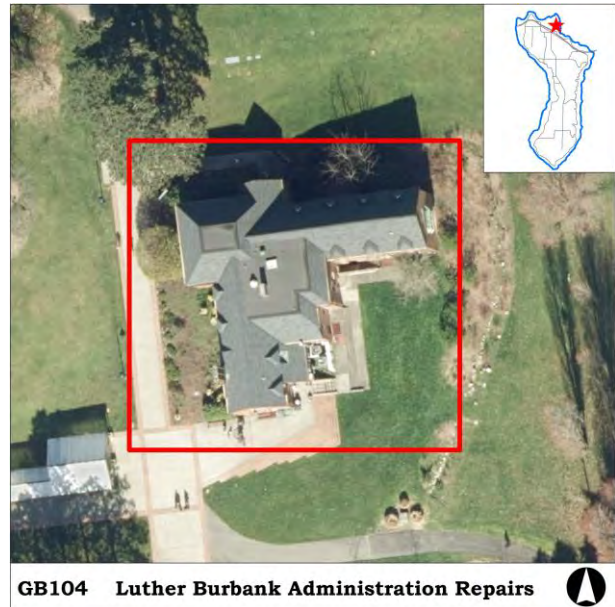
120

2021-2022 Project Budget

\$195,000

Department

Public Works



GB104 Luther Burbank Administration Repairs



Project Description

Improvements include: Caretaker house furnace replacement, upstairs HVAC unit replacement, plumbing fixture replacements, and restoration wash and seal of the outside of the building. Conduct baseline assessment of HVAC systems to determine appropriate equipment, capacity needed, and design parameters that account for cooling/heating load, ventilation, and filtration requirements are met.

Project Justification

The outside bricks are in need of a restoration wash and sealing to prolong the life of the building. The upstairs Administration HVAC units have reached the end of their useful life. Conduct an audit of the buildings conditioning requirements and replacement schedules. Caretakers house furnace needs to be replaced. Old plumbing fixtures need to be upgraded.

Expenditures	2021	2022	2023	2024	2025	2026
GB0104	\$131,000	\$64,000	\$125,180	\$72,263	\$73,970	\$54,055

Capital Improvement Program

Thrift Shop Building Repairs

Project ID
 GB0105
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 80
2022 Labor Hour Estimate
 40
2021-2022 Project Budget
 \$67,000
Department
 Public Works



Project Description

Improvements include - cashier counter reconfiguration, security system upgrade, exterior lighting upgrade to LED. Conduct baseline assessment of HVAC systems to determine appropriate equipment, capacity needed, and design parameters that account for cooling/heating load, ventilation, and filtration requirements are met. This work will align with any additional work determined by the City Council in the Fall of 2020.

Project Justification

The cashier reconfiguration will enhance sales functions and safety for shoppers and employees. The security system upgrade and lighting retrofits will offer savings on operation costs and enhance safety. Staff will conduct an audit of the buildings conditioning requirements and replacement schedules.

Expenditures	2021	2022	2023	2024	2025	2026
GB0105	\$43,000	\$24,000	\$133,146	\$66,573	\$40,968	\$44,382

Capital Improvement Program

Honeywell Site Remediation

Project ID
GB0107

Program Plan
CRP

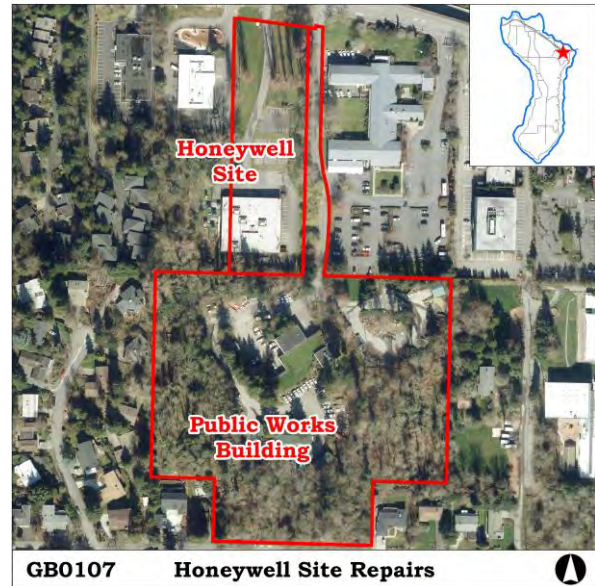
Target Completion Date
Q4 2022

2021 Labor Hour Estimate
40

2022 Labor Hour Estimate
40

2021-2022 Project Budget
\$350,000

Department
Public Works



Project Description

Continue with ongoing soil and groundwater remediation at the Honeywell Site and City Maintenance Facility. Compliance work is necessary for in order to obtain a No Further Action letter from the Department of Ecology.

Project Justification

The City previously operated an underground fuel tank at the City maintenance facility. Contaminated soil and groundwater has been located on the City's property and also the southern portion of the adjacent property, located at 9555 SE 36th St. These contaminant levels exceed the Model Toxins Control Cleanup Regulation, which pose health and environmental risks.

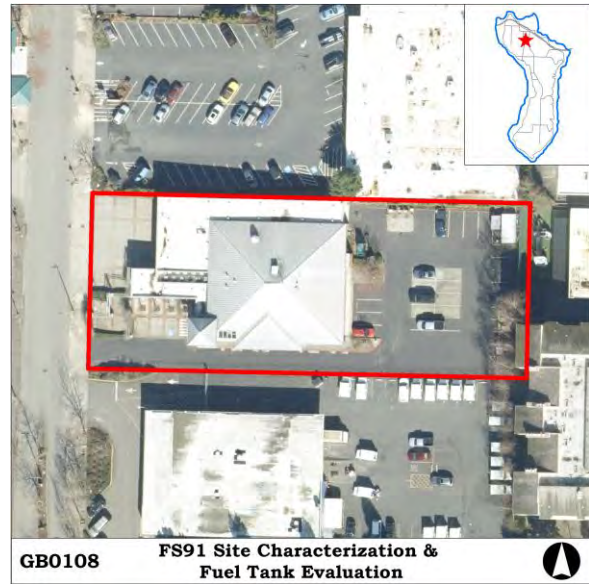
In 2018, further site characterization was performed to investigate the extent of contamination and new ground watering monitoring wells were installed. Chemical injections to expedite the degradation of the contaminants were also started. Additional injections and monitoring from a professional service are needed to complete the clean-up and receive a "No Further Action" letter from the Department of Ecology.

Expenditures	2021	2022	2023	2024	2025	2026
GB0107	\$200,000	\$150,000	\$0	\$0	\$0	\$0

Capital Improvement Program

FS91 Site Characterization & Fuel Tank Evaluation

Project ID
 GB0108
Program Plan
 CRP
Target Completion Date
 Q1 2022
2021 Labor Hour Estimate
 100
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$100,000
Department
 Public Works



Project Description

A notice from DOE was received in 2013 informing the City that FS91 is a known location of reported contaminated soils and/or groundwater. Further site characterization is needed to determine whether contaminants remain on the property or further remediation efforts are needed. Investigation is needed to determine what course of action will be needed. This project includes soil borings and the installation of monitoring wells.

Given the age of the underground fuel tanks at the Station, current conditions and remaining evaluation of expected useful life analysis is needed.

Project Justification

There is an open-ended known fuel tank leak at the fueling station located at FS 91, which has not been fully remediated. In the early 1990s the City contracted for the removal of 2 underground storage tanks and fuel lines because water had contaminated the gasoline from a leaky pipe. New tanks and pipes were installed, and contaminated soil removed to satisfy Ecology's cleanup guidelines. However, DOE still lists the property as contaminated and in violation of the Model Toxins Control Act and further action is required to complete the cleanup.

Due to age and increased maintenance needs, a long-term evaluation of the fuel tanks is warranted to determine if the tanks should be replaced or if the use of this facility should be discontinued.

Expenditures	2021	2022	2023	2024	2025	2026
GB0108	\$100,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Training Tools and Equipment

Project ID

GE0101

Program Plan

CRP

Target Completion Date

Q2 2022

2021 Labor Hour Estimate

56

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$80,000

Department

Fire



Project Description

Fire purchases a wide variety of firefighting tools and equipment each year as equipment reaches the end of its useful life. Each purchase exceeds three years of servicable life.

Project Justification

Fire conducts training required by federal, state, and local requirements and uses equipment for realistically training. This causes wear and tear on existing equipment such as but not limited to: hose, fittings, medical equipment, and heavy rescue tool components. Fire will also purchase a new battery-operated rescue tool for use on motor vehicle accidents, useful in extracting trapped vehicle occupants.

Expenditures	2021	2022	2023	2024	2025	2026
GE0101	\$39,000	\$41,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Purchase New MIDI Pumper - 2024

Project ID
 GE0103
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Fire



Project Description

Replace one-midi pumper (2024) as part of a staggered replacement schedule for fire apparatus which began in 2007, with a maxi-pumper to be replaced every six years, and a mini-pumper replaced every nine years.

Project Justification

Many of Mercer Island's fire trucks are approaching 30 years of service. They are beyond the normal or expected life for this kind of equipment. The equipment is increasingly difficult to maintain. As fleet ages the repair costs rise and the liability for system failure increases. Each Midi Pumper is replaced every nine-years. There are only two MIDI pumpers in the fleet, one at each station. What is a MIDI pumper?

Expenditures	2021	2022	2023	2024	2025	2026
GE0103	\$0	\$0	\$0	\$440,000	\$0	\$0

Capital Improvement Program

Purchase New MAXI Pumper 2024

Project ID

GE0106

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Fire



Project Description

Replace Oldest Maxi Pumper in 2024.

Project Justification

This is for the purchase of a new Maxi Pumper in 2024 in accordance with the apparatus vehicle replacement schedule.

Expenditures	2021	2022	2023	2024	2025	2026
GE0106	\$0	\$0	\$0	\$800,000	\$0	\$0

Capital Improvement Program

Fleet Replacements

Project ID
 GE0107
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$1,638,390
Department
 Public Works



Project Description

Procurement of equipment and vehicles scheduled for replacement through Fleet Services, including police patrol vehicles, marine patrol boats and engines, heavy equipment and administrative staff vehicles.

Project Justification

Equipment and vehicles that have reached the end of their useful lives need to be replaced in a timely and cost-effective manner to minimize fuel use, reduce emissions, and provide the desired services. The Equipment Rental Fund is used to manage replacement and Maintenance & Operation funds to ensure that the City's fleet meets the needs and demands of public service. Funds are collected over the life of the vehicle and spent as the useful life is reached.

Expenditures	2021	2022	2023	2024	2025	2026
GE0107	\$905,854	\$732,536	\$531,307	\$606,836	\$794,055	\$944,190

City Information via Web Based GIS

Project ID
GT0101

Program Plan
CRP

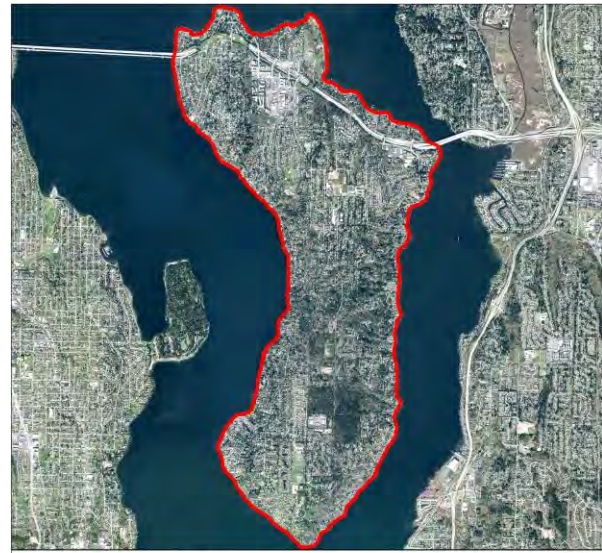
Target Completion Date
Q4 2021

2021 Labor Hour Estimate
266

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$38,860

Department
Information & Geographic Systems



GT0101 City Information via Web Based GIS 

Project Description

Continue to upgrade software used behind the City's WebGIS website. The last upgrade was in 2017 and requires customization features for enhanced workflows and connectivity to other business systems including document management. The goal is to update the City's internal and public mapping portals to the latest version of software and replicate, improve and add functionality requested by Staff since the last upgrade.

Project Justification

The City has over 400 layers in the GIS database related to infrastructure, assets, and geography. There are two primary methods in which this data is utilized by City staff and the public: paper based maps and web based maps. Web based mapping provides a highly capable tool set to City staff and the public and has become the primary method for accessing and analyzing asset and infrastructure data.

The City also has invested in other technologies such as electronic document management, permitting, utility, and public safety systems that would provide significant additional value when connected to its geographic information system. This software allows public and City staff ability to easily access information about property, public infrastructure, and other City datasets. This software system requires periodic investment to take advantage of new features and functionality and maintain the system

Expenditures	2021	2022	2023	2024	2025	2026
GT0101	\$38,860	\$0	\$0	\$0	\$40,000	\$0

Capital Improvement Program

ArcGIS Enterprise Deployment with GeoEvent Server

Project ID
GT0102

Program Plan
CRP

Target Completion Date
Q3 2021

2021 Labor Hour Estimate
365

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$34,200

Department
Information & Geographic Systems



Project Description

Continue to upgrade software behind the City's GIS system. This software is the main software that runs the City's GIS system. The current software will no longer be supported by the end of 2021. This software allows all the City's GIS data to be consumed by internal staff and the public. It also connects with other business systems such as WebGIS, Cityworks (PW Maintenance Management System), TrakIt (permitting), inspection software and E911. It will add additional functionality for Situational Awareness mapping which can be used daily as well as during Emergency Operations.

Project Justification

The City has over 400 layers in the GIS database related to infrastructure, assets, and geography. The software that is currently installed will no longer be supported by the end of 2021. This upgrade has always been done internally in the past. However, the new software has increased complexity requirements and will need assistance with professional services to ensure a smooth transition including proper hardware in place, settings and security options.

Enhancements to this software includes ArcGIS GeoEvent server. GeoEvent Server allows the City to gain situational awareness of real-time streaming data. It tracks assets, monitors stationary sensors, follows social media feeds and allows better analysis and display of real-time and the Internet of Things (IoT) data on maps.

The software upgrade allows for continuity in sharing and consuming all the City's geographic data and in addition having more situational awareness options. This software system requires periodic investment to take advantage of new features and functionality and maintain the system.

Expenditures	2021	2022	2023	2024	2025	2026
GT0102	\$34,200	\$0	\$0	\$0	\$0	\$0

ArcGIS Urban Deployment

Project ID

GT0103

Program Plan

CRP

Target Completion Date

-

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

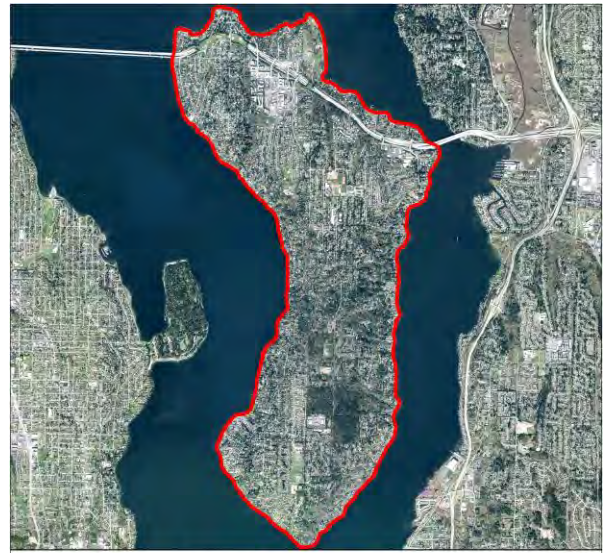
0

2021-2022 Project Budget

0

Department

Community Planning & Development



GT0103

ArcGIS Urban Deployment



Project Description

GIS has served the Community Planning and Development (CPD) department in variety of ways over the years from WebGIS, analysis for Urban Growth and special projects, zoning and land-use changes. CPD staff is the highest user of the City's WebGIS system using it daily to answer property and asset inquiries.

Most data consumed by CPD is 2D. ArcGIS Urban is a 3D experience web-based software designed to drive smart urban planning and development. Many cities today are experiencing challenges managing and responding to growing populations and the demands related to public and private capital investments.

ArcGIS Urban provides a comprehensive set of tools to orchestrate the urban development lifecycle. ArcGIS Urban is a system of web-based and desktop tools to create and manage plans and projects, engage with community stakeholders and reduce risk for timely decision making.

Project Justification

During the 2021-2022 Preliminary Budget process, staff removed this project from the 2021-2026 Capital Improvement Program.

Expenditures	2021	2022	2023	2024	2025	2026
GT0103	\$0	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Mobile Asset Data Collection

Project ID
GT0104

Program Plan
CRP

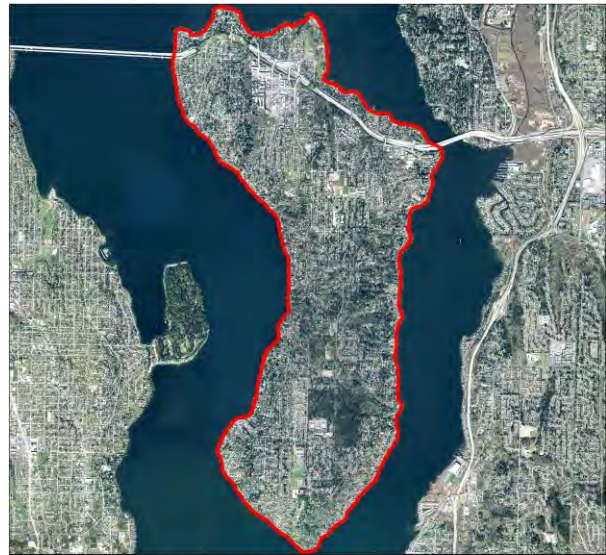
Target Completion Date
Q2 2022

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$78,000

Department
Public Works



GT0104 Mobile Asset Data Collection 

Project Description

As part of ongoing maintenance of critical infrastructure such as streets and utilities the City needs to collect information in the field to conduct further planning of maintenance activity.

Project Justification

Collecting information about assets such as pavement condition is a normal component of City operations and asset and infrastructure maintenance. A camera system mounted on a van is used to collect video images of infrastructure elements visible from a public right of way.

Geographic elements will be imported into the City's GIS database and maintenance management system for planning of infrastructure maintenance. Users will be able to view and measure items through the City's online mapping system. This project is on an ongoing 3-year cycle since 2013. The most recent collection was completed in 2019.

Expenditures	2021	2022	2023	2024	2025	2026
GT0104	\$0	\$78,000	\$0	\$0	\$78,000	\$0

High Accuracy Orthophotos

Project ID
GT0105

Program Plan
CRP

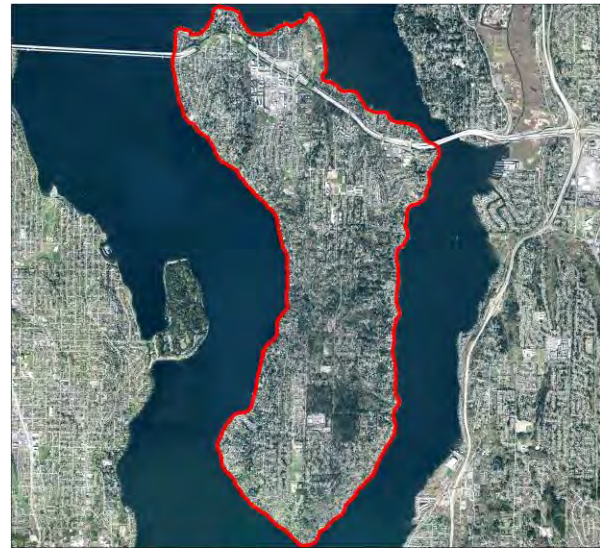
Target Completion Date
Q2 2022

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Information & Geographic Systems



GT0105 High Accuracy Orthophotos 

Project Description

As part of ongoing maintenance of critical infrastructure, the City collects high resolution aerial photography that supports the maintenance of GIS layers for above ground features and infrastructure such as roadways, property and building information, and utilities.

Project Justification

As part of ongoing maintenance of critical infrastructure, the City collects high resolution aerial photography that supports the maintenance of GIS layers for above ground features and infrastructure such as roadways, property and building information, and utilities.

High accuracy digital orthophotography is the primary low cost tool to obtain an "on the ground" picture of island-wide property and infrastructure changes from which accurate measurements and analysis can occur. New photography is required periodically to capture changes over time. The City participates in a regional orthophotography flight every 2-3 years to share and save costs.

Expenditures	2021	2022	2023	2024	2025	2026
GT0105	\$0	\$0	\$35,000	\$0	\$0	\$35,000

Capital Improvement Program

Enterprise Resource Planning System Scoping

Project ID
 GT0106
Program Plan
 CRP
Target Completion Date
 Q3 2022
2021 Labor Hour Estimate
 200
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$75,000
Department
 Finance



Project Description

The City’s accounting software is provided by SunGard Bi-Tech. Soon the City will transition to new software to perform human resources and payroll activities. Staff seek the opportunity to conduct a Request for Information and assess enterprise-wide financial planning and accounting solutions that work with new the human resources and payroll solution. Staff will either update current software or issue a Request for Proposal to integrate, install, and train staff on new Enterprise Resource Planning software.

Project Justification

This project aims to upgrade accounting software and establish software support and maintenance contracts to keep critical information secure and systems in an optimal state. The City’s current accounting software, One Solution, is over ten-years old. The recommended update requires significant staff time and financial investment.

Although One Solution is still functional, it operates on code written in the early 2000s. In some cases, it cannot provide data in an efficient and timely manner without significant time devoted to manual data entry. Since the current system does not integrate with other software used in the City, staff manually transfer data to complete accounting processes, gain information, and create reports.

This lack of functionality and integration makes processes less than efficient. Further, it can lead to financial and security risks should SunGard no longer support our current software version.

Expenditures	2021	2022	2023	2024	2025	2026
GT0106	\$75,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Public Safety Distributed Antenna System - City Hall Replacement

Project ID
 GT0107
Program Plan
 CRP
Target Completion Date
 Q4 2021
2021 Labor Hour Estimate
 123
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$80,000
Department
 Police



Project Description

Replace the existing Distributed Antenna System (DAS) located in City Hall. The original DAS was installed in 2009. The DAS will not be compatible with the new Regional Public Safety Radio system that is scheduled to go live in 2021.

Project Justification

The DAS allows first responder radios to transmit and receive communications in City Hall. This includes the Police Department, Emergency Operations Center, Council Chambers and the Municipal Court. City Hall is brick building with a metal roof that prevents radio signals from effectively transmitting in and out of the facility. Effective and reliable radio communication is a mission critical need for first responders.

Expenditures	2021	2022	2023	2024	2025	2026
GT0107	\$80,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Technology Equipment Replacement

Project ID

GT0108

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

500

2022 Labor Hour Estimate

500

2021-2022 Project Budget

\$312,950

Department

Information & Geographic Systems



Project Description

Routine replacement of outdated technology throughout the City.

Project Justification

If the City does not replace it's technology beyond it's useful life cycle, the following are examples of what could occur, but certainly not limited to:

- Replacement parts no longer able to be sourced.
- Warranty has expired, resulting in loss of manufacturer support.
- The vendor/manufacturer no longer provides stability/security updates to said technology.
- Loss of productivity due to troubleshooting or failing equipment.

Expenditures	2021	2022	2023	2024	2025	2026
GT0108	\$112,850	\$200,100	\$123,000	\$199,300	\$150,000	\$200,000

Fiber Conduit Installation

Project ID
GT0109

Program Plan
CFP

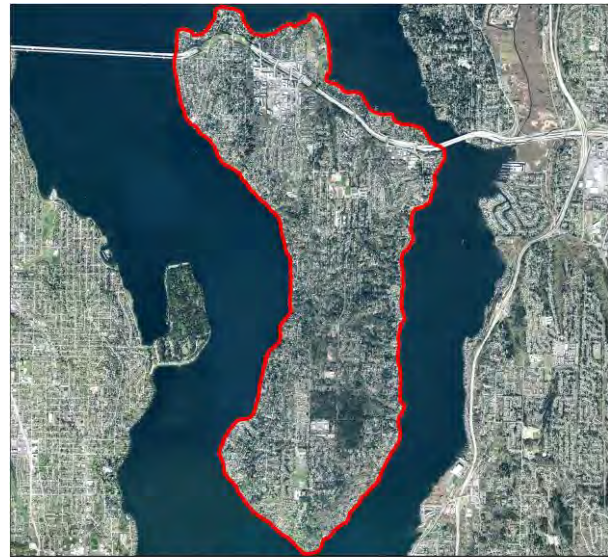
Target Completion Date
Q4 2022

2021 Labor Hour Estimate
60

2022 Labor Hour Estimate
60

2021-2022 Project Budget
\$150,000

Department
Information & Geographic Systems



GT0109 Fiber Conduit Installation 

Project Description

Placing fiber conduit PVC piping along same trenchway being dug for King County's Sewer Main project.

Project Justification

King County is preparing to replace a significant section of Sewer Main whose path travels near 77th Ave and I-90, along the I-90 trail eastward, and past the N. Mercer Way I-90 crossing. King County is willing to allow the City to take advantage of this project which is primarily going to use trenching to place conduit for City purposes. King County has asked the City to cover any design/construction costs and impacts.

The City has already paid for design work done by the County, and currently plans are at 90% submittal. The next phase is construction of the trench, and the laying of fiber conduit to enhance security of City Facilities. An excavation of this magnitude undertaken on the island is rare, in which most of the costs are borne by the County. This is an excellent opportunity to have the City own it's communication infrastructure throughout City facilities.

Expenditures	2021	2022	2023	2024	2025	2026
GT0109	\$75,000	\$75,000	\$90,000	\$90,000	\$0	\$0

Capital Improvement Program

Permitting System Upgrade/Replacement

Project ID

GT0110

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

620

2021-2022 Project Budget

\$95,000

Department

Community Planning & Development



Project Description

Upgrade the City's permitting system.

Project Justification

The City's permitting system is in dire need of upgrade. Some of the more immediate reasons to upgrade this system include:

- CRW, now CentralSquare, is no longer providing stability or security updates to this system.
- Technical support for this system by the vendor is extremely limited.
- The software uses a code base dating back to 2012, with updates only since 2016. Future Windows Updates may hinder access to this software.
- This system additionally has not kept up with progress in the technology space. Examples of this include:
- Software is sluggish and unusable to our mobile inspectors, requiring them to return to the City to input their work.
- Advances in electronic plan review that limits the need for clients to send paper drawings or do in person visits is nonexistent in the current system.
- Clients are still required to do over the counter payment as a result of the current system not having a payment module.

If the City is to keep up with the rising expectations of clients, we must keep pace with technological progress. Otherwise, antiquated technology and processes will cause the City to fall further back in relation to other eastside cities.

Expenditures	2021	2022	2023	2024	2025	2026
GT0110	\$0	\$95,000	\$40,000	\$0	\$0	\$0

Capital Improvement Program

Open Space Management

Project ID
 PA0100
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 1100
2022 Labor Hour Estimate
 1100
2021-2022 Project Budget
 \$676,000
Department
 Parks & Recreation



Project Description

Implement ecological restoration projects across 300 acres of Open Space consistent with the 2004 Open Space Vegetation Plan and 2015 Update. Restoration projects include noxious weed management, installation of native trees and shrubs, and arboriculture services. Projects are accomplished through a combination of professional restoration crews and tree care companies, in-house staff, and community volunteers.

Project Justification

The City owns and manages over 300 acres of open space comprised of upland forest as well as critical areas such as wetlands, watercourses, and steep-sloped ravines. Open spaces provide quantifiable benefits that serve as critical natural environmental infrastructure including erosion control, storm water buffering, energy conservation, and pollution abatement.

In one analysis, the City's parks and open space properties buffer 595,736 cubic feet of storm water runoff and remove 23,734 lbs of air pollutants annually. Open Spaces also provide mental and physical health benefits, recreational opportunities, and wildlife habitat. Invasive and noxious weeds threaten the health of these open spaces by creating monocultures that suppress natural forest regeneration and outcompete native plant communities. In some areas, trees are also dying from root disease and normal attrition that require ongoing monitoring and management.

Deferred maintenance and management of open space properties will lead to degraded habitat and forest canopy conditions leading to a decline in ecosystem functions as well as a loss on existing City investments in Open Space management.

Expenditures	2021	2022	2023	2024	2025	2026
PA0100	\$338,000	\$338,000	\$338,000	\$338,000	\$338,000	\$338,000

Capital Improvement Program

Recurring Parks Minor Capital

Project ID
 PA0101
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 140
2022 Labor Hour Estimate
 140
2021-2022 Project Budget
 \$280,000
Department
 Parks & Recreation



PA0101 Recurring Parks Minor Capital



Project Description

Repair, replace or refurbish park furnishings, perform emergency repairs, and other small projects to maintain City parks. Preliminary A&E scoping of projects for budget purposes. Examples of projects completed: pavement patching, restroom fixture replacement, park bench refinishing, sign refurbishment, hazard tree removal and replacement, parking lot striping, irrigation and drainage repairs, etc. Some projects are contracted and some are done in-house.

Project Justification

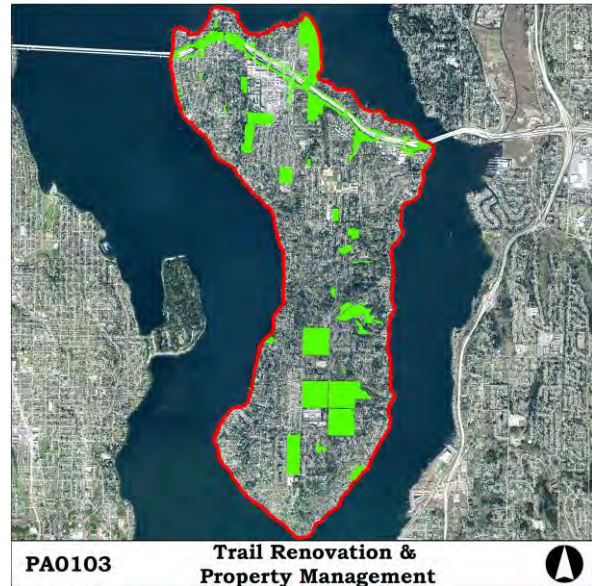
Pavement, parks furnishings, and landscaping wear out and become unsafe over time. Many of these projects are too small to define as a separate project. On a reoccurring basis equipment, facilities and amenities must be repaired or replaced as they reach the end of their useful lifecycle.

Expenditures	2021	2022	2023	2024	2025	2026
PA0101	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000

Capital Improvement Program

Trail Renovation and Property Management

Project ID
 PA0103
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 160
2022 Labor Hour Estimate
 160
2021-2022 Project Budget
 \$119,400
Department
 Parks & Recreation



Project Description

Renovate trails that improve connectivity. Repair trails with decreased functionality or safety issues. Acquire easements where needed. Manage property issues such as encroachments, donations, rights-of-entry, and leases.

Potential projects for 2021-22 include Pioneer Park trails resurfacing, SE 53rd open space trail tread rehab, ROW trails rotten stairs replacements.

Project Justification

Trails are one of the City's sustainability goals because they provide a non-motorized alternative to getting around the island. Trails that do not receive renovation when needed may become safety issues. Much of the City's trails infrastructure utilizes timber stairways that are approaching the end of their useful lifespan. An increase in costs for renovating these structures is reflected in the projected cash flow construction costs.

Expenditures	2021	2022	2023	2024	2025	2026
PA0103	\$58,550	\$60,850	\$63,150	\$65,450	\$67,750	\$70,050

Capital Improvement Program

Lake Water Irrigation Development

Project ID

PA0104

Program Plan

CFP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



Project Description

Install pumps, intake screen and plumbing for irrigation of three lakefront parks sites: Luther Burbank Park, Clarke Beach Park and Groveland Beach Park. This work would complete the development of water rights for the City and secure the claim that the Dept of Ecology authorized for construction in 2007.

Project Justification

Future climate variability is expected to have a significant negative impact on water supply. Having water rights for Lake Washington secures the City a resource that is expected to increase in value and utility. Only by completing this project does the City secure the water rights it has laid claim to. The rights could be revoked if action is not taken. The Clarke Beach and Groveland Beach sites are currently not irrigated. The Luther Burbank Calkins Point site was designed to use non-potable water specifically with this project in mind. All three of these sites are popular summer destinations. Future plans include irrigating the Luther Burbank swim beach as well.

Expenditures	2021	2022	2023	2024	2025	2026
PA0104	\$0	\$0	\$75,000	\$20,000	\$0	\$0

Capital Improvement Program

Aubrey Davis Park Lid A Playground Replacement

Project ID
 PA0105
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Replace playground equipment at the end of its useful life cycle at Aubrey Davis Park.

Project Justification

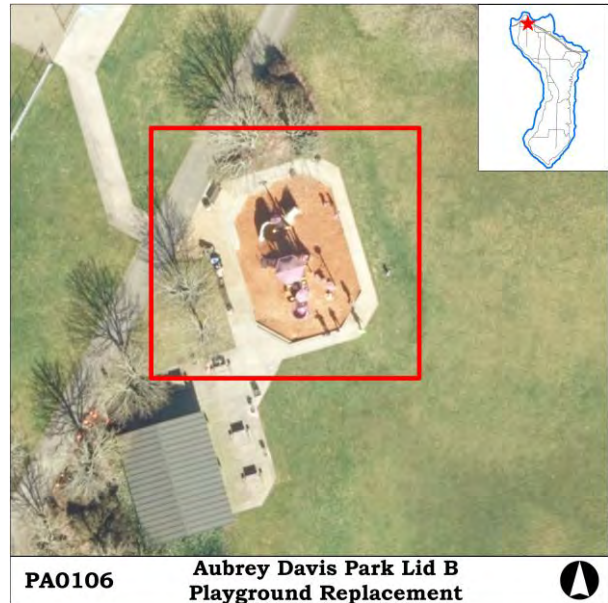
Worn and outdated play equipment require lifecycle replacement. Coordinate with other playground replacement for efficiency and complementary function.

Expenditures	2021	2022	2023	2024	2025	2026
PA0105	\$0	\$0	\$0	\$0	\$0	\$20,000

Capital Improvement Program

Aubrey Davis Park Lid B Playground Replacement

Project ID
 PA0106
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Replace playground equipment at the end of its useful life cycle at Aubrey Davis Park.

Project Justification

Worn and outdated play equipment require lifecycle replacement. Coordinate with other playground replacement for efficiency and complementary function.

Expenditures	2021	2022	2023	2024	2025	2026
PA0106	\$0	\$0	\$200,000	\$0	\$0	\$0

ADP Outdoor Sculpture Gallery Improvements

Project ID

PA0107

Program Plan

CFP

Target Completion Date

2025

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

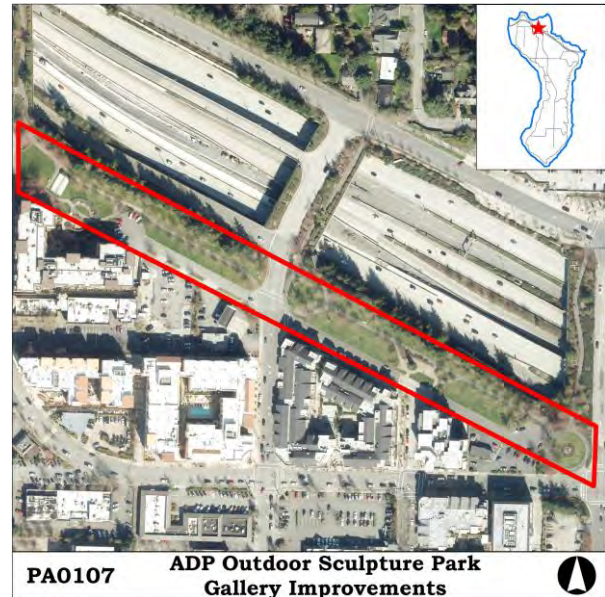
0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



Project Description

Continue efforts to reimagine the Greta Hackett Outdoor Sculpture Gallery as a community and cultural gateway in preparation for the opening of Sound Transit East Link Light Rail Station in 2023. Improvements/enhancements could include: new curation of existing artwork; redesigned landscaping; wayfinding and interpretation; a signature artist detail such as a concrete pattern liner for new paths, unique plant or planting pattern, or modular seating/lighting that extends into Aubrey Davis Park; and a new public art commission.

Project Justification

With the 2023 completion of the East Link extension, the Greta Hackett Outdoor Sculpture Gallery will become the first sculpture park accessible by light rail in the region. This presents an exciting opportunity to reenvision this vital arts space as a true cultural gateway to the Island for both community members and new visitors to enjoy. P&R and the Mercer Island Arts Council received \$25,000 in 4Culture grants to initiate planning, which includes exploring mitigation from impacts of and integration into surrounding developments as well as implementing the ADMP Arts & Culture Vision in the gallery.

Planning and preliminary design work will conclude in late 2020/early 2021; construction completion and reopening are targeted for 2023 (pending alignment with Sound Transit and other area projects).

Expenditures	2021	2022	2023	2024	2025	2026
PA0107	\$0	\$0	\$28,000	\$60,000	\$168,000	\$0

Capital Improvement Program

Aubrey Davis Park Luther Lid Connector Trail

Project ID

PA0108

Program Plan

CFP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



Project Description

Construct staircase in Aubrey Davis Park to connect the Luther Burbank Park to Town Center. This project is consistent with the 2006 Luther Burbank Park Master Plan, the 2019 Aubrey Davis Park Master Plan and the City's Comprehensive Plan 2017 amendment. Includes ADA route along North Mercer Way.

Project Justification

A dirt trail has developed where people walk down a steep slope on WSDOT property to get to and from the park. The public wants to walk between Town Center and Luther Burbank Park. Connectivity increases recreational opportunities for Town Center. WSDOT is ready to give final approval for this project.

Expenditures	2021	2022	2023	2024	2025	2026
PA0108	\$0	\$0	\$52,000	\$240,000	\$0	\$0

Capital Improvement Program

Aubrey Davis Park Trail Safety Improvements

Project ID

PA0109

Program Plan

CFP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

190

2022 Labor Hour Estimate

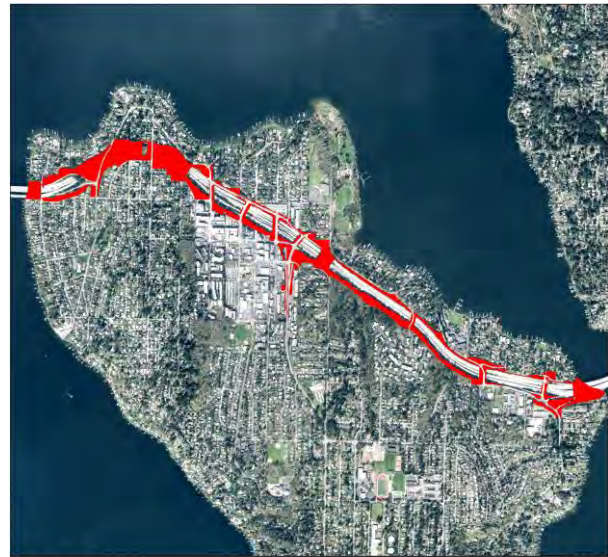
125

2021-2022 Project Budget

\$515,000

Department

Parks & Recreation



PA0109 Aubrey Davis Park Trail Safety Improvements



Project Description

Continuing project with \$490k of Dept of Commerce Grant funding to develop and construct trail safety improvements on the Mountains to Sound Regional Trail in Aubrey Davis Park.

Project Justification

This work conforms with and continues the effort started by the Aubrey Davis Park Master Plan. Scope of work contemplated in this project include traffic calming and alternative routing of bicycles on the Lid Park portion of the Mountains to Sound Trail. Scope of work is currently under development with Parks and Recreation Commission.

Expenditures	2021	2022	2023	2024	2025	2026
PA0109	\$200,000	\$315,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Aubrey Davis Park Lid A Backstop Lifecycle Replacement

Project ID
 PA0110
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Replace backstops at baseball fields with taller structures to reduce foul ball conflicts with spectators and trail users

Project Justification

Facility may be reaching the end of its useful life; standards are changing for foul ball protection

Expenditures	2021	2022	2023	2024	2025	2026
PA0110	\$0	\$0	\$0	\$0	\$100,000	\$770,000

Aubrey Davis Park Vegetation Management

Project ID

PA0111

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

250

2022 Labor Hour Estimate

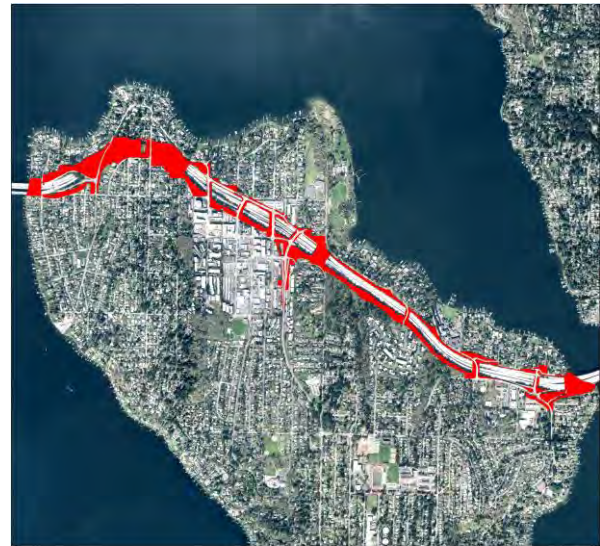
40

2021-2022 Project Budget

\$102,000

Department

Parks & Recreation



PA0111

Aubrey Davis Park
Vegetation Management



Project Description

Renovate landscapes in Aubrey Davis Park per the Aubrey Davis Park Master Plan: manage overcrowded trees, renovate soils, replant with selective plant palettes.

Project Justification

The landscape in Aubrey Davis Park was a negotiated part of the EIS for the highway reconstruction. It must continue to serve as mitigation for the presence of the highway. The ADP Master Plan provides a road map for the renovation it requires. The landscape belongs primarily to WSDOT. The project work must be done in conjunction with WSDOT. Funding should come primarily from the State. City funds cover the first year to negotiate a scope and funding package.

Expenditures	2021	2022	2023	2024	2025	2026
PA0111	\$37,000	\$65,000	\$115,000	\$115,000	\$115,000	\$115,000

Capital Improvement Program

Clarke Beach Shoreline Repair/Restoration

Project ID
 PA0112
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Design and plan for long-term shoreline restoration, pending funding. Shoreline would likely contain pocket beaches for water access similar to Luther Burbank Phase I shoreline. Seek grant funding for habitat portions of the project.

Project Justification

Swim beach enclosure has become dysfunctional. Concrete bulkheads and stairs are aging. Docks are rotting. Site is critical salmon habitat because of location at Cedar River outlet. A 2014 engineer's inspection revealed major maintenance that is needed to repair docks and bulkheads. A summer 2017 time lapse video of the swim beach suggested that this facility is underutilized and the in-water infrastructure could be scaled back instead of repaired. Public input regarding the use of Clarke Beach is needed to plan for long term.

This beach is overbuilt for current use. Habitat enhancements could benefit salmon ESA species. Public use of this beach is much less than at Groveland Beach and Luther Burbank Park. Access and sun exposure make this a less attractive destination. Existing use levels for family swimming and shoreline recreation could be better supported by a natural shoreline with pocket beaches. This would greatly improve salmon habitat. Habitat work may be supported by grant funding.

Expenditures	2021	2022	2023	2024	2025	2026
PA0112	\$0	\$0	\$85,000	\$25,000	\$0	\$1,000,000

Capital Improvement Program

Clarke Beach Restroom Fixture Replacement

Project ID

PA0113

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



PA0113 Clarke Beach Restroom Fixture Replacement 

Project Description

Replace fixtures in Clarke Beach restroom to more efficient, water and energy-saving fixtures.

Project Justification

Clarke Beach restrooms have older inefficient fixtures. Repairs are increasing and costs could be reduced by this renovation.

Expenditures	2021	2022	2023	2024	2025	2026
PA0113	\$0	\$0	\$53,000	\$0	\$0	\$0

Capital Improvement Program

Groveland Beach Bulkhead Replacement and Beach Upgrade

Project ID
 PA0114
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Design and construction placeholder for a new bulkhead to create a zero-entry beach at Groveland. This is part of a system-wide planning for replacement of hardened shorelines. Groveland Beach would include concept design and public input to determine actual needs.

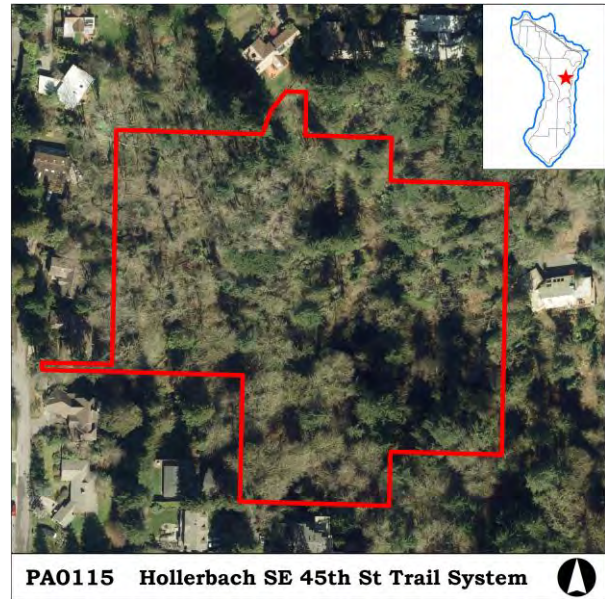
Project Justification

Groveland Beach has a bulkhead which creates a three-foot decent to the water for swimmers. It is not suitable for small children. The bulkhead is undermined. In 2014, the Overwater Structures Assessment indicated that this bulkhead will need to be repaired or replaced. The existing bulkhead could not be replaced in the current permitting environment because it is located below ordinary high water.

Expenditures	2021	2022	2023	2024	2025	2026
PA0114	\$0	\$0	\$0	\$100,000	\$20,000	\$2,000,000

Hollerbach SE 45th Trail System

Project ID
 PA0115
Program Plan
 CFP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Construct a recreation and transportation trail through Hollerbach Openspace from Cedars East Rd to SE 45th St. Construct approximately 240 ft of elevated boardwalk, three stream crossings, and 420 feet of box crib stairs.

Project Justification

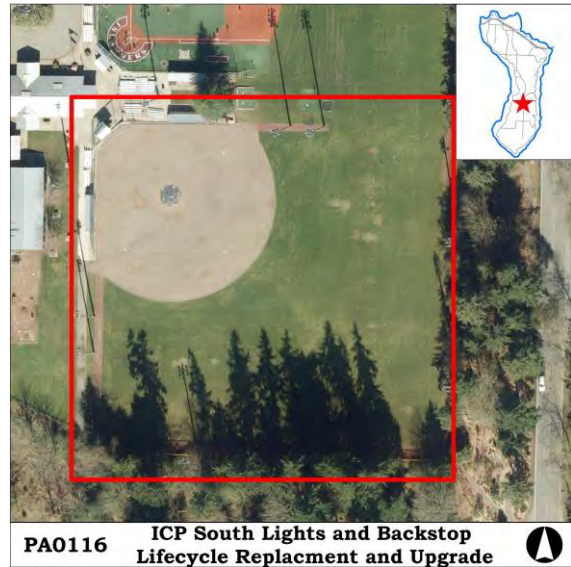
Hollerbach Openspace currently has no public services or access. Additionally, there are no connections between neighborhoods accessed by Island Crest Way and neighborhoods accessed by East Mercer Way on this part of the Island. Hollerbach trail would provide foot traffic connectivity from the top of the island to the East of the island. This trail project is consistent with city master plan.

Expenditures	2021	2022	2023	2024	2025	2026
PA0115	\$0	\$0	\$85,400	\$376,688	\$0	\$0

Capital Improvement Program

Island Crest Park South Field Lights & Backstop Lifecycle Replacement

Project ID
 PA0116
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Replace backstop with taller structure to reduce foul ball conflicts with spectators. This requires larger diameter poles and welded connections because of wind load. Replace failing HID lighting system with LED lights.

Project Justification

Backstops are worn and not functioning well. Field users report foul balls hitting spectators and vehicles in the parking lot. The existing poles cannot support more netting or more height according to the engineer. The lights are 35 years old. To date, 95% design is already done on the south field lights. It is the only City-owned field with lights.

Expenditures	2021	2022	2023	2024	2025	2026
PA0116	\$0	\$0	\$0	\$0	\$90,000	\$1,010,000

Capital Improvement Program

Island Crest Park North Infield and Minor Improvements

Project ID

PA0117

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

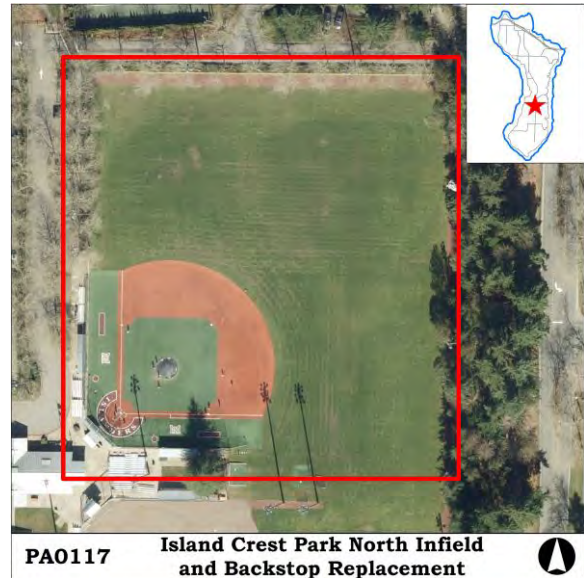
150

2021-2022 Project Budget

\$381,000

Department

Parks & Recreation



Project Description

Replace synthetic turf on north infield as lifecycle replacement, upgrade to cork and shock pad to replace crumb rubber infill. Replace backstop at the same time to provide taller backstop.

Project Justification

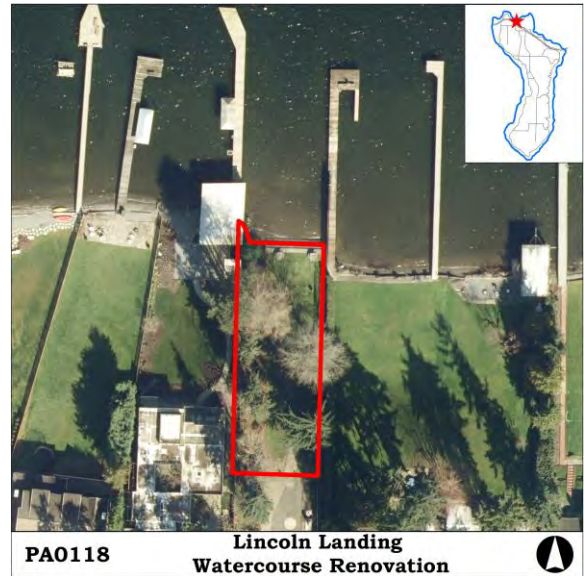
This field is the most heavily used field in the system. It hosts recreational and league teams year around. It is the only City-owned field with lights.

Expenditures	2021	2022	2023	2024	2025	2026
PA0117	\$0	\$381,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Lincoln Landing Watercourse Renovation

Project ID
 PA0118
Program Plan
 CRP
Target Completion Date
 Q4 2021
2021 Labor Hour Estimate
 120
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$601,000
Department
 Parks & Recreation



Project Description

Construct improvement to street end park to address incised stormwater channel. Construct stormwater vault, reconfigure channel and outfall, install native landscaping, remove shoreline bulkhead and re-grade shoreline to create sloped beach area. This project will be done in conjunction with a project to replace a small section of sewer lakeline that connects to this site.

Project Justification

Stormwater channel at Lincoln Landing drains a sub-basin that includes a portion of Town Center. Street end stormwater channels are eroding and silting Lake Washington.

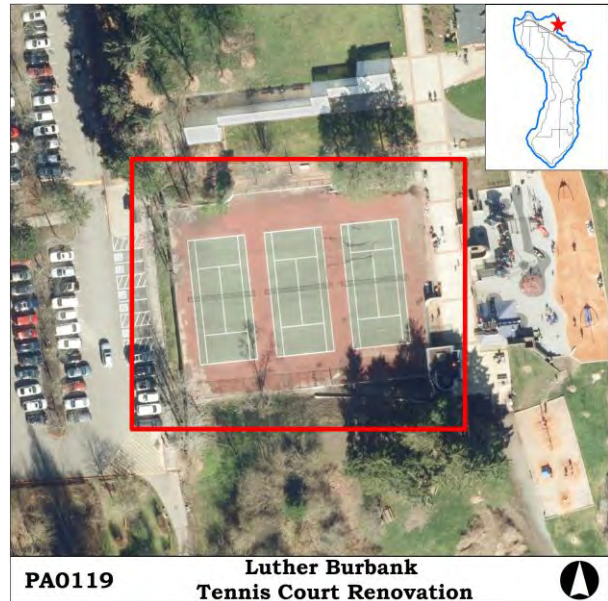
This project improves recreation, shoreline habitat and water quality by making improvements to a deteriorating street end park. Stormwater vault and channel will filter pollutants and sediment before they enter Lake Washington.

Expenditures	2021	2022	2023	2024	2025	2026
PA0118	\$300,000	\$301,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Luther Burbank Tennis Court Renovation

Project ID
 PA0119
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Reconstruct the asphalt base of the Luther Burbank tennis courts and install new netting and striping to provide playable courts for multiple sports as identified in the PROS Plan and demand analysis.

Project Justification

Luther Burbank tennis courts were constructed in 1972. The courts were constructed below grade on top of a dense silt/clay subgrade. The subgrade has settled over the last 50 years. The court surface is wavy, affecting recreational play.

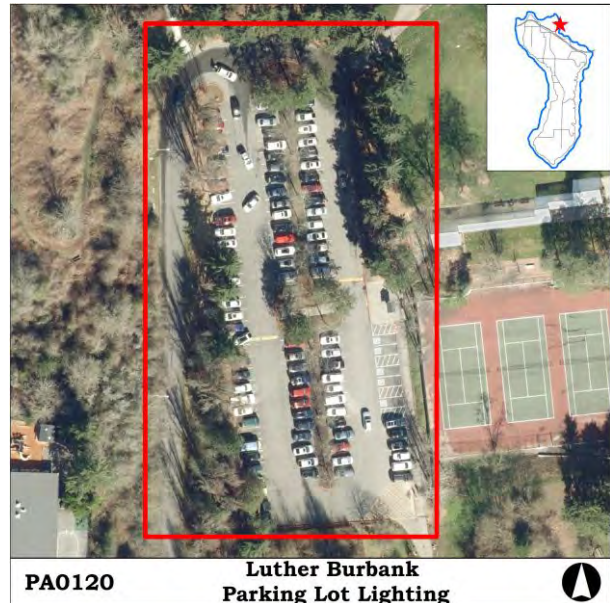
Tree root intrusions created extensive cracking that has been patched temporarily. The 2020 PROS Plan will provide information on the type of sports that are in demand and whether court layout needs to be reallocated. This will guide the renovation of the courts.

Expenditures	2021	2022	2023	2024	2025	2026
PA0119	\$0	\$0	\$85,000	\$353,184	\$0	\$0

Capital Improvement Program

Luther Burbank Park Parking Lot Lighting

Project ID
 PA0120
Program Plan
 CFP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Add new light poles for the parking spaces most accessible to the offices at the Luther Administration Building. Retrofit existing lights with LEDs at the same time.

Project Justification

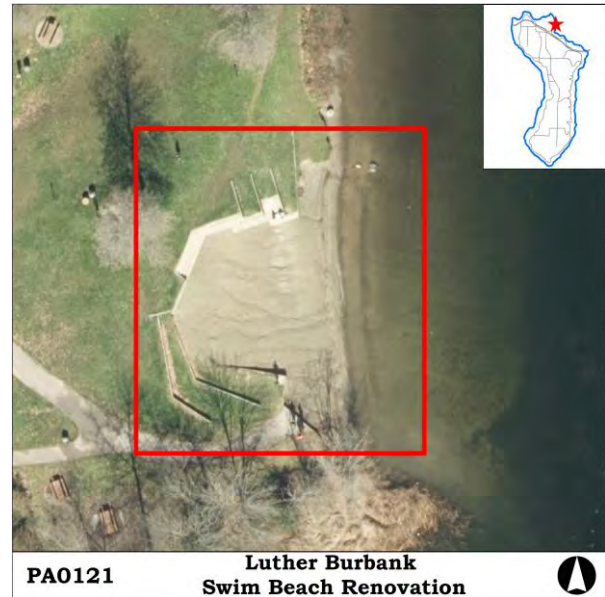
The parking lot at Luther Burbank Park has no lighting. The covered walkway to the Admin building is lit. YFS and Parks have office hours and meetings after dark in the winter. Adding lighting to the parking spaces next to the covered walkway would help clients and community members get to the Admin building. This project was anticipated in 2008 and some of the conduit is already in place.

Expenditures	2021	2022	2023	2024	2025	2026
PA0120	\$0	\$0	\$123,000	\$0	\$0	\$0

Capital Improvement Program

Luther Burbank Park Swim Beach Renovation

Project ID
 PA0121
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Planning and construction for a reduced scope for Phase IV Shoreline Restoration (Swim Beach) in 2026. Scope includes ADA access to water, kayak launch, shoreline stabilization, beach sand and in-water gravels, lake water irrigation, minor retaining wall work. Restroom and lifeguard station remain with minor renovation.

Project Justification

Luther Burbank Swim Beach is the most popular beach on Mercer Island. It is heavily used in summer and is often at or over capacity. More accessible facilities would accommodate a wider range of users and comply with accessibility laws. Design for Phase IV of the shoreline (swim beach) is needed to address significant erosion, expand capacity and improve access. Early design makes the project more competitive for grants for construction.

Expenditures	2021	2022	2023	2024	2025	2026
PA0121	\$0	\$0	\$0	\$116,600	\$30,000	\$875,400

Capital Improvement Program

Luther Burbank Dock Repair and Reconfiguration

Project ID
PA0122

Program Plan
CRP

Target Completion Date
2024

2021 Labor Hour Estimate
250

2022 Labor Hour Estimate
150

2021-2022 Project Budget
\$219,000

Department
Parks & Recreation



Project Description

Replace and renovate existing docks. Replace one or more sections of the south pier with floating dock. Renovate north pier. Provide shoreline access and paddlecraft launching. Grant funding has been secured for design of the replacement floating docks and an application has been submitted for renovation of the north pier. Seek grant funding for remaining scope to fund the majority of the capital needs of the project. This project is consistent with the 2006 Luther Burbank Park Master Plan.

Project Justification

A 2020 underwater survey of the docks found rot in structural members and loose bracing. Life expectancy is less than five years. The existing facilities do not serve the current need well. More floating dock space would support current uses including small powerboats, recreational sailing and kayak camps. Repairing excess fixed piers is not a good use of capital funding. Even after dock replacement there will be an adequate amount of fixed pier for larger boats, sunbathing and fishing.

A public design process in 2020 will help determine what is the most cost-effective repair and reconfiguration project. Current docks are non-conforming. Replacing one or more sections would improve nearshore habitat.

Expenditures	2021	2022	2023	2024	2025	2026
PA0122	\$171,000	\$48,000	\$442,100	\$2,975,000	\$0	\$0

Luther Burbank Minor Capital Levy

Project ID

PA0123

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

140

2022 Labor Hour Estimate

130

2021-2022 Project Budget

\$199,000

Department

Parks & Recreation



Project Description

Repairs and minor improvements to Luther Burbank Park infrastructure, equipment and amenities consistent with the 2006 Luther Burbank Park Master Plan and the 2008 Parks Levy. Meets ongoing needs for repair and replacement of infrastructure, including trees, docks, pathways, trails, fixtures, drainage, electrical, plumbing, landscaping, etc. Upgrades and current needs are included in project scoping.

Project Justification

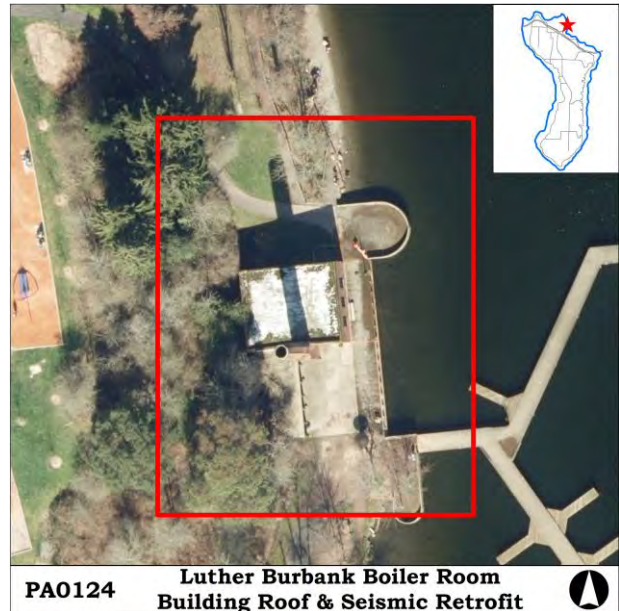
Roads, docks, sports courts, turf areas, restrooms, facilities, parking lots, trails and shoreline have suffered from extended deferred maintenance. These areas need ongoing minor repair. On a recurring basis, equipment, facilities and amenities must be repaired or replaced as they reach the end of their useful lifecycle.

Expenditures	2021	2022	2023	2024	2025	2026
PA0123	\$95,000	\$104,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Luther Burbank Boiler Building Roof and Seismic Retrofit

Project ID
 PA0124
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 360
2021-2022 Project Budget
 \$365,000
Department
 Parks & Recreation



Project Description

Repair the roof and install seismic retrofits according to the 2017 Boiler Building feasibility study.

Project Justification

This project stabilizes the 1928 building and conserves it for future reuse as a small boating center as envisioned in the 2006 Luther Burbank Park Master Plan. Water seepage is causing corrosion of internal rebar reinforcement and eventually will weaken the structure. An earthquake could result in the failure of brick masonry especially the smokestack and brick facade. This would be cost-prohibitive to repair and would likely result in the demolition of the building. No replacement building would be permitted because of shoreline regulations.

Expenditures	2021	2022	2023	2024	2025	2026
PA0124	\$0	\$365,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Mercedale Playground Replacement

Project ID

PA0125

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

60

2022 Labor Hour Estimate

0


2021-2022 Project Budget

\$490,000

Department

Parks & Recreation



PA0125 Mercerdale Playground Replacement 

Project Description

Replace playground equipment at the end of its useful life cycle at Mercerdale Park. Fix drainage and install resilient fall surface similar to Luther Burbank Park.

Project Justification

Worn and outdated play equipment require lifecycle replacement. Poor drainage at this site has caused the play equipment to be out of service in the wet season.

Expenditures	2021	2022	2023	2024	2025	2026
PA0125	\$490,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Mercedale Park Master Plan

Project ID
 PA0126
Program Plan
 CFP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Develop a Master Plan for Mercedale Park, including the Thrift Store, Recycling Center and Bicentennial Park.

Project Justification

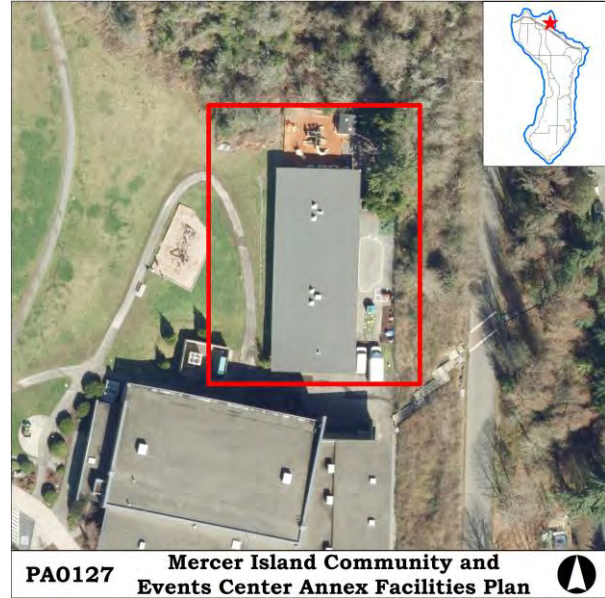
City Council needs systematic, long-term planning to be able to make operating and CIP prioritization decisions. Mercedale Park needs a master plan to anticipate future needs and changing uses. Mercedale Park was built out in the early 2000's before the current town center growth.

Expenditures	2021	2022	2023	2024	2025	2026
PA0126	\$0	\$0	\$90,000	\$0	\$0	\$0

Capital Improvement Program

Mercer Island Community and Events Center Annex Facilities Plan

Project ID
 PA0127
Program Plan
 CFP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Develop facilities assessment, policy, business model, and long-range plan for the annex building and north grounds of the main building. Includes public involvement and engagement with Parks and Recreation Commission.

Project Justification

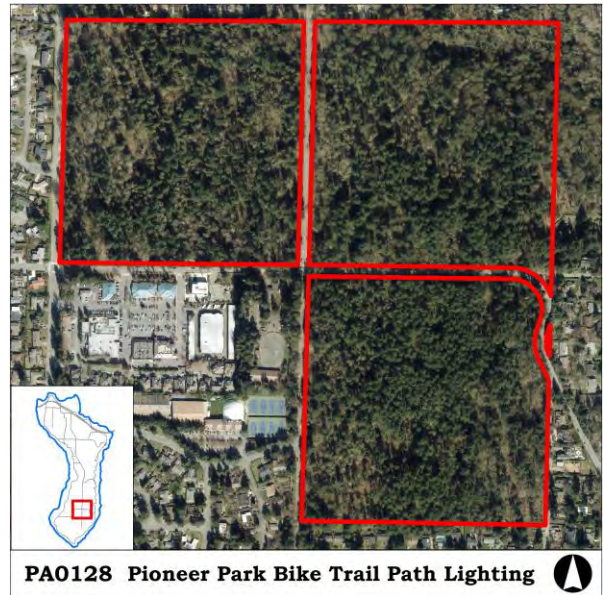
The MICEC Annex will need major capital reinvestment or replacement in the 5-7 year timeframe. This facility currently houses daycare programs. City Council needs to consider policy, planning and capital needs for this facility. MICEC was built in 2004 before ST2, and the design did not anticipate projected town center impacts. In the work on the Annex, minimal renovations were made with the intention of extending the useful building life by five years (AB3808).

Expenditures	2021	2022	2023	2024	2025	2026
PA0127	\$0	\$0	\$0	\$90,000	\$0	\$0

Capital Improvement Program

Pioneer Park Bike Trail Path Lighting

Project ID
 PA0128
Program Plan
 CFP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Plan and install trail lighting along the NE Quadrant trail of Pioneer Park.

Project Justification

Unlit pathways inhibit walking to destinations. Park users have requested trail lighting to improve the functionality of high use trails, specifically in Pioneer Park next to Island Crest Way. Project was vetted and approved by the Open Space Conservancy Trust to be included in the capital plan in 2008-2009. See March 2009 meeting minutes.

Expenditures	2021	2022	2023	2024	2025	2026
PA0128	\$0	\$0	\$100,000	\$0	\$0	\$0

Pioneer Park/Engstrom OS Forest Management

Project ID
PA0129

Program Plan
CRP

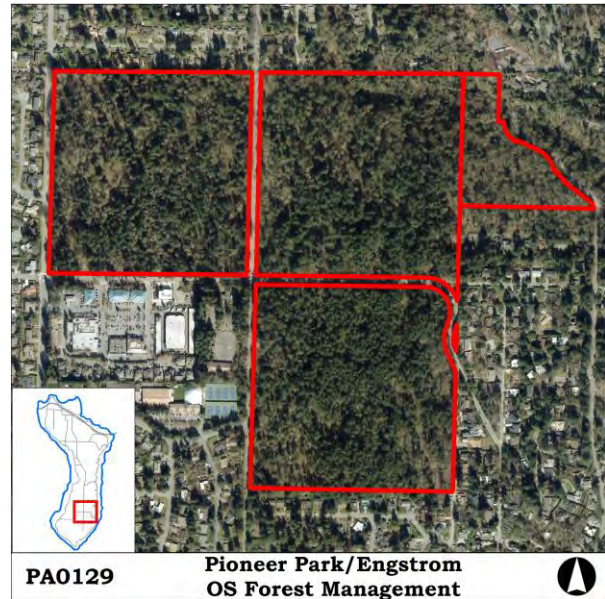
Target Completion Date
ONGOING

2021 Labor Hour Estimate
650

2022 Labor Hour Estimate
650

2021-2022 Project Budget
\$382,400

Department
Parks & Recreation



Project Description

Implement ecological restoration projects in Pioneer Park and Engstrom Open Space consistent with the 2004 Open Space Vegetation Plan and 2015 Update, the Pioneer Park Forest Management Plan, and the Pioneer Park 2008 Forest Health Survey. Restoration projects include noxious weed management, native tree and shrub installation, and arboriculture services. Projects are accomplished through a combination of professional restoration crews and tree care companies, in-house staff, and community volunteers.

Project Justification

Pioneer Park and Engstrom Open Space (OS) represent 127 acres of the City's 300 acres of Open Space properties that include high value upland coniferous forest and critical areas such as wetlands, watercourses, and steep-sloped ravines. The properties are managed under the guidance of the City's Open Space Conservancy Trust Board. Pioneer Park and Engstrom OS quantifiable benefits that serve as critical natural environmental infrastructure including erosion control, storm water buffering, energy conservation, and pollution abatement.

Open Spaces also provide mental and physical health benefits, recreational opportunities, and wildlife habitat. Invasive and noxious weeds threaten the health of these open spaces by creating monocultures that suppress natural forest regeneration and outcompete native plant communities. Trees are also dying from root disease and normal attrition that require ongoing monitoring and management. Deferred maintenance and management of Pioneer Park and Engstrom OS will lead to degraded habitat and forest canopy conditions leading to a decline in ecosystem functions as well as a loss on existing City investments in forest health and management.

Expenditures	2021	2022	2023	2024	2025	2026
PA0129	\$191,200	\$191,200	\$191,200	\$191,200	\$191,200	\$191,200

Capital Improvement Program

Roanoke Playground Replacement

Project ID

PA0130

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



PA0130 Roanoke Playground Replacement



Project Description

Replace playground equipment at the end of its useful life cycle at Roanoke Park. Requires reconfiguring play area to reduce borders and provide an efficient layout.

Project Justification

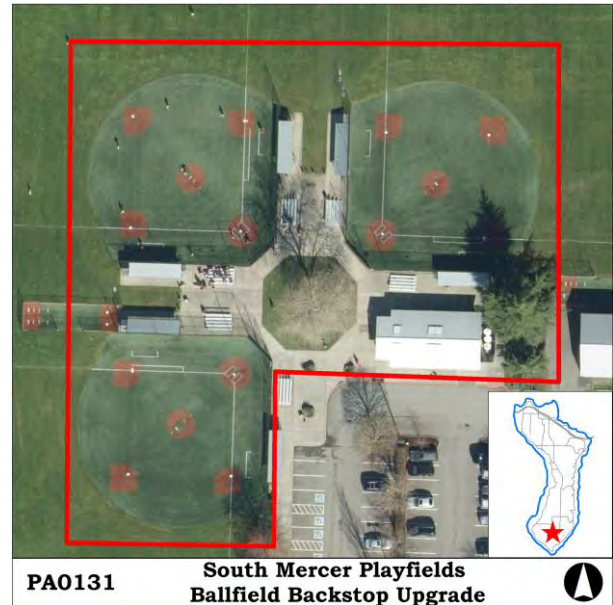
Worn and outdated play equipment require lifecycle replacement. Replacing parts is costly and inefficient. Delaying causes more safety concerns. Design in conjunction with Mercerdale Playground to provide coordination and efficiency.

Expenditures	2021	2022	2023	2024	2025	2026
PA0130	\$0	\$0	\$27,500	\$176,000	\$0	\$0

Capital Improvement Program

South Mercer Playfields Ballfield Backstop Upgrade

Project ID
 PA0131
Program Plan
 CFP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Replace three existing backstops on baseball fields with taller backstops that have larger poles to enable netting between fields. This will reduce foul ball contact with spectators.

Project Justification

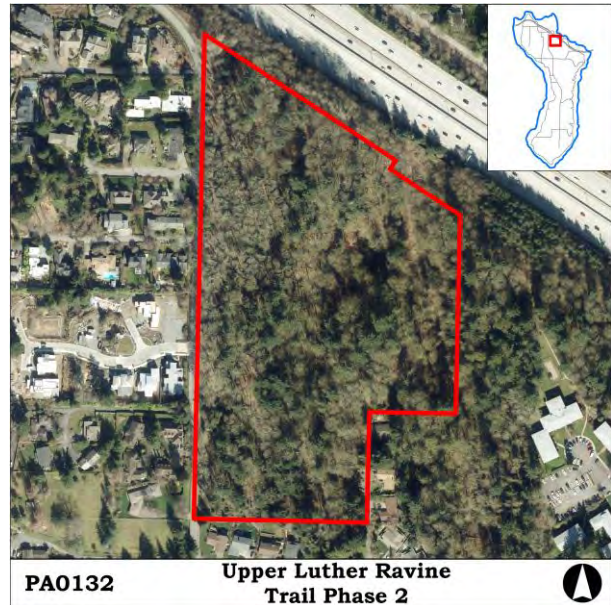
Existing backstops meet current standards. Field users report foul balls hitting spectators and vehicles in the parking lot. Backstops have some netting on them. The existing poles cannot support more netting or more height according to the engineer. These fields are heavily used by little league baseball with lots of families congregating in the plaza around the fields. Spectators are not always aware of foul balls coming from neighboring fields.

Expenditures	2021	2022	2023	2024	2025	2026
PA0131	\$0	\$0	\$995,000	\$0	\$0	\$0

Capital Improvement Program

Upper Luther Ravine Trail Phase 2

Project ID
 PA0132
Program Plan
 CFP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Parks & Recreation



Project Description

Construct approximately 850 ft of dirt trail, 680 ft of gravel surfaced trail, one stream crossing and 60 ft of timber crib stairs to connect Shorewood Apartments to Upper Luther Burbank Park. This project is consistent with the 2006 Luther Burbank Park Master Plan and the 2019 Aubrey Davis Park Master Plan.

Project Justification

The Upper Luther Ravine Trail dead ends at the stream. City has a trail easement through Shorewood but not in WSDOT ROW. The master plan calls for a trail to connect to Shorewood, providing park access to a new neighborhood. Completion of the Upper Luther Ravine Trail would provide the missing link in connecting Gallegher Hill Open Space to Upper Luther Burbank Park, allowing for greater connectivity in the area and a continuous recreational walking route between the East Mercer Commercial Area and Town Center.

Expenditures	2021	2022	2023	2024	2025	2026
PA0132	\$0	\$0	\$58,947	\$150,043	\$0	\$0

Capital Improvement Program

MICEC Technology and Equipment Replacement

Project ID
PA0133

Program Plan
CRP

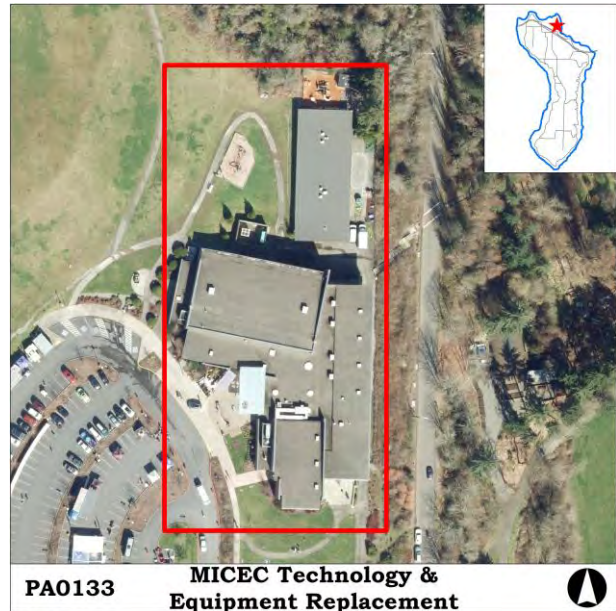
Target Completion Date
ONGOING

2021 Labor Hour Estimate
20

2022 Labor Hour Estimate
20

2021-2022 Project Budget
\$81,000

Department
Parks & Recreation



Project Description

Continued management of MICEC technology and equipment replacement cycles as they reach the end of useful life. Examples include catering kitchen appliances, security camera hardware, window shades, and fitness room equipment.

Project Justification

Replacement cycles range from 2 to 30 years based on average useful life of equipment. In 2019-2020, several purchases were made for items that had 10+ years useful life. To ensure desired quality and safety standards are met at MICEC when offering services to the public.

Expenditures	2021	2022	2023	2024	2025	2026
PA0133	\$20,500	\$20,500	\$60,500	\$60,500	\$60,500	\$60,500

Capital Improvement Program

Aubrey Davis Park Lid C Field Drainage Renovation

Project ID

PA0134

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Parks & Recreation



Project Description

Excavate and replace sand base and grass turf on multi-purpose field

Project Justification

This heavily used field does not drain well. Soil sampling results from the Aubrey Davis Park Master Plan indicate that the sand is not a suitable texture for good drainage. It needs to be replaced with a sorted material that has more pore space. This is a project identified in the ADP Master Plan.

Expenditures	2021	2022	2023	2024	2025	2026
PA0134	\$0	\$0	\$0	\$990,000	\$0	\$0

Capital Improvement Program

Town Center Micro Precinct Placeholder

Project ID

PA0135

Program Plan

CFP

Target Completion Date

Q1 2022

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$50,000

Department



Project Description

Placeholder for the City Council to work with staff and determine if a police precinct in the Town Center should be established during the 2021-2022 biennium.

Project Justification

Expenditures	2021	2022	2023	2024	2025	2026
PA0135	\$50,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Luther Burbank South Shoreline Restoration

Project ID

PA0136

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

105

2022 Labor Hour Estimate

150

2021-2022 Project Budget

\$707,000

Department

Parks & Recreation



Project Description

This project covers approximately 900 linear feet of shoreline from the waterfront plaza to the swim beach. Restoration work includes anchoring large woody debris, adding rock spawning gravel, invasive plant control, plantings including brush layering, and temporary irrigation (which will be repurposed to irrigate the swim beach with lake water). The project also includes relocating the shoreline trail away from the eroding shoreline and constructing it with ADA accessible grades and surfacing.

Project Justification

The shoreline at Luther Burbank Park has been slowly eroding for the past 110 years as a result of the lowering of Lake Washington. Changes in boat traffic over the past 50 years have accelerated this process. Previous phases of shoreline restoration have been completed on the north section (waterfront plaza through the off-leash area) and at Calkins Point. The shoreline has eroded to an extent that it is undermining the existing shoreline trail and has caused the trail to collapse in more than one location.

Erosion is so extensive that it is no longer feasible to construct temporary reroutes around eroded sections. This project is fully designed. It requires permits for construction. It has been modified to be competitive for WRIA 8 and other grant sources. Portions of the project will be constructed with in-house seasonal labor and/or with contracted conservation corps crews.

Expenditures	2021	2022	2023	2024	2025	2026
PA0136	\$47,000	\$660,000	\$0	\$0	\$0	\$0

Residential Street Resurfacing

Project ID
SP0100

Program Plan
CRP

Target Completion Date
ONGOING

2021 Labor Hour Estimate
1000

2022 Labor Hour Estimate
1000

2021-2022 Project Budget
\$1,800,000

Department
Public Works



SP0100 Residential Street Resurfacing



Project Description

This annual program repairs and resurfaces public residential streets on the Island through hot mix asphalt overlays and chip sealing. The program includes upgrades to substandard residential streets, at the rate of about one location per biennium. Minor storm drainage repairs and minor water improvements will also be constructed. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

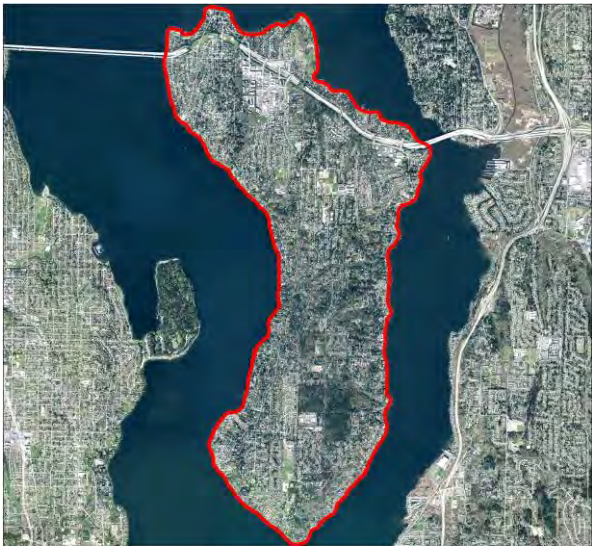
Many of the Island's residential street pavements are 25 to 35 years old. Numerous streets are in need of repair and resurfacing. A pavement condition index (PCI) is used to track the condition of streets and helps determine which segments of the 58 miles are most in need of repair. Current planning allows for a 35-year life cycle for residential hot mix asphalt pavements. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0100	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000

Capital Improvement Program

Arterial Preservation Program

Project ID
 SP0101
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 100
2022 Labor Hour Estimate
 100
2021-2022 Project Budget
 \$150,000
Department
 Public Works



SP0101 Arterial Preservation Programming



Project Description

This annual program repairs isolated pavement failure areas on arterial streets to extend their service lives. Repairs include crack sealing, square cut patching, and grinding and paving of full lane areas.

Project Justification

Some of the Island's arterial streets develop areas of pavement fatigue and failure over time. Repairing these small areas will extend the pavement's service life. Some repair areas will contain City utility castings needing adjustment and/or replacement.

Expenditures	2021	2022	2023	2024	2025	2026
SP0101	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000

Capital Improvement Program

East Mercer Way Overlay (SE 53rd Place to SE 68th Street)

Project ID
SP0102

Program Plan
CRP

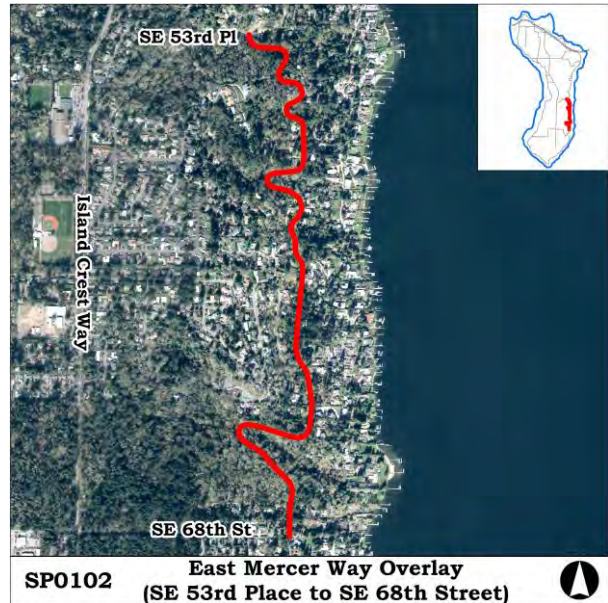
Target Completion Date
Q4 2021

2021 Labor Hour Estimate
1050

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$1,185,000

Department
Public Works



Project Description

This project will resurface East Mercer Way from SE 53rd Place to SE 68th Street with a hot mix asphalt overlay. Work will include pavement repairs, preleveling, paving of the roadway and existing southbound pedestrian shoulder, raising utility castings to grade, and new pavement markings. Minor storm drainage repairs and minor water improvements will also be constructed. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

This segment of arterial is nearing the end of its pavement life and needs resurfacing. This roadway was last paved in 1992 and its current Pavement Condition Index rating is in the "Fair" range. Paved shoulders have been previously constructed within this portion of East Mercer Way. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0102	\$1,185,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

SE 68th Street and SE 70th Place Overlay (ICW to EMW)

Project ID
SP0103

Program Plan
CRP

Target Completion Date
Q4 2022

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
750

2021-2022 Project Budget
\$680,000

Department
Public Works



Project Description

This project will resurface the existing roadway from Island Crest Way to East Mercer Way with a hot mix asphalt overlay. Work will include pavement repairs, preleveling, paving of roadway and uphill lane pedestrian shoulder, raising utility castings to grade, and new pavement markings. Minor storm drainage repairs and minor water improvements will also be constructed. Utility work will be funded from the City's corresponding sewer, water, and storm water utility funds.

Project Justification

SE 68th Street and SE 70th Place is the City's main East-West arterial for the south end of the Island. This portion of roadway is nearing the end of its pavement life and needs resurfacing. SE 68th street was last resurfaced in the late 1980's and SE 70th Place was last resurfaced in 2001.

Current Pavement Condition Index ratings are in the "Fair" and bottom of the "Satisfactory" ranges. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays. This project was postponed from the 2019-2020 CIP Budget.

Expenditures	2021	2022	2023	2024	2025	2026
SP0103	\$0	\$680,000	\$0	\$0	\$0	\$0

Capital Improvement Program

North Mercer Way Overlay (7500 block to Roanoke Way)

Project ID

SP0104

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

This project will resurface North Mercer Way from the 7500 block to Roanoke Way with a hot mix asphalt overlay. Work will include pavement repairs, preleveling, paving of roadway and existing eastbound pedestrian shoulder, raising utility castings to grade, new pavement markings, and sidewalk repairs in the 7500 block. Minor storm drainage repairs and minor water system improvements will also be constructed. Utility work will be funded from the City's corresponding sewer, water, and storm water utility funds.

Project Justification

This segment of North Mercer Way is nearing the end of its pavement life and needs resurfacing. It was last resurfaced in 1994 by WSDOT and its current Pavement Condition Ratings are in the "Fair" and lower "Satisfactory" ranges. Paved shoulders have been previously constructed within this portion of North Mercer Way. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0104	\$0	\$0	\$557,000	\$0	\$0	\$0

Capital Improvement Program

West Mercer Way Resurfacing (SE 56th to EMW)

Project ID
 SP0105
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

This project will restore the existing pavement on West Mercer Way from SE 56th to East Mercer Way with a chip seal. Work will include pavement repairs, single and double chip seal application, fog seal, replacement of old utility castings, and new pavement markings. Minor storm drainage repairs will also be performed.

Project Justification

This 2.3 mile portion of West Mercer Way was last resurfaced in 1995 and its current Pavement Condition Index ratings are in the "Satisfactory" and "Fair" ranges. Most roadway distresses are low severity; therefore, a chip seal is an economical way to significantly extend the life of this 25-year old pavement. Many of the sewer and water castings within the project are old and should be replaced.

Expenditures	2021	2022	2023	2024	2025	2026
SP0105	\$0	\$0	\$545,000	\$0	\$0	\$0

Capital Improvement Program

Gallagher Hill Road Overlay (SE 36th to SE 40th Streets)

Project ID

SP0106

Program Plan

CFP

Target Completion Date

2025

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

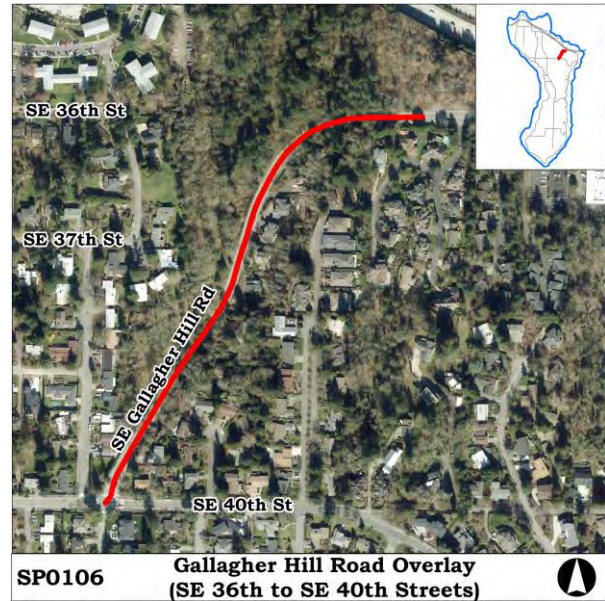
0

2021-2022 Project Budget

\$0

Department

Public Works



SP0106 Gallagher Hill Road Overlay (SE 36th to SE 40th Streets)

Project Description

This project will resurface Gallagher Hill Road between SE 36th and SE 40th Streets with a hot mix asphalt overlay. Work will include pavement repairs, preleveling, paving of the roadway and paved shoulders, raising utility castings to grade, and new pavement markings. Minor storm drainage repairs and minor water improvements will be constructed as needed. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

This segment of arterial roadway is nearing the end of its pavement life. It was last repaved in the late 1980's and its current Pavement Condition Index rating is in the "Fair" range. Over the next several years, this rating is expected to continue a slow decline. Paved shoulders exist along both sides of the roadway. Utility castings need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0106	\$0	\$0	\$0	\$0	\$534,000	\$0

Capital Improvement Program

SE 40th Street Overlay (88th Ave SE to Gallagher Hill Rd)

Project ID
SP0107

Program Plan
CRP

Target Completion Date
2024

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will resurface SE 40th Street from 88th Avenue to Gallagher Hill Road with a hot mix asphalt overlay. Work will include pavement repairs, pavement grinding, hot mix asphalt paving, raising utility castings to grade, and new pavement markings. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

SE 40th Street is the primary East-West arterial on the Island and this section of its pavement is in need of resurfacing. Its current Pavement Condition Index rating is in the low "Satisfactory" range. This paving project is planned to occur after completion of watermain improvements on this same segment of SE 40th Street and in the residential neighborhood to the north. PCI rating is expected to drop significantly due to the water utility work. This roadway was last repaved in 1999. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0107	\$0	\$0	\$0	\$200,000	\$0	\$0

Capital Improvement Program

SE 36th Street Overlay (Gallagher Hill Rd to EMW)

Project ID

SP0108

Program Plan

CRP

Target Completion Date

2025

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

This project will resurface SE 36th Street with a hot mix asphalt overlay. Work will include pavement repairs, pavement grinding, asphalt paving, minor sidewalk repairs, ADA ramp replacements, raising utility castings to grade, and new pavement markings. Additionally, minor storm drainage repairs and minor water improvements will be constructed. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

This roadway was reconstructed in the late 1980's by WSDOT during the I-90 freeway project and its pavement is nearing the end of its life. Its current Pavement Condition Index ratings are in the "Fair" range and are expected to continue a slow decline in the next several years. Utility castings (manholes, valve boxes, catch basins) need to be raised and/or replaced after asphalt overlays.

Expenditures	2021	2022	2023	2024	2025	2026
SP0108	\$0	\$0	\$0	\$0	\$548,000	\$0

Capital Improvement Program

North Mercer Way Overlay (8400 Block to SE 35th Street)

Project ID
SP0109

Program Plan
CRP

Target Completion Date
2026

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will resurface North Mercer Way from the 8400 block to SE 35th Street with a hot mix asphalt overlay. Work will include pavement repairs, pavement grinding, asphalt paving of the roadway and existing pedestrian shoulder, ADA ramp replacements, raising utility castings to grade, and new pavement markings. A new sidewalk will be constructed behind existing curbs from Fortuna Drive to SE 35th Street. Minor storm drainage repairs and minor water system improvements will also be constructed, funded from the corresponding City utilities.

Project Justification

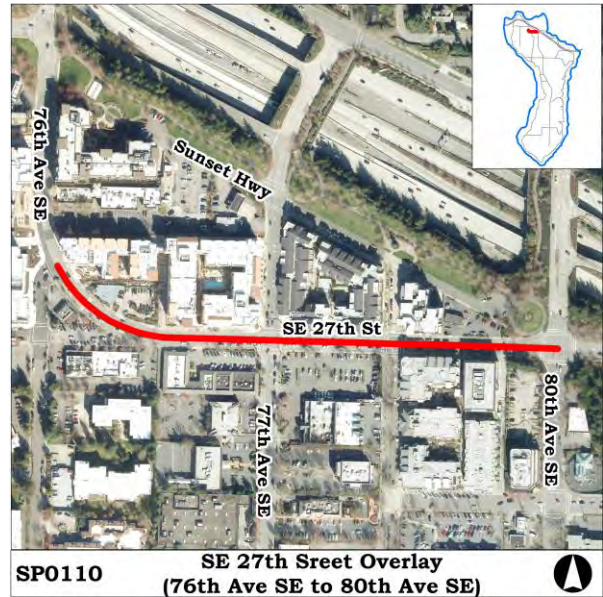
This arterial roadway was last resurfaced in 1994 by WSDOT and is nearing the end of its pavement life. The upcoming King County North Mercer Interceptor Sewer project will impact this roadway with utility cuts for sewer pipes as well as extended periods of heavy truck traffic. It will need resurfacing after completion of the sewer project and is therefore planned for 2026. Current Pavement Condition Ratings are in the "Fair" and low "Satisfactory" ranges. The new sidewalk from Fortuna Drive to SE 35th Street will improve connectivity for pedestrians walking from Covenant Shores to the I-90 trail facility.

Expenditures	2021	2022	2023	2024	2025	2026
SP0109	\$0	\$0	\$0	\$0	\$0	\$776,000

Capital Improvement Program

SE 27th Street Overlay (76th Ave SE to 80th Ave SE)

Project ID
 SP0110
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

This project will resurface SE 27th Street from 76th Avenue to 80th Avenue in the Town Center with a hot mix asphalt overlay. Work will consist of pavement repairs, pavement grinding, asphalt paving, ADA ramp replacements, raising utility castings to grade, and new pavement markings. Utility work will be funded from the corresponding City sewer, water, and storm water utility funds.

Project Justification

The Town Center has experienced a surge of redevelopment in the last decade and there is an expectation for streets to be well constructed and of good quality. The main east-west route through the Town Center, SE 27th Street, is showing signs of age and wear. Last reconstructed and repaved in the mid-1990's, SE 27th Street has Pavement Condition Index ratings in the low "Satisfactory" and "Fair" ranges. Its condition is expected to decline over the next several years. This paving project is being planned to occur after completion of the Mercer Island light rail train station and its associated roadway improvements.

Expenditures	2021	2022	2023	2024	2025	2026
SP0110	\$0	\$0	\$0	\$548,000	\$0	\$0

Capital Improvement Program

80th Ave SE Sidewalk Improvements (SE 28th to SE 32nd Street)

Project ID
SP0111

Program Plan
CRP

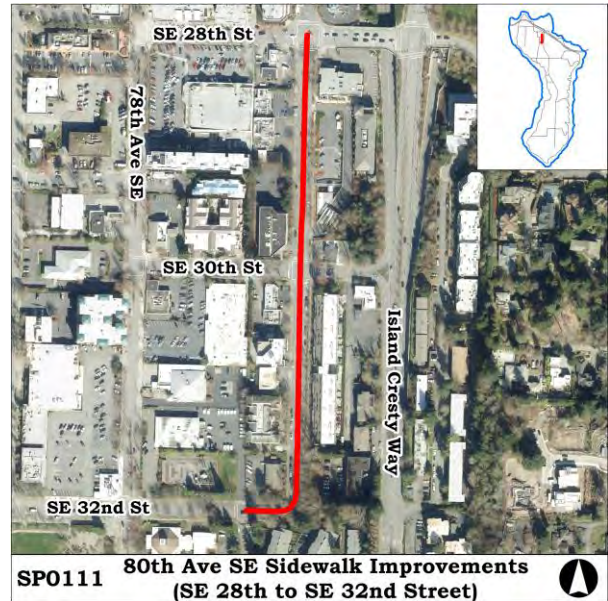
Target Completion Date
Q4 2021

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will reconstruct curbs, sidewalks, and ADA ramps, and replace street trees along the east side of 80th Avenue from SE 28th to SE 32nd Streets. It will also replace street lighting on both sides of the street and address tree root damage along the west side of the street. Minor storm drainage repairs and minor water system improvements will also be constructed on the east side, funded from the corresponding City utilities.

Project Justification

Pedestrians need safe and reliable sidewalks that meet ADA requirements, particularly in the Town Center. Sidewalks on the east side of 80th Avenue date to pre-1985. They are narrow and have significant settlement and heaving due to nearby street trees. The street lighting system along 80th Avenue does not provide sufficient lighting for sidewalks and has some equipment that dates to the 1970's. The storm drainage system needs repairs due to tree root intrusions.

Expenditures	2021	2022	2023	2024	2025	2026
SP0111	\$0	\$0	\$1,080,000	\$0	\$0	\$0

Capital Improvement Program

78th Ave SE Sidewalk Improvements (SE 32nd to SE 34th Street)

Project ID

SP0112

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

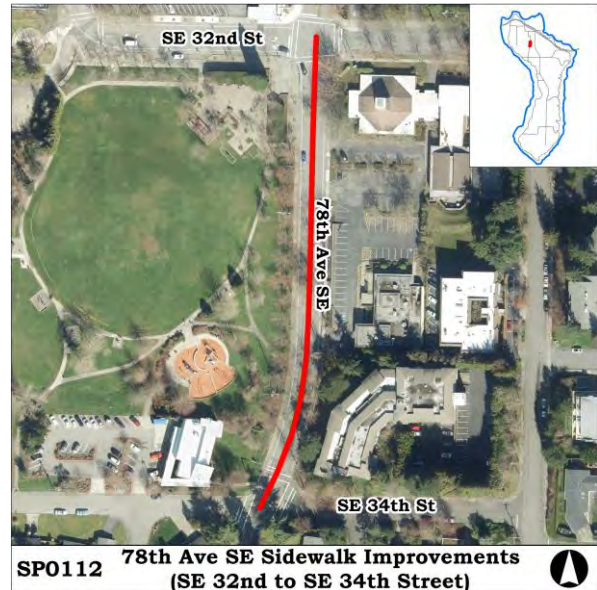
0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

This project will reconstruct curbs, sidewalks, and ADA ramps, and replace street trees along the east side of 78th Avenue from SE 32nd to SE 34th Streets. It will also replace street lighting on both sides of the street and address tree root damage along the west side of the street. Minor storm drainage repairs and minor water system improvements will also be constructed on the east side, funded from the corresponding City utilities.

Project Justification

Pedestrians need safe and reliable sidewalks that meet ADA requirements, particularly in the Town Center. Sidewalks on the east side of 78th Avenue date to pre-1980. They are narrow and have significant settlement and heaving due to nearby street trees. The street lighting system along 78th Avenue does not provide sufficient lighting for sidewalks and has some equipment that dates to the 1970's. The storm drainage system needs repairs due to tree root intrusions.

Expenditures	2021	2022	2023	2024	2025	2026
SP0112	\$0	\$0	\$712,000	\$0	\$0	\$0

Capital Improvement Program

Roadside Shoulder Improvements - EMW Phase I I (SE 79th Street to Avalon Drive)

Project ID

SP0113

Program Plan

CFP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

This project will continue the program of paved shoulder construction along the southbound side of East Mercer Way by building new shoulder from SE 79th Street to the 8300 block. Work will include piping drainage ditches, relocating fire hydrants and water meters, grading, paving a 5-foot wide shoulder, and new pavement markings. Utility work will be funded by the corresponding City utility funds.

Project Justification

Pedestrians and bicyclists regularly use East Mercer Way, but lack of shoulders can make the roadway hazardous for these users. Paved roadside shoulders currently exist along East Mercer Way from I-90 to SE 79th Street. The roadside shoulder development program was implemented in 2002, and Phase I of EMW was built in 2004. Historically the City has built one new shoulder project per biennium. Some fire hydrants and water meters will need to be moved outside of the new shoulder.

Expenditures	2021	2022	2023	2024	2025	2026
SP0113	\$0	\$0	\$0	\$475,000	\$0	\$0

Capital Improvement Program

Roadside Shoulder Improvements - WMW Phase 3 (SE 70th to SE 65th Streets)

Project ID

SP0114

Program Plan

CFP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

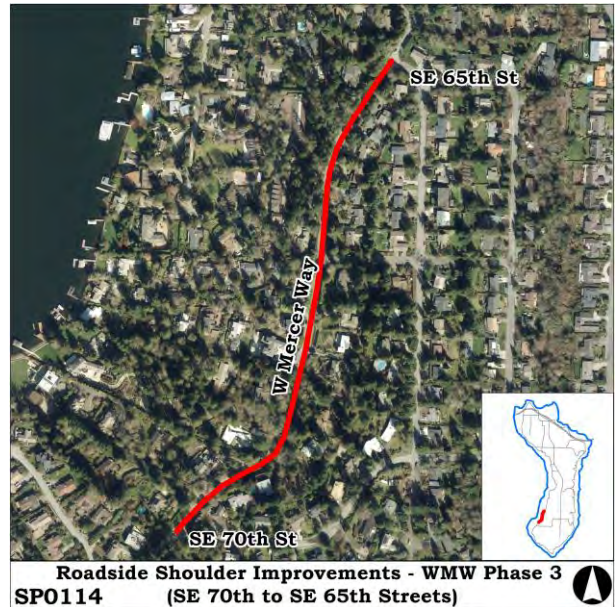
750

2021-2022 Project Budget

\$485,000

Department

Public Works



Project Description

This project will continue the program of paved shoulder construction along the northbound side of West Mercer Way by building new shoulder from SE 70th to SE 65th Streets. Work will include piping drainage ditches, grading, paving a 5-foot wide shoulder, and new pavement markings. Utility work will be funded by the corresponding City utility funds.

Project Justification

Pedestrians and bicyclists regularly use West Mercer Way, but lack of shoulders can make the roadway hazardous for these users. The roadside shoulder development program for the Mercer Ways was implemented in 2002. Paved roadside shoulders exist along West Mercer Way from I-90 to SE 65th Street and from SE 70th Street to the 8100 block, resulting in a gap of no shoulder between SE 65th and SE 70th.

The shoulders on West Mercer Way north of SE 65th were built in the late 1970's and early 1980's. The shoulders south of SE 70th are Phases 1 and 2 of WMW and were built in 2017 and 2020, respectively. Historically, the City has built one new shoulder project per biennium. Some fire hydrants and water meters will need to be moved outside of the new shoulder.

Expenditures	2021	2022	2023	2024	2025	2026
SP0114	\$0	\$485,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Gallagher Hill Road Sidewalk Improvements (SE 36th to SE 40th Streets)

Project ID
SP0115

Program Plan
CFP

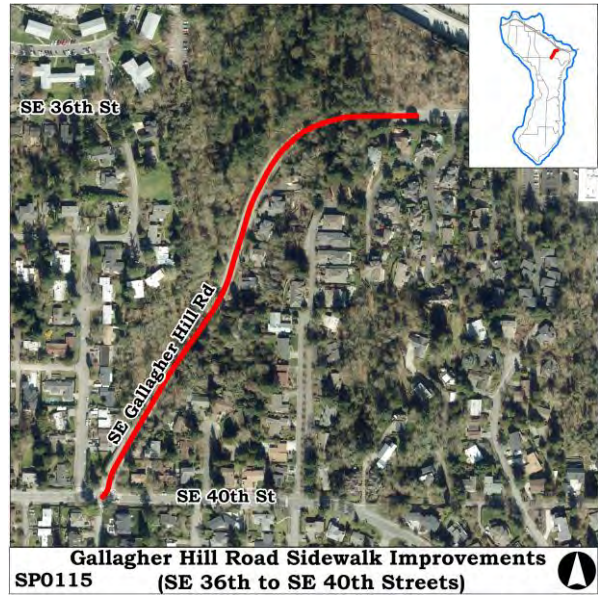
Target Completion Date
2025

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will construct a new sidewalk along the downhill side of Gallagher Hill Road between SE 36th and SE 40th Streets in conjunction with repaving of the roadway. Work will include installing new curbs, gutters, sidewalks, and storm drainage catch basins.

Project Justification

The PBF Plan identifies completing connectivity of facilities as a high priority and has proposed this improvement. A paved shoulder exists along this portion of Gallagher Hill, but with no physical separation for pedestrians. This is a hilly and curvy section of roadway with higher traffic speeds in the downhill direction. The need for this project was requested by the community in previous TIP processes. This project may be eligible for TIB Grant funds.

Expenditures	2021	2022	2023	2024	2025	2026
SP0115	\$0	\$0	\$0	\$0	\$474,000	\$0

Capital Improvement Program

SE 40th Street Sidewalk Improvements (Gallagher Hill to 93rd Ave)

Project ID
SP0116

Program Plan
CRP

Target Completion Date
2024

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will replace sidewalks and create bike lanes on SE 40th Street from Gallagher Hill Road to 93rd Avenue. Work will include constructing new curbs, gutters, and sidewalks along both sides of the roadway, minor drainage improvements, landscaping, and new pavement markings.

Project Justification

The PBF Plan identifies completing connectivity of facilities as a high priority and has proposed this improvement. Paved paths exist along most of both sides of this segment of SE 40th Street; however they are narrow and uneven.

The SE 40th Street corridor provides walking routes to Northwood Elementary, Mercer Island High School, and PEAK. This project will connect to sidewalk and bike lane improvements on SE 40th from ICW to Gallagher Hill Road that were constructed in 2018. This new project may be eligible for TIB or SRTS grant funding.

Expenditures	2021	2022	2023	2024	2025	2026
SP0116	\$0	\$0	\$0	\$920,000	\$0	\$0

Capital Improvement Program

92nd Ave SE Sidewalk Improvements (SE 40th to SE 41st Streets)

Project ID
SP0117

Program Plan
CFP

Target Completion Date
2026

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

This project will construct a new sidewalk along the west side of 92nd Avenue from SE 40th to SE 41st Streets. Work would include constructing new curbs, gutter, sidewalk, storm drainage, and landscaping along the west side of the roadway.

Project Justification

The PBF Plan identifies connectivity of facilities as a high priority. This project will complete the final gap in an otherwise continuous sidewalk route around the so-called school "mega block," connecting SE 40th Street to the High School, Admin Building, PEAK, and Northwood Elementary.

Expenditures	2021	2022	2023	2024	2025	2026
SP0117	\$0	\$0	\$0	\$0	\$0	\$540,000

ADA Compliance Plan Implementation

Project ID

SP0118

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

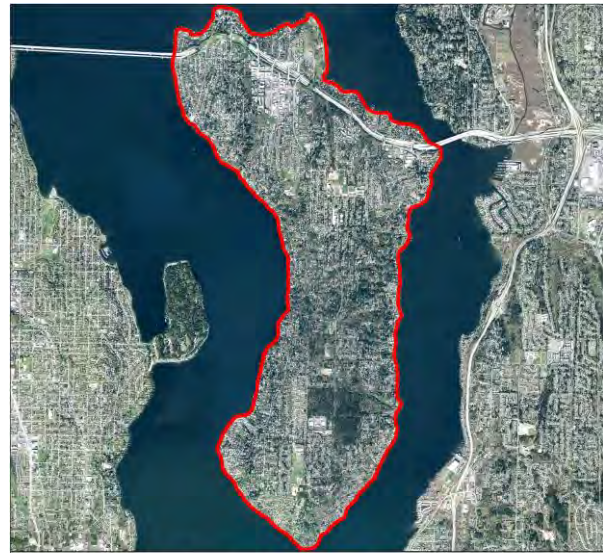
160

2021-2022 Project Budget

\$100,000

Department

Public Works



SP0118 ADA Compliance Plan Implementation



Project Description

Design and construction of spot improvements to pedestrian facilities citywide to meet compliance standards established by the Americans with Disabilities Act (ADA).

Project Justification

All public agencies are required to follow the Americans with Disabilities Act of 1990 (ADA) which requires that new and altered facilities be designed and constructed to be accessible to and usable by persons with disabilities. In some areas the city's existing pedestrian facilities do not meet regulatory requirements of the ADA. This project is an ongoing effort to prioritize, design and construct improvements to pedestrian facilities in compliance with ADA.

Expenditures	2021	2022	2023	2024	2025	2026
SP0118	\$0	\$100,000	\$0	\$100,000	\$0	\$100,000

Capital Improvement Program

N-S Bike Route Completion ICW (90th Ave SE - SE 63rd St)

Project ID
SP0119

Program Plan
CRP

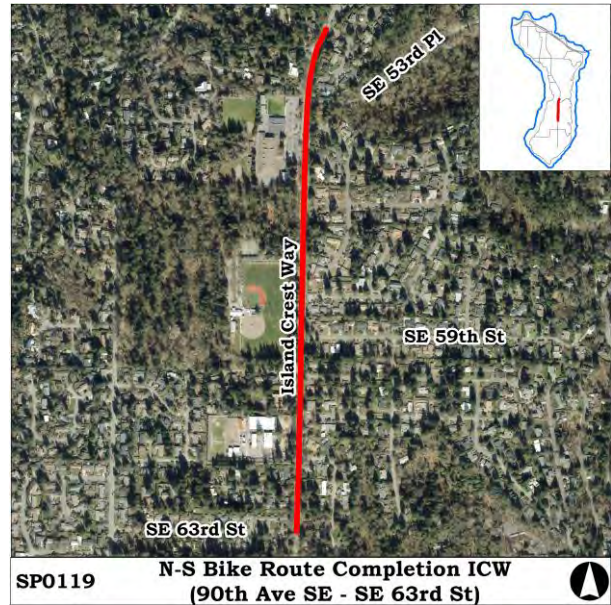
Target Completion Date
2023

2021 Labor Hour Estimate
300

2022 Labor Hour Estimate
500

2021-2022 Project Budget
\$50,000

Department
Public Works



Project Description

Complete gap in North/South Bike Route on Island Crest Way to provide route to connect the south end of the Island to the north end and Town Center for alternative transportation modes. Complete phase 1 Project Scoping and Alternative Selection and phase 2 Public Involvement in 2021 - 2022 biennium. Once a preferred alternative is selected begin preliminary design, final design and construction.

Project Justification

The PBF plan supports enhanced and improved bicycle circulation across the Island and identifies completing connectivity of facilities as a high priority. Island Crest Way is a 2-lane north/south arterial with minimal pedestrian and no bicycle facilities. This section is a missing gap in the north/south bike route. Within this area is Island Crest Park, Pioneer Park and Island Park Elementary, all within walking distance to residential homes and the south end shopping center.

An evaluation to provide an alternative route to bypass Island Crest Way through Island Crest Park (2012) was determined to be infeasible. Completing this missing gap is supported by the local bicycling group Neighbors In Motion. Supports First Mile/Last Mile. Only ph 1 & ph 2 are funded at this time utilizing Sound Transit mitigation funds. Future funding pending and prioritization pending outcome of phases 1 & 2.

Expenditures	2021	2022	2023	2024	2025	2026
SP0119	\$0	\$50,000	\$50,000	\$200,000	\$0	\$0

Sunset Hwy/77th Ave SE Improvements

Project ID

SP0120

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

350

2022 Labor Hour Estimate

300

2021-2022 Project Budget

\$700,000

Department

Public Works



Project Description

Design and construction of intersection/traffic safety improvements to improve pedestrian and bicycle crossings and vehicular circulation at the East Link Rail Station on 77th Ave SE. The project location is within WSDOT limited access and coordination with WSDOT will be ongoing.

Project Justification

This intersection is directly adjacent to the East Link station access and is expected to experience an increase in pedestrian and bicycle traffic, as well as vehicle traffic once the station opens. The Aubrey Davis Park and Mountains to Sound trail system are adjacent to Sunset Highway and the East Link station which crosses at 77th Ave SE. The center roadway closure and opening of East Link Station has changed travel patterns on the Island.

A long-term solution could be installation of a roundabout, a traffic signal, a rectangular rapid flashing beacon (RRFB) or other urban design intersection improvements to improve pedestrian and bicycle crossings and vehicular circulation. Project scoping and design planned for 2021 with construction in 2022. WSDOT coordination will be ongoing. Project will utilize Sound Transit mitigation funds.

Expenditures	2021	2022	2023	2024	2025	2026
SP0120	\$100,000	\$600,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Mid-block crosswalk 76th Ave SE between SE 24th and SE 27th

Project ID

SP0121

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

350

2021-2022 Project Budget

\$244,800

Department

Public Works



Project Description

Install new crosswalk with center median, RRFB, ADA curb ramps on 76th Ave SE in Town Center.

Project Justification

Ongoing redevelopment in the Town Center has seen increasing pedestrian circulation as new families and businesses move into the Town Center. The blocks are long and existing crosswalks are at intersecting streets resulting in an increase in jay-walking. With the opening of the East Link Rail Station it is expected there will be an increase in walking and biking in the Town Center as residents make their way to/from the station.

This project will utilize Sound Transit mitigation funds.

Expenditures	2021	2022	2023	2024	2025	2026
SP0121	\$65,000	\$203,704	\$0	\$0	\$0	\$0

Capital Improvement Program

Minor Capital - Traffic Operations Improvements

Project ID
SP0122

Program Plan
CRP

Target Completion Date
ONGOING

2021 Labor Hour Estimate
260

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$100,000

Department
Public Works



Project Description

Provide minor capital transportation improvements throughout the City to address traffic operation issues and concerns. Typical projects include upgrading signs to new mandated standards, channelization improvements, roadway safety and access management improvements, upgrading traffic signals for increased efficiency and safety, and new or revised street lighting.

Project Justification

This project allows staff to address small scale traffic operations improvements that are beyond the scope of the operating budget but too small for individual CIP projects.

Expenditures	2021	2022	2023	2024	2025	2026
SP0122	\$100,000	\$0	\$100,000	\$0	\$100,000	\$0

Capital Improvement Program

North Mercer Way - MI P&R Frontage Improvements

Project ID

SP0123

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Modify frontage of the MI P&R along North Mercer Way to improve pedestrian and bicycle circulation. The project includes remove the bus bay on the north side of NMW, widen trail to meet current standards for multi-use facility, remove bus shelters, extend NW corner of 80th Ave SE I/S to shorten N-S crossing distance and provide mixing zone for better ped/bike separation, improve sight lines at western driveway access. Relocate street lights, add landscape separation and bike lockers.

Project Justification

When the East Link station opens in 2023 transit service to the Island will change. The current configuration along the frontage of the P&R does not lend itself to positive pedestrian and bicycle circulation. Increased pedestrian and bicycle use is expected as more users walk/bike to the new station and as more people chose alternative modes of travel to go between Bellevue and Seattle along the trail system.

Expenditures	2021	2022	2023	2024	2025	2026
SP0123	\$0	\$0	\$0	\$1,177,000	\$0	\$0

PBF Plan Implementation

Project ID

SP0125

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

250

2022 Labor Hour Estimate

250

2021-2022 Project Budget

\$100,000

Department

Public Works



Project Description

Ongoing program to identify, prioritize, design and construct small spot improvements and gap completion projects to pedestrian and bicycle facilities citywide, as identified in the PBF Plan.

Project Justification

PBF Plan identifies gaps in and opportunities for investment in pedestrian and bicycle facilities citywide. In some areas of the City the existing transportation system does not provide adequate facilities for non-motorized users. Gaps in facilities should be designed and built to connect missing sections of pedestrian and bicycle facilities.

Expenditures	2021	2022	2023	2024	2025	2026
SP0125	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Capital Improvement Program

Emergency Sewer Repairs

Project ID
 SU0100
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$600,000
Department
 Public Works



SU0100 Emergency Sewer Repairs 

Project Description

Annual program to repair or replace sewer system infrastructure and components on an emergency basis. Work includes emergency repairs to sewer collection (pipe infrastructure) and pumping systems (pump stations and sewer lakeline).

Project Justification

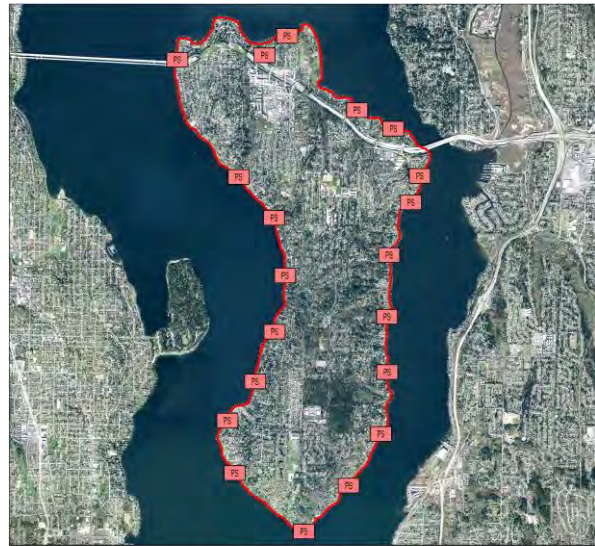
Due to an aging sewer/wastewater system and degradation of existing infrastructure, the City has seen an increase of emergency repairs. These emergencies have resulted in costly repairs and increased potential risk to exposure and negative environmental impacts. The Emergency System repairs program provides funding to address failed assets due to emergency.

Expenditures	2021	2022	2023	2024	2025	2026
SU0100	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000

Capital Improvement Program

Pump Station R&R Improvements

Project ID
 SU0102
Program Plan
 CRP
Target Completion Date
 ONGOING
2021 Labor Hour Estimate
 400
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$200,000
Department
 Public Works



SU0102 Pump Station R&R Improvements 

Project Description

Ongoing program to fund rehabilitation of sewer pump stations. Phase I conduct comprehensive review of all stations, develop scope of work and priority based on risk, consequence of failure, M/O experience and age, and modifications required to accommodate SCADA installation. Future phases begin construction of identified improvements.

Project Justification

Sewer Pump Stations are necessary for continuing reliable and cost-effective sewer system operation. Pump Stations, installed in the mid-1950's to late 1960's as part of the Lake Line system, are aging and in need of capital repair that can no longer be deferred. Pump station walls, constructed of concrete, are now failing. Some stations have capacity concerns while others are experiencing multiple component failures. Deferral of pump station R&R may likely result in sewer spillage into Lake Washington. Project PS-4 and PS-5 of the 2018 General Sewer Plan supports this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0102	\$200,000	\$0	\$750,000	\$0	\$750,000	\$0

Capital Improvement Program

Easement, Access Codes and Standards Review

Project ID
 SU0103
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 280
2022 Labor Hour Estimate
 280
2021-2022 Project Budget
 \$300,000
Department
 Public Works



Project Description

Review and confirm easements for pump station and lake line access, including easement language and rights of use for existing docks. Identify additional language needed to conduct full spectrum of operation and maintenance activities. Conduct comprehensive review of codes and standards relating to utility access. Implement changes to support utility maintenance of existing infrastructure.

Project Justification

The Lake Line system is a critical component for the continuing reliable and cost-effective sewer system operation. At the time of construction easements were obtained from adjacent property owners. Many easements are not recorded, and copies are no longer available. Some easements do not cover the infrastructure adequately nor do they define adequate area for City rights of entry.

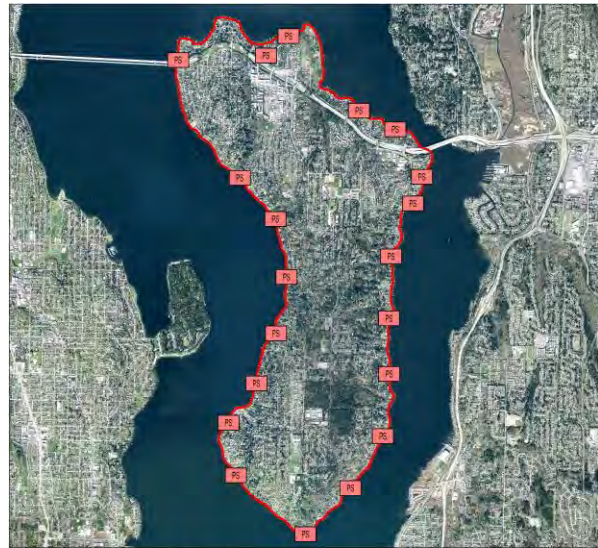
Overtime, access to some pump stations has become blocked making access to pump stations difficult if not impossible. This project, together with Pump Station Access Improvements will improve access to all pump stations for ongoing maintenance and operations. Projects G-5 and G-6 of the 2018 General Sewer Plan and the 2019 Lake Line and Pump Station Access Evaluation report confirms this project need.

Expenditures	2021	2022	2023	2024	2025	2026
SU0103	\$150,000	\$150,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Pump Station & HGMH Flow Monitoring

Project ID
 SU0104
Program Plan
 CRP
Target Completion Date
 2025
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



SU0104 Pump Station & HGMH Flow Monitoring 

Project Description

Install flow and level monitoring at pump stations and hydraulic grade manholes to evaluate capacity of pump stations versus flow during storm events. Some HGMH are not accessible and will require modifications or rebuilding to accommodate installation of necessary flow monitoring.

Project Justification

There is currently no flow monitoring program for the sewer system. Flow and level monitoring at pump stations and hydraulic grade manholes is necessary to support SCADA reliability and understanding the system capacity to provide ongoing reliable sewer service and minimize system failure. This project should be coordinated with the SCADA system upgrades and supports ongoing hydraulic model development. Project PS-3 of the 2018 General Sewer Plan supports this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0104	\$0	\$0	\$300,000	\$300,000	\$1,000,000	\$0

Capital Improvement Program

Pipe Flow Monitoring

Project ID

SU0105

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Install flow monitoring to evaluate capacity of the sewer pipe system versus flow during storm events.

Project Justification

Currently there is no ongoing flow monitoring program for the sewer system. Flow monitoring is necessary to support SCADA reliability and understanding system capacity to provide ongoing reliable sewer service and minimize system failure. Data from ongoing collection will be used for calibration of the hydraulic model and support prioritization of future capital reinvestment projects. This project should be coordinated with SCADA system upgrades and Pump Station & HGMH Flow Monitoring projects. Project G-1 of the 2018 General Sewer Plan supports this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0105	\$0	\$0	\$280,000	\$280,000	\$0	\$150,000

Lake Line Locating and Marking

Project ID

SU0106

Program Plan

CRP

Target Completion Date

2025

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Locate and mark the Lake Line system to aid asset management of the system and to assist with future condition assessment and R&R projects. Verify plan and profile of the lake line sewer and private laterals, locate special catch basins and emergency bypass locations, and confirm pump station piping configurations. Produce lake bathymetry map to include horizontal and vertical geospatial information to reduce future risk of damage. Install survey-grade markers to enable locating of lake line.

Project Justification

The Lake Line system is critical to providing reliable sewer service to Mercer Island. When constructed the pipeline was located by installing a metal washer on the side of the docks. Since that time docks have been rebuilt, washers removed or lost and not replaced. There are no known survey coordinates of the pipeline. Erosion of shoreline and lakebed has magnified the uncertainty of its location.

Results from this project will establish permanent record of the location of the lake line. Project L-4a of the 2018 General Sewer Plan support this project. The 2019 Lake Line and Pump Station Access Evaluation report confirms the need for locating the lake line to support future R&R.

Expenditures	2021	2022	2023	2024	2025	2026
SU0106	\$0	\$0	\$950,000	\$1,025,000	\$925,000	\$0

Capital Improvement Program

Lake Line Condition Assessment

Project ID

SU0107

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Initial condition assessment to complete a high-level assessment of the entire Lakeline to identify segments of pipe for further detailed condition assessment. Review historical project documentation determine pipe material, wall thickness, lining, coating, joint type, gasket material and test pressure. Detailed assessment of prioritized segments planned for 2027. Use results to guide future Lake Line repair and replacement (R&R).

Project Justification

The Lake Line system is critical to providing reliable sewer service to Mercer Island. The Lake Line was installed in the mid-1950's to late 1960's and may be nearing the end of its useful life. Access to the Lake Line is limited which prevents routine maintenance, inspection or cleaning of the pipe. The condition of the pipe is unknown. Results from this condition assessment will establish priorities for future R&R. Projects L-2, L-3 and L-4 of the 2018 General Sewer Plan support this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0107	\$0	\$0	\$0	\$0	\$2,000,000	\$0

Capital Improvement Program

Comprehensive Pipeline R&R Program

Project ID

SU0108

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

250

2022 Labor Hour Estimate

250

2021-2022 Project Budget

\$1,000,000

Department

Public Works



Project Description

Ongoing program to improve the sewer collection system that includes manhole installation, pipe installation, rehabilitation, replacement or lining, and smoke testing for inflow and infiltration (I/I).

Project Justification

Many components of the sewer system are aging and have reached the end of their useful life. Ongoing system improvements will ensure continued reliable and cost-effective sewer system operation. NAASCO CCTV inspection data is used to prioritize pipeline projects and develop comprehensive R&R program to continually replace pipes and other features of the sewer pipe system as they reach the end of their useful life. This project is projects P-9 and P-10 in the 2018 General Sewer Plan.

Expenditures	2021	2022	2023	2024	2025	2026
SU0108	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Capital Improvement Program

Sewer System Generator Replacement

Project ID

SU0109

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

182

2022 Labor Hour Estimate

182

2021-2022 Project Budget

\$300,000

Department

Public Works



Project Description

Ongoing program to replace generators that provide emergency power at sewer pump stations.

Project Justification

On-site back-up generators provide reliable and cost-effective operations of the sewer system. Generators have a useful life of 25 - 30 years. This ongoing program replaces a generator each year. By 2023 generators will have been replaced at each pump station. This program will begin again in 2028 to fund one generator replacement per year. The project is project PS-2 in the 2018 General Sewer Plan.

Expenditures	2021	2022	2023	2024	2025	2026
SU0109	\$150,000	\$150,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Pump Station Accessibility Improvements

Project ID

SU0110

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

200

2022 Labor Hour Estimate

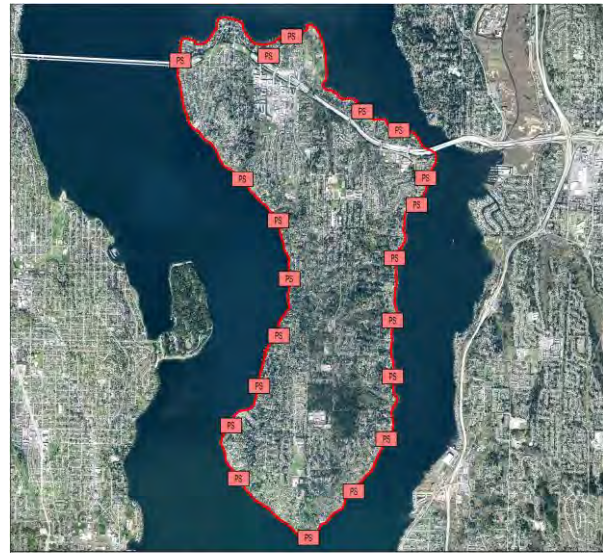
200


2021-2022 Project Budget

\$200,000

Department

Public Works



SU0110 Pump Station Accessibility Improvements 

Project Description

Address priority pump station access issues to support daily access needs. Priority projects include new or improved walking paths/stairs and improvements to existing roadways to facilitate land access, new or improved docks/bulkheads to facilitate access from Lake.

Project Justification

Many of the pump stations are difficult, if not impossible to access. In an emergency crews may not be able to access the station with needed equipment and arts due to terrain and private property improvements surrounding the station.

Project PS-I in the 2018 General Sewer Plan recommends a systematic program to improve access. The 2019 Lake Line and Pump Station Access Evaluation report confirms access difficulty at many stations and prioritizes stations for future improvements.

Expenditures	2021	2022	2023	2024	2025	2026
SU0110	\$100,000	\$100,000	\$0	\$100,000	\$0	\$100,000

Capital Improvement Program

Comprehensive Hydraulic Model Development

Project ID

SU0111

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Develop a system-wide hydraulic model to aid in identifying capacity issues and future reinvestment needs. Recalibrate the model every 10 years with the update to the General Sewer Plan

Project Justification

The City currently has no system-wide hydraulic model of the sewer system. A hydraulic model can assess conveyance capacity of the collection system and assess impacts of future development and land use changes. The model is used to prioritize future reinvestment in the sewer collection system and aids in identifying rehabilitation methods.

The model development should include the Lake Line system. Flow data collected as part of the Pump Station and the Pipe Flow Monitoring projects will be used to calibrate and validate the model. Project G-2 of the 2018 General Sewer Plan supports this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0111	\$0	\$0	\$0	\$0	\$0	\$250,000

Capital Improvement Program

Comprehensive I/I Evaluation

Project ID

SU0112

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Conduct a comprehensive Inflow and Infiltrations (I/I) investigation of sewer basins to identify areas of concern for future reinvestment.

Project Justification

The City currently does not have a comprehensive plan to monitor flows to evaluate, identify or address problems related to high I/I. During wet weather events Pump Stations may operate at capacity due to groundwater and surface water entering into the sewer pipe system.

Finding and correcting I/I can reduce M/O and treatment costs by eliminating groundwater and surface water from the sanitary sewer system. This project supports the Comprehensive Hydraulic Model Development. Project G-3 of the 2018 General Sewer Plan supports this project.

Expenditures	2021	2022	2023	2024	2025	2026
SU0112	\$0	\$0	\$0	\$0	\$0	\$150,000

Capital Improvement Program

SCADA System Replacement (Sewer)

Project ID

SU0113

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

750

2022 Labor Hour Estimate

750

2021-2022 Project Budget

\$1,650,000

Department

Public Works



Project Description

Design and replace the SCADA systems (supervisory control and data acquisition) including obsolete RTU's (remote terminal units) at pump stations and the reservoir and replace the HMI (human-machine interface) at the Public Works building.

Project Justification

The City's water distribution and sewer collection system are monitored and controlled by their SCADA systems which City staff rely on for all control and alarm notifications. The systems for both the water and sewer utilities are over a decade old. Equipment is outdated, obsolete and no longer available from the manufacturer. The software version currently operating the system is no longer supported. A comprehensive SCADA Master Plan was completed in 2017 and guides replacement of this system.

Expenditures	2021	2022	2023	2024	2025	2026
SU0113	\$675,000	\$975,000	\$1,275,000	\$0	\$0	\$0

Capital Improvement Program

Sub Basin 42.1 and 42.1a Watercourse Stabilization

Project ID
SW0100

Program Plan
CRP

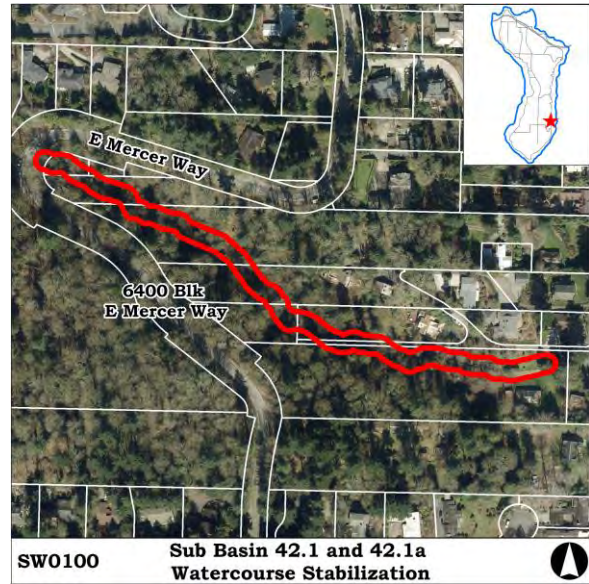
Target Completion Date
Q3 2021

2021 Labor Hour Estimate
874

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$389,657

Department
Public Works



Project Description

Stabilize 1200 linear feet of eroded watercourse east of East Mercer Way near 6500 block with series of bed control structures that are made of logs and streambed cobble in the channel. Also install timber frame structures on soft banks to reduce sediment transport.

Where the channel has a steeper slope at the upstream reach, 12” stream rocks will be placed to protect the toe of the existing gabion baskets from undercutting.

Project Justification

Temporary streambank erosion control measures (sandbags) installed more than 15 years ago are beginning to fail which poses risks to banks and upper slope stabilities, increase sediment source and habitat destruction. Project design began in January 2020, permitting with state and federal agencies to follow in late Spring. When permits are received, construction can take place in Summer of 2021.

Expenditures	2021	2022	2023	2024	2025	2026
SW0100	\$389,657	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Sub basin 23.2 Watercourse Stabilization

Project ID
 SW0101
Program Plan
 CRP
Target Completion Date
 Q3 2021
2021 Labor Hour Estimate
 668
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$202,157
Department
 Public Works



Project Description

Stabilize the upper 250 feet of watercourse adjacent to 4324 West Mercer Way by regrading and filling channel. Install boulder cascade at headcuts and beyond.

Project Justification

This sub-reach has numerous headcuts, the channel has incised up to 15 feet into the bed pan. This condition poses risks to near home, private street, banks and upper slope stabilities, increase sediment source and habitat destruction. Project design begins in 2020, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2021.

Expenditures	2021	2022	2023	2024	2025	2026
SW0101	\$202,157	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Sub basin 45b.1 Watercourse Stabilization

Project ID
 SW0102
Program Plan
 CRP
Target Completion Date
 Q3 2022
2021 Labor Hour Estimate
 240
2022 Labor Hour Estimate
 508
2021-2022 Project Budget
 \$224,657
Department
 Public Works



Project Description

Repair existing quarry spall check dams and provide bank protection with use of bioengineering method along this 300 feet of watercourse reach off West Mercer Way near 5600 Block.

Project Justification

High flow events have been eroding this watercourse, sediment transport is evidential. The eroded bank is posing risks to bank and upper slope stabilities, increase sediment source and habitat destruction. There are also low risks of affecting nearby street and infrastructures if the problem persists. Existing sediment collection structures downstream require ongoing maintenance. Project design to begin in 2021, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2022.

Expenditures	2021	2022	2023	2024	2025	2026
SW0102	\$36,157	\$188,500	\$0	\$0	\$0	\$0

Capital Improvement Program

Sub basin 27a.10 Watercourse Stabilization

Project ID
 SW0103
Program Plan
 CRP
Target Completion Date
 Q3 2022
2021 Labor Hour Estimate
 160
2022 Labor Hour Estimate
 408
2021-2022 Project Budget
 \$101,157
Department
 Public Works



Project Description

100 LINEAR FEET (LF) of channel restoration near SE 52nd Street and Forest Ave., works include stabilization through grading of the channel bed with streambed gravels, riparian planting.

Project Justification

Sedimentation source from unstable bank slopes seen with some risk to private road. Moderate bank erosion noted in sections along waterway. Steep slope on right bank downstream of private drive continues to have bank and slope failure partially due to creek toe erosion and partially due to the instability of the bank. Project design to begin in 2021, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2022.

Expenditures	2021	2022	2023	2024	2025	2026
SW0103	\$22,157	\$79,000	\$0	\$0	\$0	\$0

Sub basin 22.1 Watercourse Stabilization

Project ID
 SW0104
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 140
2021-2022 Project Budget
 \$24,157
Department
 Public Works



Project Description

Channel stabilization in two subreaches totaling 140 linear feet (LF) near 4200 West Mercer Way. Banks to be laid back and channel filled, re-creating a stream channel.

Project Justification

Downcutting has formed two separate subreaches within this watercourse. The upper 50 linear feet (LF) subreach has near vertical banks and is incised up to 8 feet in light brown stiff silt, creating a minor hazard to the fill of West Mercer Way. The lower 90 linear feet subreach has a 6-foot high headcut and is incised up to 20 feet in very stiff silt but does not pose a threat to West Mercer Way. Project design to begin in 2022, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2023.

Expenditures	2021	2022	2023	2024	2025	2026
SW0104	\$0	\$24,157	\$139,100	\$0	\$0	\$0

Capital Improvement Program

Sub basin 50b.4 (a & e) Watercourse Stabilization

Project ID
 SW0105
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 140
2021-2022 Project Budget
 \$17,657
Department
 Public Works



Project Description

Install log weir structures and outlet protection in watercourse off 4500 block East Mercer Way.

Project Justification

At 50b.A, channel is becoming laterally less stable and receiving upstream sand deposition. Existing log weir structures are being undermined or flanked.

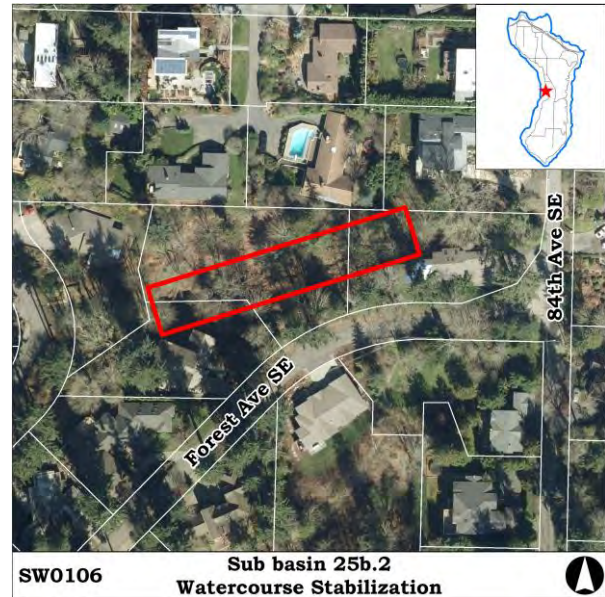
At 50b.E, downstream of Fercroft Road at culvert outlet, the bed and bank protection is failing. Additional failure of fill material adjacent to private drive was also observed. Project design to begin in 2022, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2023.

Expenditures	2021	2022	2023	2024	2025	2026
SW0105	\$0	\$17,657	\$46,000	\$0	\$0	\$0

Capital Improvement Program

Sub basin 25b.2 Watercourse Stabilization

Project ID
 SW0106
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 180
2021-2022 Project Budget
 \$46,657
Department
 Public Works



Project Description

Between 84th Ave SE and Forest Ave SE., perform 220 linear feet channel restoration through clearing and grading of the channel bed with streambed gravel, riparian planting along the banks, and installation of logs.

Project Justification

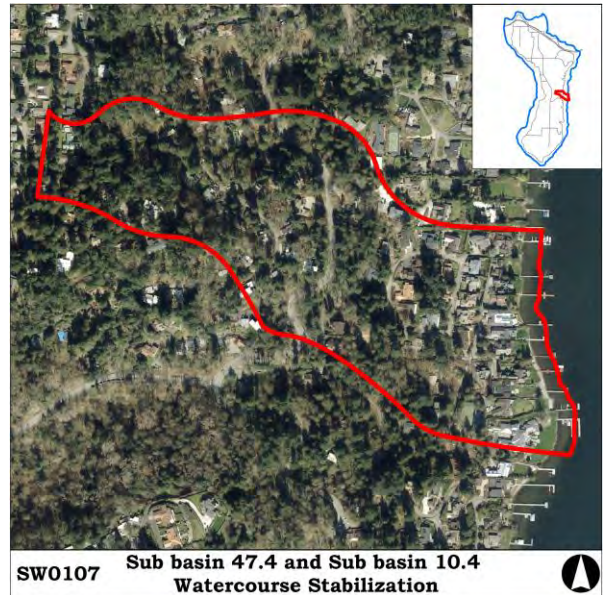
Highly erodible loose silt and soil banks observed. Channel then widens toward downstream and becoming less stable with a sand and gravel bed. Slides noted on right and left banks with slide material in ravine bottom. The condition poses risks to banks and upper slope stabilities, increase sediment source and habitat destruction. Project design to begin in 2022, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2023.

Expenditures	2021	2022	2023	2024	2025	2026
SW0106	\$0	\$46,657	\$145,000	\$0	\$0	\$0

Capital Improvement Program

Sub basin 47.4 and Sub basin 10.4 Watercourse Stabilization

Project ID
 SW0107
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

300 to 400 LINEAR FEET (LF) of pipe extension from East Mercer Way to SE 52nd Street, and pipe outfall protection downstream of I-90 and west of 77th Avenue SE.

Project Justification

The seasonal watercourse in SB47.4 flows from East Merce Way to SE 52nd street thru 9426 SE 52nd street, creating some erosion around the residence. Meanwhile the outfall of a to 60" pipe in SB10.4 that drains from the business district and into an open channel. The riprap thickness at the outfall is thin and more material may be undersized. Project design to begin in 2022, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2023.

Expenditures	2021	2022	2023	2024	2025	2026
SW0107	\$0	\$0	\$55,514	\$292,500	\$0	\$0

Capital Improvement Program

Sub basin 24a.1 Watercourse Stabilization

Project ID

SW0109

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Outfall protection West of Forest Ave SE , south of 4500 block. Install drop manhole and outfall protection

Project Justification

Flow is scouring and undercutting the storm outlet and has created a 6ft deep by 15ft wide scour hole. The slope above is susceptible to further erosion. A fence running parallel to the storm pipe is currently at risk. Other risks are bank stabilities, increase sediment source and habitat destruction. Project design to begin in 2023, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2024.

Expenditures	2021	2022	2023	2024	2025	2026
SW0109	\$0	\$0	\$17,157	\$56,500	\$0	\$0

Capital Improvement Program

Sub basin 39a.2 Watercourse Stabilization

Project ID
 SW0110
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Fill 30 linear feet of secondary channel and replace unstable wood dam with rock weir, near 7450 block 92nd Ave SE.

Project Justification

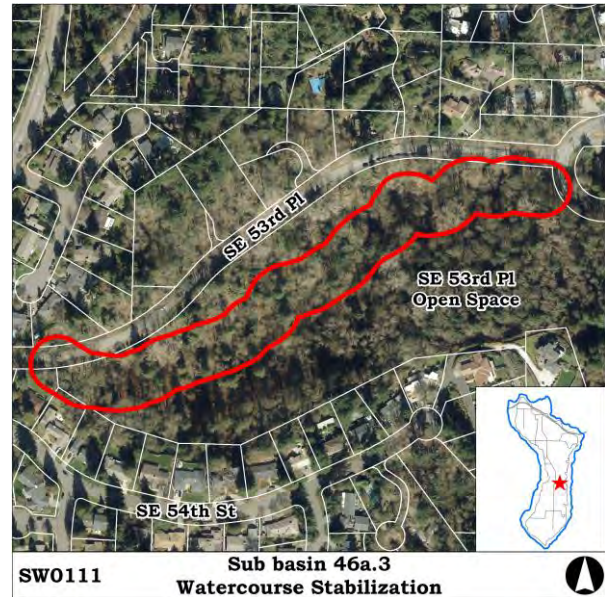
At culvert outlet under 92nd Avenue SE, a very steep watercourse has eroded a secondary 30 linear feet (LF) channel around a tree into the north bank. Risks are bank stabilities, increase sediment source and habitat destruction. Project design to begin in 2023, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2024.

Expenditures	2021	2022	2023	2024	2025	2026
SW0110	\$0	\$0	\$16,157	\$40,000	\$0	\$0

Capital Improvement Program

Sub basin 46a.3 Watercourse Stabilization

Project ID
 SW0111
Program Plan
 CRP
Target Completion Date
 2024
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Complete 475 linear feet channel restoration south of SE 53rd Pl, between Island Crest Way and West Mercer Way. Work includes stabilization through clearing and grading of the channel bed with a streambed gravel mix, riparian planting along the banks, and installation of logs and rootwads.

Project Justification

Watercourse extends from headwaters below east of Island Crest Way downstream to East Mercer Way. Reach segments are highly erodible because they are landslide deposits, Sandy banks were observed 3' to 4' high in certain areas. North bank saw slide material and is soft, loose and wet. These banks are most likely a source of sedimentation downstream of East Mercer Way.

These conditions pose risks including banks and slope stabilities, including landslide, increase sediment source, and habitat destruction. Project design is scheduled to begin in 2023, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2024.

Expenditures	2021	2022	2023	2024	2025	2026
SW0111	\$0	\$0	\$48,657	\$371,500	\$0	\$0

Capital Improvement Program

Watercourse Stabilization - Sub basin 34.1

Project ID
 SW0112
Program Plan
 CRP
Target Completion Date
 2025
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Complete 100 linear feet (LF) of channel stabilization and outfall protection near 8200 block of West Mercer Way.

Project Justification

A 4.0-foot headcut has developed downstream of second culvert in watercourse downstream of W. Mercer Way. For the next 100 feet, there is moderate lateral instability and the watercourse is within 10 feet of the foundation of a house. Bed is dense glacial deposits, but bank is unconsolidated and unarmored. Project design to begin in 2024, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2025.

Expenditures	2021	2022	2023	2024	2025	2026
SW0112	\$0	\$0	\$0	\$24,157	\$92,200	\$0

Capital Improvement Program

Watercourse Stabilization - Sub basin 45b.4

Project ID
 SW0113
Program Plan
 CRP
Target Completion Date
 2025
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Connect pipe outfall with 120 feet of HDPE pipe to ravine bottom near Parkwood.

Project Justification

Drop at culvert outlet of a 12-inch CMP culvert under private drive is eroding. Erosion also occurring downstream of the outlet. Project design is scheduled to begin in 2024, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2025.

Expenditures	2021	2022	2023	2024	2025	2026
SW0113	\$0	\$0	\$0	\$28,157	\$83,600	\$0

Capital Improvement Program

Watercourse Stabilization - Sub basin 29.3

Project ID
 SW0114
Program Plan
 CRP
Target Completion Date
 2025
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Stream restoration and bank stabilization at 6200 block of West Mercer Way.

Project Justification

About midway between West Mercer Way and SE 65th street, a 150-foot reach has one to two-foot drops, eroding banks and creating west bank instability. Project design to begin in 2024, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2025.

Expenditures	2021	2022	2023	2024	2025	2026
SW0114	\$0	\$0	\$0	\$45,157	\$116,500	\$0

Capital Improvement Program

Watercourse Stabilization - Sub-Basin 42.2, 42.3, 42.8, 42.8a

Project ID

SW0115

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

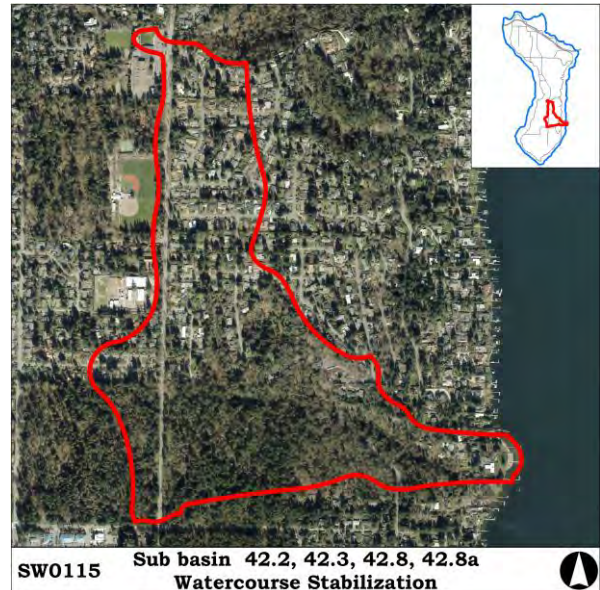
0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Restore and stabilize multiple tributaries and stream within Pioneer Park.

Project Justification

Various tributaries and channels are experiencing erosion and need bank protection and restoration. Several rock dams also need repairs. Risks that these problems pose are slope stabilities, increase sediment source and habitat destruction. Project design to begin in 2025, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2026.

Expenditures	2021	2022	2023	2024	2025	2026
SW0115	\$0	\$0	\$0	\$0	\$87,157	\$333,500

Capital Improvement Program

Watercourse Stabilization - Sub basin 44b.3

Project ID
 SW0116
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



Project Description

Restore 60 linear feet (LF) of the downstream channel of East Mercer way, south of SE 61st Place.

Project Justification

Stream is actively eroding. Headcut has formed downstream of homeowner's 24" storm pipe. Previous quarry spall and geotextile lining has failed. Risks are bank stability, increase sediment source and habitat destruction. Project design to begin in 2025, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2026.

Expenditures	2021	2022	2023	2024	2025	2026
SW0116	\$0	\$0	\$0	\$0	\$29,157	\$67,700

Capital Improvement Program

Watercourse Stabilization - Sub-Basin 32b.1 and 32.2

Project ID

SW0117

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Complete 80 linear feet of boulder cascade for protection of outfall and headcut in an incised stream channel south of Meadow Lane and west of West Mercer Way.

Project Justification

Channel scouring occurred at the outfall of a 48” half-round metal pipe, created 3 to 5 feet drop. There is a 7 feet headcut downstream where the channel is highly incised with vertical, unvegetated banks. Risks are slope stabilities, increase sediment source and habitat destruction.

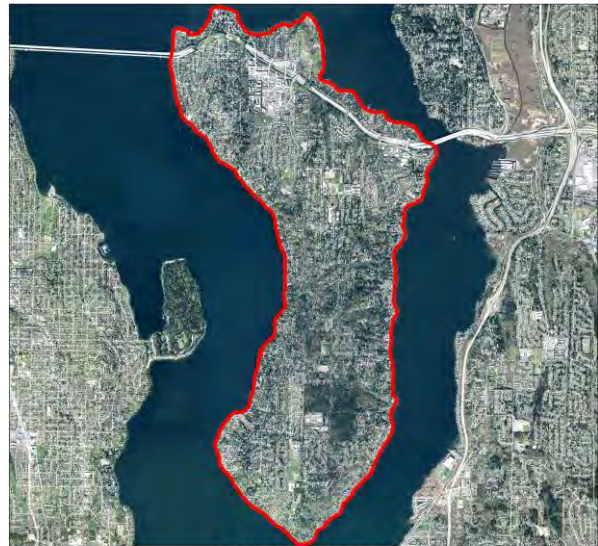
Project design to begin in 2025, permitting with state and federal agencies to follow. When permits are received, construction can take place in Summer of 2026.

Expenditures	2021	2022	2023	2024	2025	2026
SW0117	\$0	\$0	\$0	\$0	\$48,157	\$150,000

Capital Improvement Program

Watercourse Minor Repairs and Maintenance

Project ID
 SW0118
Program Plan
 CRP
Target Completion Date
 2025
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$0
Department
 Public Works



SW0118 Watercourse Minor Repairs/Maintenance

Project Description

Re-establish riparian corridors and make adjustment to logs and grade control structures in watercourses that had received stabilization work in prior years.

Project Justification

Some stream banks become overgrown with invasive plants. Re-establish riparian buffer to prevent pollutants entering stream from runoff, controls erosion, and provides habitat and nutrient input into the stream. Stream flows often displace logs and grade control structures that were installed in the past, therefore some manual adjustments are needed after years of use.

Expenditures	2021	2022	2023	2024	2025	2026
SW0118	\$0	\$0	\$0	\$0	\$100,000	\$0

Conveyance System Assessments

Project ID
 SW0119
Program Plan
 CRP
Target Completion Date
 2026
2021 Labor Hour Estimate
 324
2022 Labor Hour Estimate
 8
2021-2022 Project Budget
 \$162,000
Department
 Public Works



Project Description

As a pilot project in 2021, assess selected basins by using conventional stormwater management modeling to help assess runoff quantity and quality from the drainage systems, and take hydrologic and hydraulic factors into account when proposing project solutions. Basin 10 and 32b are prime candidates for this project since they are the largest basins on the island. If successful, the assessment work could reoccur every other year when assessing other basins.

Project Justification

The result will allow the City to utilize a standardized prioritization method when problems are identified, projects can be ranked in a logical and consistent manner. Produce planning-level project solutions and cost estimates.

Expenditures	2021	2022	2023	2024	2025	2026
SW0119	\$112,000	\$50,000	\$112,000	\$50,000	\$112,000	\$50,000

Capital Improvement Program

East & West Mercer Way Trenchless Culvert Replacements

Project ID

SW0120

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

540

2022 Labor Hour Estimate

740

2021-2022 Project Budget

\$616,157

Department

Public Works



Project Description

Replace eight arterial stormwater culvert crossings using trenchless methods such as slip-lining or pipe bursting.

Project Justification

Stormwater culvert integrity defects including separated joints, cracks and root intrusion were identified by City Staff utilizing CCTV inspections at 5615 EMW, 6000 EMW, 6230 EMW, 6421 EMW, 7008 EMW, 7444 EMW, 7928 EMW and 3535 WMW.

A culvert pipe failure at any of the identified locations would pose a structural risk to the main arterial roadway. Project entails nearly 540 linear feet of replacement pipe using trenchless replacement methods to minimize excavation impacts while preserving stormwater conveyance and roadway integrity. Permit and design in 2021, construction in 2022.

Expenditures	2021	2022	2023	2024	2025	2026
SW0120	\$112,657	\$503,500	\$0	\$0	\$0	\$0

Capital Improvement Program

Conveyance System Improvement - drainage repair, extension, and replacement

Project ID

SW0121

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

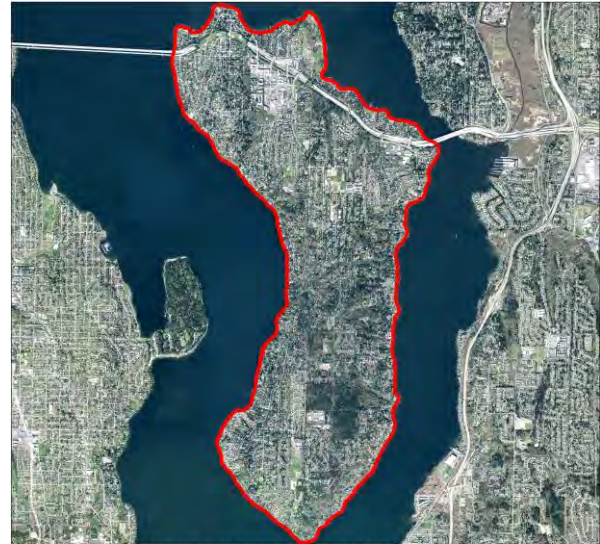
0

2021-2022 Project Budget

\$0

Department

Public Works



**SW0121 Conveyance system Improvement -
Drainage repair, extension, replacement**



Project Description

Futures projects to be determined according to findings and recommendation per the 2021 Conveyance System Assessment Project.

Project Justification

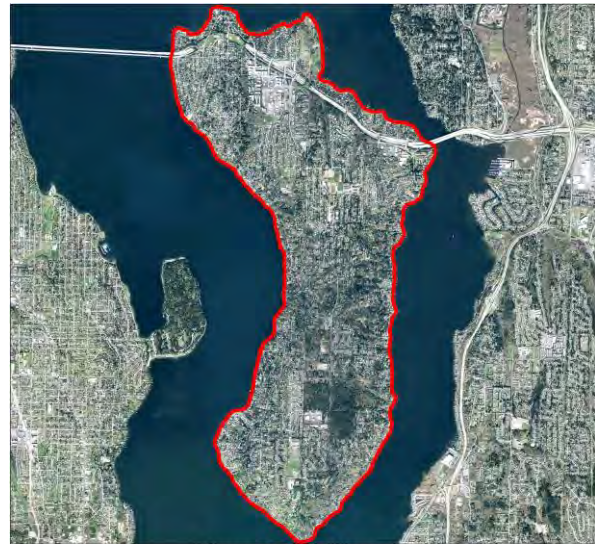
For 2023 to 2026, futures projects to be determined according to findings and recommendation per the 2021 Conveyance System Assessment Project.

Expenditures	2021	2022	2023	2024	2025	2026
SW0121	\$0	\$0	\$300,000	\$300,000	\$300,000	\$300,000

Capital Improvement Program

Emergency Stormwater Conveyance Repairs

Project ID
 SW0126
Program Plan
 CRP
Target Completion Date
 Q4 2022
2021 Labor Hour Estimate
 62
2022 Labor Hour Estimate
 158
2021-2022 Project Budget
 \$0
Department
 Public Works



SW0126 Emergency Stormwater conveyance repairs

Project Description

Repair Stormwater conveyance system components in the event required emergency repairs emerge due to severe weather or material failure.

Project Justification

Emergency Stormwater conveyance repairs are routinely required due to variable severe weather events, land movement or material failure.

Expenditures	2021	2022	2023	2024	2025	2026
SW0126	\$50,000	\$50,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Emergency Water System Repairs

Project ID
WU0100

Program Plan
CRP

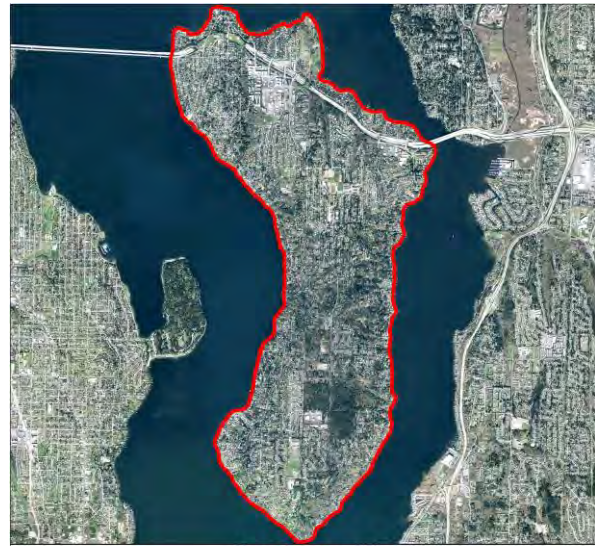
Target Completion Date
ONGOING


2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$300,000

Department
Public Works



WU0100 **Emergency Water System Repairs** 

Project Description

Annual program to repair or replace water distribution system infrastructure on an emergency basis.

Project Justification

Due to an aging distribution system and degradation of existing infrastructure, the City has seen an increase of pipe failures and watermain breaks. These emergencies have resulted in costly repairs and increased risk to exposure and potential system contamination. The Emergency System repairs program provides funding to address failed assets due to emergency.

Expenditures	2021	2022	2023	2024	2025	2026
WU0100	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000

Capital Improvement Program

Booster Chlorination Station

Project ID
WU0101

Program Plan
CRP

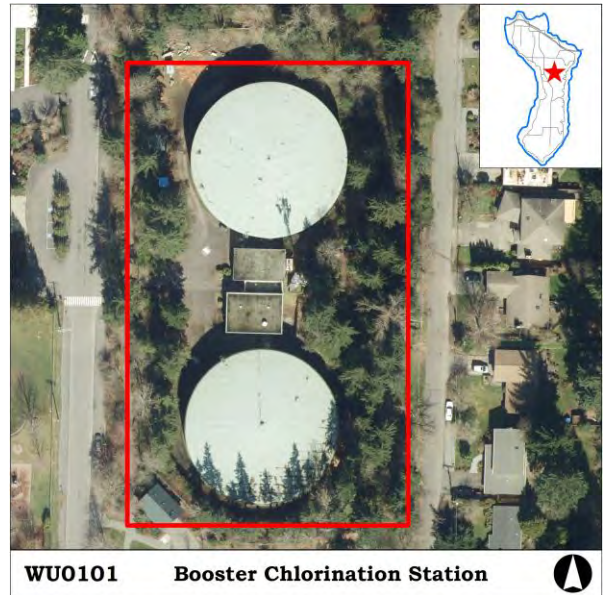
Target Completion Date
Q4 2022

2021 Labor Hour Estimate
2150

2022 Labor Hour Estimate
2200

2021-2022 Project Budget
\$3,505,000

Department
Public Works



Project Description

Final design and construction of a permanent booster disinfection system for the City's Reservoir and Main Pump Station. Project includes chlorination booster system with sodium hypochlorite generation and metering; chlorine injection and sampling; reservoir mixing system with integrated chlorine injection; piping and valving to improve hydraulic control of SPU Meter's 67 and 171; replacement of two PRV's to improve hydraulic control; and decommission extraneous piping.

Project Justification

The 2014 Boil Water Advisory long-term Action Plan identifies steps to mitigate the risk of future contamination to the City's water system. This project is an after-event action fully supported by Washington State Department of Health. Investment in the water system reduces the risk of future contamination by providing reliable and cost effective distribution of drinking water.

Expenditures	2021	2022	2023	2024	2025	2026
WU0101	\$995,000	\$2,510,000	\$0	\$0	\$0	\$0

Capital Improvement Program

SCADA System Replacement (Water)

Project ID

WU0102

Program Plan

CRP

Target Completion Date

2023

2021 Labor Hour Estimate

750

2022 Labor Hour Estimate

750

2021-2022 Project Budget

\$1,650,000

Department

Public Works



WU0102 SCADA System Replacement (Water) 

Project Description

Design and replace the SCADA systems (supervisory control and data acquisition) including obsolete RTU's (remote terminal units) at pump stations and the reservoir and replace the HMI (human-machine interface) at the Public Works building.

Project Justification

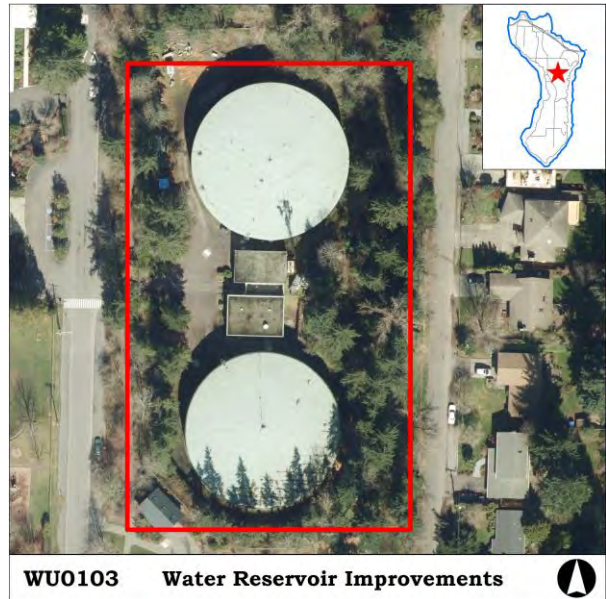
The City's water distribution and sewer collection system are monitored and controlled by their SCADA systems which City staff rely on for all control and alarm notifications. The systems for both the water and sewer utilities are over a decade old. Equipment is outdated, obsolete and no longer available from the manufacturer. The software version currently operating the system is no longer supported. A comprehensive SCADA Master Plan was completed in 2017 and guides replacement of this system.

Expenditures	2021	2022	2023	2024	2025	2026
WU0102	\$675,000	\$975,000	\$1,275,000	\$0	\$0	\$0

Capital Improvement Program

Water Reservoir Improvements

Project ID
 WU0103
Program Plan
 CRP
Target Completion Date
 2023
2021 Labor Hour Estimate
 150
2022 Labor Hour Estimate
 375
2021-2022 Project Budget
 \$2,110,000
Department
 Public Works



Project Description

Examine and identify components that require replacement or improvements for both water tanks. These components include structure supports, hatches, ladders, and ladder cages. Engineering design is planned for year 2021. Second, the projects will relaminate interior linings and complete exterior painting of water reservoir tanks at the water reservoir.

Project Justification

- 1) Many water tank components have aged or deteriorated since the seismic upgrade of both tanks in 1999/2000.
- 2) The interior lining and exterior paint of both reservoir tanks is failing. Both tanks had the interiors epoxy coated and the exteriors painted in 1999 with an estimated useful life of 20 years. The two 4 million-gallon welded steel storage tanks must be maintained to provide reliable storage and cost effective water delivery to customers.

Expenditures	2021	2022	2023	2024	2025	2026
WU0103	\$375,000	\$1,735,000	\$1,715,000	\$0	\$0	\$0

Capital Improvement Program

Water System Construction Improvements - 82 Ave and Forest Ave, West of West Mercer Way

Project ID

WU0104

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

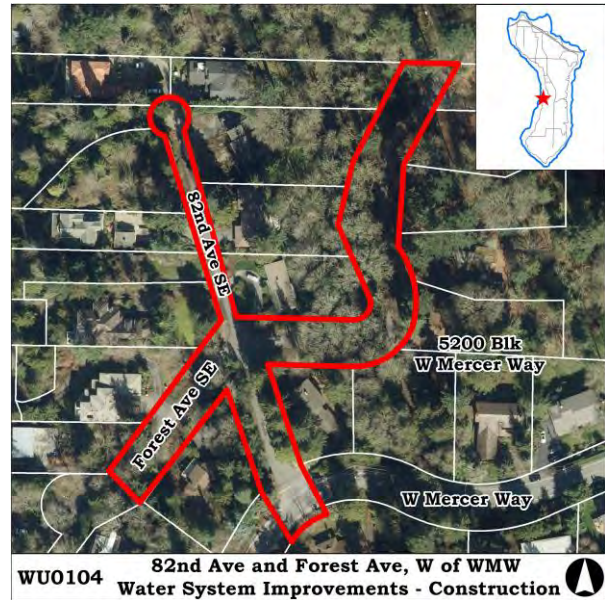
0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Replace 1,330 linear feet (LF) 4-inch and 6-inch cast iron (CI) water main, and 1 PRV station. The aging water mains will be replaced with ductile iron (DI) water mains. Fire hydrants, water services, and other water system components will be replaced as well. Sites located at 82nd Ave SE and Forest Ave SE (5200 block of 82nd Ave and north of 5252 W Mercer Way).

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The existing CI water mains are aging and have had several breakages in the past. The pressure reducing valve (PRV) station also needs upgrade/replacement.

Expenditures	2021	2022	2023	2024	2025	2026
WU0104	\$0	\$0	\$145,000	\$810,000	\$0	\$0

Capital Improvement Program

Water System Design Improvements - 74 Ave, SE 29 St, and 73 Ave

Project ID

WU0105

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Replace 2,220 linear feet (LF) of 4-inch & 6-inch cast iron (CI) water main. Replace the aging CI water mains with ductile iron (DI) water mains, and replace associated water system components. Site locations are: 1) 74th Ave SE, btw SE 24th & SE 27th St, 2) SE 29th St, btw 74th Ave & 76th Ave SE, & 3) 73rd Ave SE from SE 27th north to dead-end street.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The CI water mains are aging and have experienced breaks in the past.

Expenditures	2021	2022	2023	2024	2025	2026
WU0105	\$0	\$0	\$0	\$0	\$0	\$188,000

Capital Improvement Program

Madrona Crest East Addition Water System Improvements

Project ID
WU0106

Program Plan
CRP

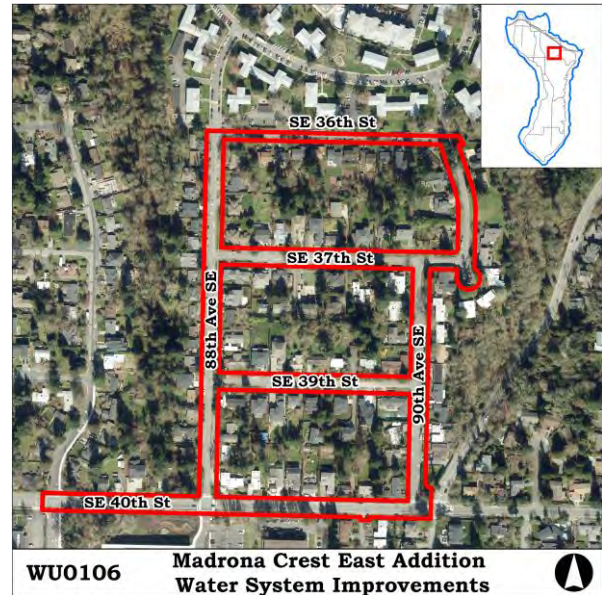
Target Completion Date
Q4 2022

2021 Labor Hour Estimate
500

2022 Labor Hour Estimate
800

2021-2022 Project Budget
\$2,798,000

Department
Public Works



Project Description

Replace 4,455 linear feet (LF) of 4-inch and 6-inch cast iron (CI) water mains and abandon 6-inch asbestos cement (AC) main. Fire hydrants, water services, and other system components will be replaced as well. Sites located south of Shorewood Apartments/SE 37th St, SE 39th St between 88th and 90th Ave SE, 88th and 90th Ave SE between SE 36th St and SE 40th St, and SE 40th from 88th Ave SE to 90th Ave SE.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The CI water mains are extremely corroded and restrict the flow for domestic water supply and fire flow. The AC main is aging and will be taken out of service.

Expenditures	2021	2022	2023	2024	2025	2026
WU0106	\$350,000	\$2,448,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Town Center Water System Improvements - 77 & 78 Ave SE (SE 27 - SE 29 St)

Project ID
WU0107

Program Plan
CRP

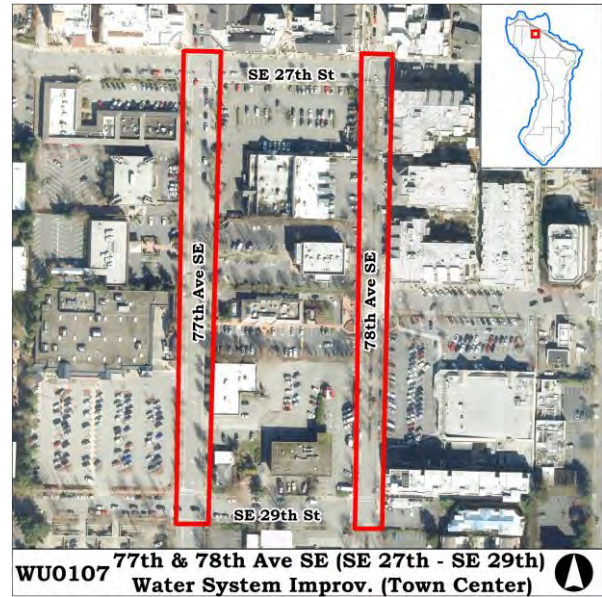
Target Completion Date
2025

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
0

2021-2022 Project Budget
\$0

Department
Public Works



Project Description

Replacement of 1,760 linear feet of 6-inch and 8-inch cast iron (CI) water mains. Replace the aging CI water mains with ductile iron (DI) water mains. Fire hydrants, valves, and water services will be replaced as well. Sites located at 77th Ave SE & 78th Ave SE/from SE 27th St to SE 29th St.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood.

Expenditures	2021	2022	2023	2024	2025	2026
WU0107	\$0	\$0	\$0	\$204,000	\$950,000	\$0

Capital Improvement Program

Water System Improvements - Avalon Drive and Benotho Place Neighborhoods

Project ID

WU0108

Program Plan

CRP

Target Completion Date

2026

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Replacement of 3,290 linear feet of 4-inch and 6-inch cast iron (CI) water mains with ductile iron (DI) water mains. Fire hydrants, valves, and water services will be replaced as well. Sites located at Avalon Drive, Avalon Place, SE 87th and Benotho Place.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The CI water mains are aging and have experienced a number of breaks in the past.

Expenditures	2021	2022	2023	2024	2025	2026
WU0108	\$0	\$0	\$0	\$0	\$279,000	\$1,775,000

Capital Improvement Program

Water System Improvements - 60 Ave SE, between SE 27, SE 32, and 62 Ave

Project ID
WU0109

Program Plan
CRP

Target Completion Date
2023

2021 Labor Hour Estimate
0

2022 Labor Hour Estimate
400

2021-2022 Project Budget
\$229,000

Department
Public Works



Project Description

Replacement of 2,700 linear feet (LF) of 6-inch cast iron (CI) water mains with ductile iron (DI) water mains. Fire hydrants, water services, and other system components will be replaced as well. Sites located at First Hill/60th Ave SE between SE 27th and SE 32nd St, and 62nd Ave SE between SE 24th and SE 27th St.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The water mains are aging, undersized, and have experienced breakage in the past. The water quality related index also contributes to a higher priority replacement of this water main.

Expenditures	2021	2022	2023	2024	2025	2026
WU0109	\$0	\$229,000	\$1,456,000	\$0	\$0	\$0

Capital Improvement Program

Water System Construction Improvements - 82 Ave SE, N of SE 24th St

Project ID

WU0110

Program Plan

CRP

Target Completion Date

Q4 2021

2021 Labor Hour Estimate

600

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$1,087,000

Department

Public Works



Project Description

Replacement of 1,940 linear feet (LF) of 6-inch cast iron (CI) water mains with ductile iron (DI) main. Fire Hydrants, water services, and other system components will be upgraded as well. Sites located at North end of Island/82nd Ave SE-north of SE 24th St and 81st Ave SE - south of SE 24th St.

Project Justification

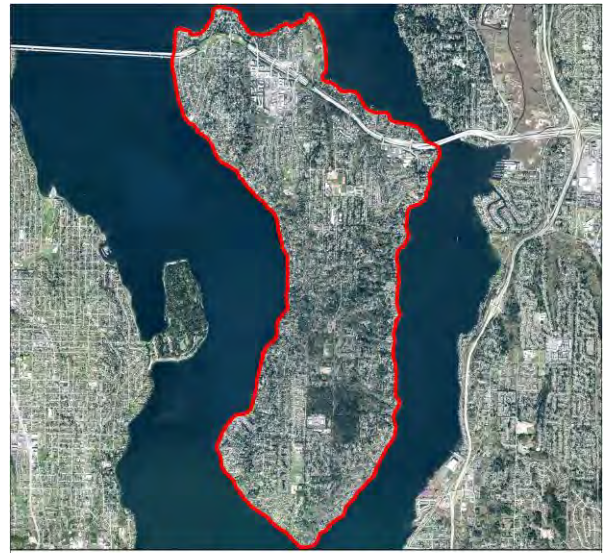
Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The existing CI main is aging and has a history of malfunctions. Water quality related index also contributes to the higher priority of this water main replacement.

Expenditures	2021	2022	2023	2024	2025	2026
WU0110	\$1,087,000	\$0	\$0	\$0	\$0	\$0

Capital Improvement Program

Hydrant Replacement Contract Work

Project ID
 WU0111
Program Plan
 CRP
Target Completion Date
 Q4 2022
2021 Labor Hour Estimate
 0
2022 Labor Hour Estimate
 150
2021-2022 Project Budget
 \$0
Department
 Public Works



WU0111 Hydrant Replacement (contract work) 

Project Description

Small public works contracts to replace 2-port hydrants. Replace aging and undersized fire hydrants in various locations throughout the Island with this biennial program. Out of the 1,200 fire hydrants the City currently owns (additional hydrants are owned by other entities including schools, WSDOT, and private property owners), 208 are 2-port hydrants.

Project Justification

A systematic replacement program is necessary to ensure all fire hydrants are functioning properly and effectively. Undersized and/or aging hydrants are in need of replacement. New hydrants will conform to Mercer Island's Engineering Standard Specifications.

Expenditures	2021	2022	2023	2024	2025	2026
WU0111	\$0	\$0	\$250,000	\$0	\$250,000	\$0

Capital Improvement Program

Water System Components Replacements

Project ID

WU0112

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

40

2022 Labor Hour Estimate

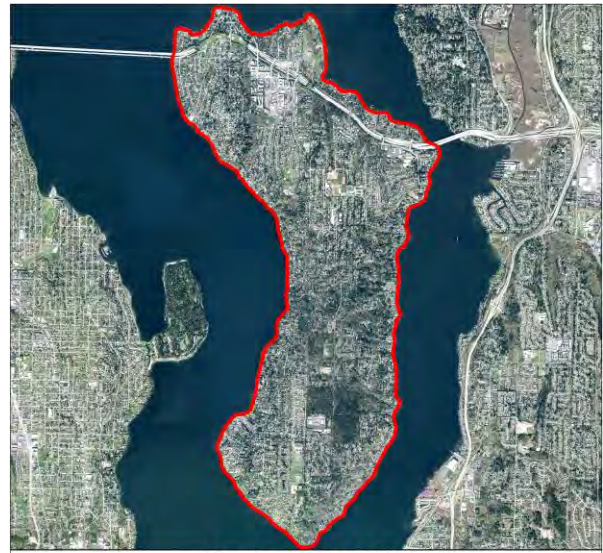
40


2021-2022 Project Budget

\$70,000

Department

Public Works



WU0112 Abandonment of 1955 12" Cast Iron Water Main (Reservoir to First Hill) 

Project Description

Replace components of the water system including in-line valves, pressure reducing valves, air-vacuum release valves, and blow-offs as needed on an annual basis.

Project Justification

A systematic, annual improvement program is necessary to ensure all components of the water system are in reliable condition, functioning properly and effectively.

Expenditures	2021	2022	2023	2024	2025	2026
WU0112	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000

Capital Improvement Program

Abandon 1955 12" Cast Iron water main (reservoir to First Hill)

Project ID

WU0114

Program Plan

CRP

Target Completion Date

Q4 2021

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Abandon 12-inch cast iron (CI) water main, originally installed in 1955, between water reservoir and First Hill. Install water main connections where needed and transfer water services and fire hydrants to an existing parallel water main.

Project Justification

An effective and reliable water distribution system is necessary for cost-effective operations and maintenance.

Expenditures	2021	2022	2023	2024	2025	2026
WU0114	\$0	\$0	\$320,000	\$0	\$0	\$0

Water Model Updates/Fire Flow Analysis

Project ID

WU0115

Program Plan

CRP

Target Completion Date

ONGOING

2021 Labor Hour Estimate

40

2022 Labor Hour Estimate

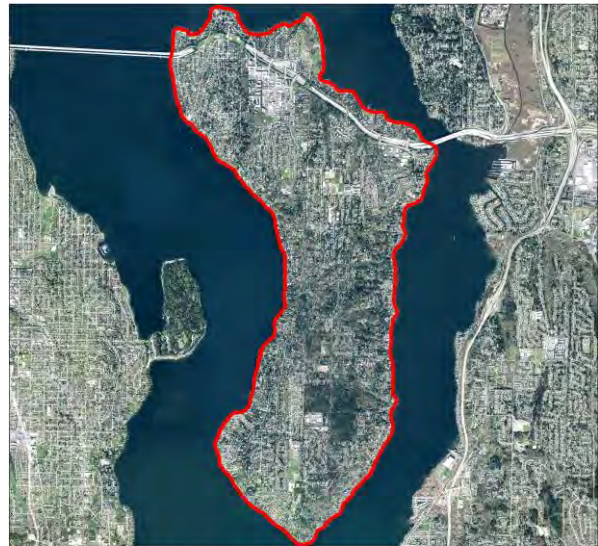
75

2021-2022 Project Budget

\$65,000

Department

Public Works



WU0115 Water Model Updates/Fire Flow Analysis



Project Description

Update the hydraulic model of the water system every two years to incorporate improvements and changes to the water system through the completion of capital improvement projects, private development, and maintenance activities. In addition to the hydraulic modeling and fire flow analysis for system-wide planning, new modeling tasks will be performed to identify water system operations strategies.

Project Justification

Maintaining current information in the water model is essential for planning water system improvements and fire flow analysis. Public water system improvements and private development both rely on up to date model data to provide design criteria for construction. The water model becomes out of date as improvements and changes are made to the water system.

Simulating system operating conditions in extended period of time can also provide 'tools' for system operators to strategize and maximize the efficiency of system performance.

Expenditures	2021	2022	2023	2024	2025	2026
WU0115	\$15,000	\$50,000	\$15,000	\$50,000	\$15,000	\$50,000

Capital Improvement Program

RRA, ERP Updates, and Water System Plan Updates

Project ID
WU0116

Program Plan
CRP

Target Completion Date
Q4 2022

2021 Labor Hour Estimate
220

2022 Labor Hour Estimate
150

2021-2022 Project Budget
\$300,000

Department
Public Works



Project Description

Risk & Resilience Assessment (RRA) and Emergency Response Plan (ERP) Updates in 2021. Tasks involve evaluation of the water system’s assets, operations and maintenance activities, and potential threats to update the 2004 ERP to meet current needs.

Water System Plan (WSP) Updates in 2021 and 2022. Tasks include re-examining policies, criteria, system operations and capacities, water use data, and projected future water demand to update the 2015 WSP. The ERP is an important key component in WSP.

Project Justification

America's Water Infrastructure Act of 2018 (AWIA) became law in October 2018. It expands the 2002 Bioterrorism Act which main focus was malevolent acts of terrorism or intentional threats. The 'original' 2004 ERP was developed in compliance of the 2002 Bioterrorism Act. Under the new AWIA, water utilities are required to conduct RRAs and to update ERPs to include all-hazards approach such as cyber and natural hazards as well as malevolent threats. As part of the risk assessment, all existing pressure reducing valves (PRVs) will be evaluated/assessed for potential future system wide safety upgrade.

Update the Water System Plan every 6 years as required by WAC-246-490. The upcoming update is scheduled to begin in 2021. The 2015 Water System Plan was approved by the Washington State Department of Health (DOH) in July 2016 and adopted by City Council in October of 2016.

Expenditures	2021	2022	2023	2024	2025	2026
WU0116	\$200,000	\$100,000	\$0	\$0	\$0	\$0

Meter Replacement Implementation

Project ID

WU0117

Program Plan

CRP

Target Completion Date

Q4 2022

2021 Labor Hour Estimate

475

2022 Labor Hour Estimate

350

2021-2022 Project Budget

\$4,100,000

Department

Public Works



WU0117 Meter Replacement Implementation 

Project Description

To carry out the Island-wide meter replacement program with selected meter type/style and technology that best support the City's goal of reducing water losses and effectively managing its water resources. The plan also involves the integration of the Advanced Metering Infrastructure (AMI) technologies with City's proposed SCADA system in support of future system analysis and operations.

Project Justification

Water meter accuracy is the greatest at the beginning of its life and degrades with age and use. The water system currently has a wide array of water meter manufactures, type, and reading technologies of varying age. A large number of the existing meters serving City's 7,600 customers are outdated and malfunctioning, contributing to high, unaccountable water loss and lost revenue. Older water meters manufactured pre-2013 do not meet lead free requirements and should be replaced.

Expenditures	2021	2022	2023	2024	2025	2026
WU0117	\$2,050,000	\$2,050,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Reservoir Generator Replacement

Project ID

WU0119

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



WU0119 Reservoir Generator Replacement



Project Description

Replace generator which serves as back up power source for reservoir booster pump station, emergency well at Rotary Park and booster chlorination station. This project relocates the generator outside the pump station building in a self-contained enclosure that will ultimately provide more efficient operations and reduce noise output when the system is running.

Project Justification

Seventy-five percent of the water system relies on water being pumped to provide water system pressure. In the event of a power outage, the pumps are provided enough power to sustain system pressure by an emergency back-up power generator. The existing generator is approaching the end of its useful life and availability of spare parts is limited.

Expenditures	2021	2022	2023	2024	2025	2026
WU0119	\$240,000	\$120,000	\$0	\$0	\$0	\$0

Capital Improvement Program

Mercerwood - 94th Ave SE and Crestwood Pl Water System Improvements

Project ID

WU0120

Program Plan

CRP

Target Completion Date

2024

2021 Labor Hour Estimate

0

2022 Labor Hour Estimate

0

2021-2022 Project Budget

\$0

Department

Public Works



Project Description

Replacement of 2,700 linear feet (LF) of 4-inch and 6-inch AC watermains. The aging AC water mains will be replaced with ductile iron(DI) water mains. Fire hydrants, water services, and other water system components will be replaced as well. Sites located at 94th Ave SE, Crestwood Pl, and SE 43rd Street.

Project Justification

Improving the water system is necessary to ensure cost-effective distribution of safe drinking water and adequate fire protection for the neighborhood. The existing AC water mains are aging and have experienced breaks in the past.

Expenditures	2021	2022	2023	2024	2025	2026
WU0120	\$0	\$0	\$229,000	\$1,456,000	\$0	\$0

Capital Improvement Program

Solutions for Water System Deficiencies - Consultant Services

Project ID
 WU0124
Program Plan
 CRP
Target Completion Date
 Q4 2021
2021 Labor Hour Estimate
 75
2022 Labor Hour Estimate
 0
2021-2022 Project Budget
 \$120,000
Department
 Public Works



Project Description

Some of the system deficiencies identified in water modeling results involve more than water main related issues. This project is to utilize engineering consulting services to explore the causes of these deficiencies and to provide solutions for improvements.

The goal is to complete a pre-design plan, with options to solve the deficiencies. The plan will be ready for operation strategy changes immediately, for engineering design and construction for system improvements in the next biennium budgeting years, or a combination of both.

Project Justification

To address the concern identified in Department of Health's 2019 Sanitary Survey report regarding lower than acceptable pressure during fire flow in a couple of areas, the focus of this project is to mitigate the potential health hazards by finding the best solutions to provide adequate water pressures in these challenging areas.

Expenditures	2021	2022	2023	2024	2025	2026
WU0124	\$120,000	\$0	\$0	\$0	\$0	\$0

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
PROJECTS PROPOSED IN 2021-2022						
GB0100-CITY HALL BUILDING REPAIRS	207	400	548	466	302	234
343-CAPITAL IMPROVEMENT FUND	207	400	548	466	302	234
GB0101-PUBLIC WORKS BUILDING REPAIRS	261	65	83	108	67	71
343-CAPITAL IMPROVEMENT FUND	65	16	21	27	17	18
402-WATER FUND	79	20	25	32	20	21
426-SEWER FUND	79	20	25	32	20	21
432-STORM & SURFACE WATER FUND	39	10	12	16	10	11
GB0102-MICEC BUILDING REPAIRS	263	113	327	199	151	148
343-CAPITAL IMPROVEMENT FUND	263	113	327	199	151	148
GB0103-FS91 AND FS92 BUILDING REPAIRS	105	124	130	125	128	380
343-CAPITAL IMPROVEMENT FUND	105	124	130	125	128	380
GB0104-LUTHER BURBANK ADMINISTRATION REPAIRS	131	64	125	72	74	54
343-CAPITAL IMPROVEMENT FUND	131	64	125	72	74	54
GB0105-THRIFT SHOP BUILDING REPAIRS	43	24	133	67	41	44
343-CAPITAL IMPROVEMENT FUND	43	24	133	67	41	44
GB0107-HONEYWELL SITE REMEDIATION	200	150	0	0	0	0
001-GENERAL FUND	174	131	0	0	0	0
402-WATER FUND	12	9	0	0	0	0
426-SEWER FUND	6	5	0	0	0	0
432-STORM & SURFACE WATER FUND	8	6	0	0	0	0
GB0108-FS91 SITE CHARACTERIZATION & FUEL TANK EVALUATION	100	0	0	0	0	0
001-GENERAL FUND	74	0	0	0	0	0
402-WATER FUND	12	0	0	0	0	0
426-SEWER FUND	6	0	0	0	0	0
432-STORM & SURFACE WATER FUND	8	0	0	0	0	0
GE0101-TRAINING TOOLS AND EQUIPMENT	39	41	0	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	39	41	0	0	0	0
GE0107-FLEET REPLACEMENTS	906	733	531	607	794	944
503-EQUIPMENT RENTAL FUND	906	733	531	607	794	944
GT0101-CITY INFORMATION VIA WEB BASED GIS	39	0	0	0	40	0
345-TECHNOLOGY & EQUIPMENT FUND	39	0	0	0	40	0
GT0102-ARCGIS ENTERPRISE DEPLOYMENT WITH GEOEVENT SERVER	34	0	0	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	34	0	0	0	0	0
GT0104-MOBILE ASSET DATA COLLECTION	0	78	0	0	78	0
104-STREET FUND	0	78	0	0	78	0
GT0106-ENTERPRISE RESOURCE PLANNING SYSTEM SCOPING	75	0	0	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	75	0	0	0	0	0
GT0107-PUBLIC SAFETY DISTRIBUTED ANTENNA SYSTEM - CITY HALL REPLACEMENT	80	0	0	0	0	0
503-EQUIPMENT RENTAL FUND	80	0	0	0	0	0
GT0108-TECHNOLOGY EQUIPMENT REPLACEMENT	113	200	123	199	150	200
520-COMPUTER REPLACEMENT FUND	113	200	123	199	150	200
GT0109-FIBER CONDUIT INSTALLATION	75	75	90	90	0	0
343-CAPITAL IMPROVEMENT FUND	75	75	90	90	0	0

Capital Improvement Program

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
GT0110-PERMITTING SYSTEM UPGRADE/REPLACEMENT	0	95	40	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	0	95	40	0	0	0
PA0100-OPEN SPACE MANAGEMENT	338	338	338	338	338	338
343-CAPITAL IMPROVEMENT FUND	338	338	338	338	338	338
PA0101-RECURRING PARKS MINOR CAPITAL	140	140	140	140	140	140
343-CAPITAL IMPROVEMENT FUND	140	140	140	140	140	140
PA0103-TRAIL RENOVATION AND PROPERTY MANAGEMENT	59	61	63	65	68	70
343-CAPITAL IMPROVEMENT FUND	59	61	63	65	68	70
PA0109-AUBREY DAVIS PARK TRAIL SAFETY IMPROVEMENTS	200	315	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	200	315	0	0	0	0
PA0111-AUBREY DAVIS PARK VEGETATION MANAGEMENT	37	65	115	115	115	115
343-CAPITAL IMPROVEMENT FUND	37	65	115	115	115	115
PA0117-ISLAND CREST PARK NORTH INFIELD AND MINOR IMPROVEMENTS	0	381	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	0	381	0	0	0	0
PA0118-LINCOLN LANDING WATERCOURSE RENOVATION	300	301	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	300	301	0	0	0	0
PA0122-LUTHER BURBANK DOCK REPAIR AND RECONFIGURATION	171	48	442	2,975	0	0
343-CAPITAL IMPROVEMENT FUND	171	48	442	2,975	0	0
PA0123-LUTHER BURBANK MINOR CAPITAL LEVY	95	104	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	95	104	0	0	0	0
PA0124-LUTHER BURBANK BOILER BUILDING ROOF AND SEISMIC RETROFIT	0	365	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	0	365	0	0	0	0
PA0125-MERCERDALE PLAYGROUND REPLACEMENT	490	0	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	490	0	0	0	0	0
PA0129-PIONEER PARK/ENGSTROM OS FOREST MANAGEMENT	191	191	191	191	191	191
343-CAPITAL IMPROVEMENT FUND	191	191	191	191	191	191
PA0133-MICEC TECHNOLOGY AND EQUIPMENT REPLACEMENT	21	21	61	61	61	61
345-TECHNOLOGY & EQUIPMENT FUND	21	21	61	61	61	61
PA0135-TOWN CENTER MICRO PRECINCT PLACEHOLDER	50	0	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	50	0	0	0	0	0
PA0136-LUTHER BURBANK SOUTH SHORELINE RESTORATION	47	660	0	0	0	0
343-CAPITAL IMPROVEMENT FUND	47	660	0	0	0	0
SP0100-RESIDENTIAL STREET RESURFACING	900	900	900	900	900	900
104-STREET FUND	670	670	670	670	670	670
402-WATER FUND	105	105	105	105	105	105
426-SEWER FUND	15	15	15	15	15	15
432-STORM & SURFACE WATER FUND	110	110	110	110	110	110
SP0101-ARTERIAL PRESERVATION PROGRAM	75	75	75	75	75	75
104-STREET FUND	65	65	65	65	65	65
402-WATER FUND	2	2	2	2	2	2
426-SEWER FUND	5	5	5	5	5	5
432-STORM & SURFACE WATER FUND	3	3	3	3	3	3
SP0102-EAST MERCER WAY OVERLAY (SE 53RD PLACE TO SE 68TH STREET)	1,185	0	0	0	0	0
104-STREET FUND	880	0	0	0	0	0
402-WATER FUND	175	0	0	0	0	0
426-SEWER FUND	40	0	0	0	0	0
432-STORM & SURFACE WATER FUND	90	0	0	0	0	0

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
SP0103-SE 68TH STREET AND SE 70TH PLACE OVERLAY (ICW TO EMW)	0	680	0	0	0	0
104-STREET FUND	0	525	0	0	0	0
402-WATER FUND	0	50	0	0	0	0
426-SEWER FUND	0	5	0	0	0	0
432-STORM & SURFACE WATER FUND	0	100	0	0	0	0
SP0114-ROADSIDE SHLDR IMPROVEMENTS - WMW PHASE 3 (SE 70 TO SE 65)	0	485	0	0	0	0
104-STREET FUND	0	233	0	0	0	0
402-WATER FUND	0	75	0	0	0	0
426-SEWER FUND	0	2	0	0	0	0
432-STORM & SURFACE WATER FUND	0	175	0	0	0	0
SP0118-ADA COMPLIANCE PLAN IMPLEMENTATION	0	100	0	100	0	100
104-STREET FUND	0	100	0	100	0	100
SP0119-N-S BIKE ROUTE COMPLETION ICW (90TH AVE SE - SE 63RD ST)	0	50	50	200	0	0
104-STREET FUND	0	50	50	200	0	0
SP0120-SUNSET HWY/77TH AVE SE IMPROVEMENTS	100	600	0	0	0	0
104-STREET FUND	100	600	0	0	0	0
SP0121-MID-BLOCK CROSSWALK 76TH AVE SE B/T SE 24TH AND SE 27TH	65	204	0	0	0	0
104-STREET FUND	50	204	0	0	0	0
402-WATER FUND	12	0	0	0	0	0
432-STORM & SURFACE WATER FUND	3	0	0	0	0	0
SP0122-MINOR CAPITAL - TRAFFIC OPERATIONS IMPROVEMENTS	100	0	100	0	100	0
104-STREET FUND	100	0	100	0	100	0
SP0125-PBF PLAN IMPLEMENTATION	50	50	50	50	50	50
104-STREET FUND	50	50	50	50	50	50
SU0100-EMERGENCY SEWER REPAIRS	300	300	300	300	300	300
426-SEWER FUND	300	300	300	300	300	300
SU0102-PUMP STATION R&R IMPROVEMENTS	200	0	750	0	750	0
426-SEWER FUND	200	0	750	0	750	0
SU0103-EASEMENT, ACCESS CODES AND STANDARDS REVIEW	150	150	0	0	0	0
426-SEWER FUND	150	150	0	0	0	0
SU0108-COMPREHENSIVE PIPELINE R&R PROGRAM	500	500	500	500	500	500
426-SEWER FUND	500	500	500	500	500	500
SU0109-SEWER SYSTEM GENERATOR REPLACEMENT	150	150	0	0	0	0
426-SEWER FUND	150	150	0	0	0	0
SU0110-PUMP STATION ACCESSIBILITY IMPROVEMENTS	100	100	0	100	0	100
426-SEWER FUND	100	100	0	100	0	100
SU0113-SCADA SYSTEM REPLACEMENT (SEWER)	675	975	1,275	0	0	0
426-SEWER FUND	675	975	1,275	0	0	0
SW0100-SUB BASIN 42.1 AND 42.1A WATERCOURSE STABILIZATION	390	0	0	0	0	0
432-STORM & SURFACE WATER FUND	390	0	0	0	0	0
SW0101-SUB BASIN 23.2 WATERCOURSE STABILIZATION	202	0	0	0	0	0
432-STORM & SURFACE WATER FUND	202	0	0	0	0	0
SW0102-SUB BASIN 45B.1 WATERCOURSE STABILIZATION	36	189	0	0	0	0
432-STORM & SURFACE WATER FUND	36	189	0	0	0	0
SW0103-SUB BASIN 27A.10 WATERCOURSE STABILIZATION	22	79	0	0	0	0
432-STORM & SURFACE WATER FUND	22	79	0	0	0	0

Capital Improvement Program

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
SW0104-SUB BASIN 22.1 WATERCOURSE STABILIZATION	0	24	139	0	0	0
432-STORM & SURFACE WATER FUND	0	24	139	0	0	0
SW0105-SUB BASIN 50B.4 (A & E) WATERCOURSE STABILIZATION	0	18	46	0	0	0
432-STORM & SURFACE WATER FUND	0	18	46	0	0	0
SW0106-SUB BASIN 25B.2 WATERCOURSE STABILIZATION	0	47	145	0	0	0
432-STORM & SURFACE WATER FUND	0	47	145	0	0	0
SW0119-CONVEYANCE SYSTEM ASSESSMENTS	112	50	112	50	112	50
432-STORM & SURFACE WATER FUND	112	50	112	50	112	50
SW0120-EAST & WEST MERCER WAY TRENCHLESS CULVERT REPLACEMENTS	113	504	0	0	0	0
432-STORM & SURFACE WATER FUND	113	504	0	0	0	0
SW0126-EMERGENCY STORMWATER CONVEYANCE REPAIRS	50	50	0	0	0	0
432-STORM & SURFACE WATER FUND	50	50	0	0	0	0
WU0100-EMERGENCY WATER SYSTEM REPAIRS	150	150	150	150	150	150
402-WATER FUND	150	150	150	150	150	150
WU0101-BOOSTER CHLORINATION STATION	995	2,510	0	0	0	0
402-WATER FUND	995	2,510	0	0	0	0
WU0102-SCADA SYSTEM REPLACEMENT (WATER)	675	975	1,275	0	0	0
402-WATER FUND	675	975	1,275	0	0	0
WU0103-WATER RESERVOIR IMPROVEMENTS	375	1,735	1,715	0	0	0
402-WATER FUND	375	1,735	1,715	0	0	0
WU0106-MADRONA CREST EAST ADDITION WATER SYSTEM IMPROVEMENTS	350	2,448	0	0	0	0
402-WATER FUND	350	2,448	0	0	0	0
WU0109-WATER SYSTEM IMPROVEMENTS - 60 AVE SE, B/T SE 27, SE 32, AND 62 AVE	0	229	1,456	0	0	0
402-WATER FUND	0	229	1,456	0	0	0
WU0110-WATER SYSTEM CONSTRUCTION IMPROV - 82 AVE SE, N OF SE 24TH ST	1,087	0	0	0	0	0
402-WATER FUND	1,087	0	0	0	0	0
WU0112-WATER SYSTEM COMPONENTS REPLACEMENTS	35	35	35	35	35	35
402-WATER FUND	35	35	35	35	35	35
WU0115-WATER MODEL UPDATES/FIRE FLOW ANALYSIS	15	50	15	50	15	50
402-WATER FUND	15	50	15	50	15	50
WU0116-RRA, ERP UPDATES, AND WATER SYSTEM PLAN UPDATES	200	100	0	0	0	0
402-WATER FUND	200	100	0	0	0	0
WU0117-METER REPLACEMENT IMPLEMENTATION	2,050	2,050	0	0	0	0
402-WATER FUND	2,050	2,050	0	0	0	0
WU0119-RESERVOIR GENERATOR REPLACEMENT	240	120	0	0	0	0
402-WATER FUND	240	120	0	0	0	0
WU0124-SOLUTIONS FOR WATER SYSTEM DEFICIENCIES - CONSULTANT SERVICES	120	0	0	0	0	0
402-WATER FUND	120	0	0	0	0	0
TOTAL (IN THOUSANDS)	\$16,576	\$21,831	\$12,569	\$8,328	\$5,725	\$5,301

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
PROJECTS NOT PROPOSED IN 2021-2022						
GE0100-FIRE APPARATUS REPLACEMENTS - AID CAR IN 2022	0	0	0	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	0
GE0102-PURCHASE AUTOMATED EXTERNAL DEFIBRILLATORS	0	0	0	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	0
GE0103-PURCHASE NEW MIDI PUMPER - 2024	0	0	0	440	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	440	0	0
GE0104-PURCHASE NEW FIRE COMMAND VEHICLE 2024	0	0	0	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	0
GE0105-REPLACE FIRE STAFF CARS - 2026	0	0	0	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	0
GE0106-PURCHASE NEW MAXI PUMPER 2024	0	0	0	800	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	800	0	0
GT0103-ARCGIS URBAN DEPLOYMENT	0	0	0	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	0	0	0	0	0	0
GT0105-HIGH ACCURACY ORTHOPHOTOS	0	0	35	0	0	35
NOT PROPOSED IN FY21-FY22	0	0	35	0	0	35
PA0104-LAKE WATER IRRIGATION DEVELOPMENT	0	0	75	20	0	0
NOT PROPOSED IN FY21-FY22	0	0	75	20	0	0
PA0105-AUBREY DAVIS PARK LID A PLAYGROUND REPLACEMENT	0	0	0	0	0	20
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	20
PA0106-AUBREY DAVIS PARK LID B PLAYGROUND REPLACEMENT	0	0	200	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	200	0	0	0
PA0107-ADP OUTDOOR SCULPTURE GALLERY IMPROVEMENTS	0	0	28	60	168	0
NOT PROPOSED IN FY21-FY22	0	0	28	60	168	0
PA0108-AUBREY DAVIS PARK LUTHER LID CONNECTOR TRAIL	0	0	52	240	0	0
NOT PROPOSED IN FY21-FY22	0	0	52	240	0	0
PA0110-AUBREY DAVIS PARK LID A BACKSTOP LIFECYCLE REPLACEMENT	0	0	0	0	100	770
NOT PROPOSED IN FY21-FY22	0	0	0	0	100	770
PA0112-CLARKE BEACH SHORELINE REPAIR/RESTORATION	0	0	85	25	0	1,000
NOT PROPOSED IN FY21-FY22	0	0	85	25	0	1,000
PA0113-CLARKE BEACH RESTROOM FIXTURE REPLACEMENT	0	0	53	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	53	0	0	0
PA0114-GROVELAND BEACH BULKHEAD REPLACEMENT AND BEACH UPGRADE	0	0	0	100	20	2,000
NOT PROPOSED IN FY21-FY22	0	0	0	100	20	2,000
PA0115-HOLLERBACH SE 45TH TRAIL SYSTEM	0	0	85	377	0	0
NOT PROPOSED IN FY21-FY22	0	0	85	377	0	0
PA0116-ICP SOUTH FIELD LIGHTS & BACKSTOP REPLACEMENT AND UPGRADE	0	0	0	0	90	1,010
NOT PROPOSED IN FY21-FY22	0	0	0	0	90	1,010
PA0119-LUTHER BURBANK TENNIS COURT RENOVATION	0	0	85	353	0	0
NOT PROPOSED IN FY21-FY22	0	0	85	353	0	0
PA0120-LUTHER BURBANK PARK PARKING LOT LIGHTING	0	0	123	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	123	0	0	0

Capital Improvement Program

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
PA0121-LUTHER BURBANK PARK SWIM BEACH RENOVATION	0	0	0	117	30	875
NOT PROPOSED IN FY21-FY22	0	0	0	117	30	875
PA0126-MERCERDALE PARK MASTER PLAN	0	0	90	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	90	0	0	0
PA0127-MICEC ANNEX FACILITIES PLAN	0	0	0	90	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	90	0	0
PA0128-PIONEER PARK BIKE TRAIL PATH LIGHTING	0	0	100	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	100	0	0	0
PA0130-ROANOKE PLAYGROUND REPLACEMENT	0	0	28	176	0	0
NOT PROPOSED IN FY21-FY22	0	0	28	176	0	0
PA0131-SOUTH MERCER PLAYFIELDS BALLFIELD BACKSTOP UPGRADE	0	0	995	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	995	0	0	0
PA0132-UPPER LUTHER RAVINE TRAIL PHASE 2	0	0	59	150	0	0
NOT PROPOSED IN FY21-FY22	0	0	59	150	0	0
PA0134-AUBREY DAVIS PARK LID C FIELD DRAINAGE RENOVATION	0	0	0	990	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	990	0	0
SP0104-NORTH MERCER WAY OVERLAY (7500 BLOCK TO ROANOKE WAY)	0	0	557	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	557	0	0	0
SP0105-WEST MERCER WAY RESURFACING (SE 56TH TO EMW)	0	0	545	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	545	0	0	0
SP0106-GALLAGHER HILL ROAD OVERLAY (SE 36TH TO SE 40TH STREETS)	0	0	0	0	534	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	534	0
SP0107-SE 40TH STREET OVERLAY (88TH AVE SE TO GALLAGHER HILL RD)	0	0	0	200	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	200	0	0
SP0108-SE 36TH STREET OVERLAY (GALLAGHER HILL RD TO EMW)	0	0	0	0	548	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	548	0
SP0109-NORTH MERCER WAY OVERLAY (8400 BLOCK TO SE 35TH STREET)	0	0	0	0	0	776
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	776
SP0110-SE 27TH SREET OVERLAY (76TH AVE SE TO 80TH AVE SE)	0	0	0	548	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	548	0	0
SP0111-80TH AVE SE SIDEWALK IMPROVEMENTS (SE 28TH TO SE 32ND STREET)	0	0	1,080	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	1,080	0	0	0
SP0112-78TH AVE SE SIDEWALK IMPROVEMENTS (SE 32ND TO SE 34TH STREET)	0	0	712	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	712	0	0	0
SP0113-ROADSIDE SHLDR IMPROVEMENTS - EMW PHASE 11 (SE 79 ST TO AVALON DR)	0	0	0	475	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	475	0	0
SP0115-GALLAGHER HILL SIDEWALK IMPROVEMENTS (SE 36 TO SE 40 ST)	0	0	0	0	474	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	474	0
SP0116-SE 40TH STREET SIDEWALK IMPROVEMENTS (GALLAGHER HILL TO 93RD AVE)	0	0	0	920	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	920	0	0
SP0117-92ND AVE SE SIDEWALK IMPROVEMENTS (SE 40TH TO SE 41ST STREETS)	0	0	0	0	0	540
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	540
SP0123-NORTH MERCER WAY - MI P&R FRONTAGE IMPROVEMENTS	0	0	0	1,177	0	0
NOT PROPOSED IN FY21-FY22	0	0	0	1,177	0	0

FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
SU0104-PUMP STATION & HGMH FLOW MONITORING	0	0	300	300	1,000	0
NOT PROPOSED IN FY21-FY22	0	0	300	300	1,000	0
SU0105-PIPE FLOW MONITORING	0	0	280	280	0	150
NOT PROPOSED IN FY21-FY22	0	0	280	280	0	150
SU0106-LAKE LINE LOCATING AND MARKING	0	0	950	1,025	925	0
NOT PROPOSED IN FY21-FY22	0	0	950	1,025	925	0
SU0107-LAKE LINE CONDITION ASSESSMENT	0	0	0	0	2,000	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	2,000	0
SU0111-COMPREHENSIVE HYDRAULIC MODEL DEVELOPMENT	0	0	0	0	0	250
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	250
SU0112-COMPREHENSIVE I/I EVALUATION	0	0	0	0	0	150
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	150
SW0107-SUB BASIN 47.4 AND SUB BASIN 10.4 WATERCOURSE STABILIZATION	0	0	56	293	0	0
NOT PROPOSED IN FY21-FY22	0	0	56	293	0	0
SW0109-SUB BASIN 24A.1 WATERCOURSE STABILIZATION	0	0	17	57	0	0
NOT PROPOSED IN FY21-FY22	0	0	17	57	0	0
SW0110-SUB BASIN 39A.2 WATERCOURSE STABILIZATION	0	0	16	40	0	0
NOT PROPOSED IN FY21-FY22	0	0	16	40	0	0
SW0111-SUB BASIN 46A.3 WATERCOURSE STABILIZATION	0	0	49	372	0	0
NOT PROPOSED IN FY21-FY22	0	0	49	372	0	0
SW0112-WATERCOURSE STABILIZATION - SUB BASIN 34.1	0	0	0	24	92	0
NOT PROPOSED IN FY21-FY22	0	0	0	24	92	0
SW0113-WATERCOURSE STABILIZATION - SUB BASIN 45B.4	0	0	0	28	84	0
NOT PROPOSED IN FY21-FY22	0	0	0	28	84	0
SW0114-WATERCOURSE STABILIZATION - SUB BASIN 29.3	0	0	0	45	117	0
NOT PROPOSED IN FY21-FY22	0	0	0	45	117	0
SW0115-WATERCOURSE STABILIZATION - SUB-BASIN 42.2, 42.3, 42.8, 42.8A	0	0	0	0	87	334
NOT PROPOSED IN FY21-FY22	0	0	0	0	87	334
SW0116-WATERCOURSE STABILIZATION - SUB BASIN 44B.3	0	0	0	0	29	68
NOT PROPOSED IN FY21-FY22	0	0	0	0	29	68
SW0117-WATERCOURSE STABILIZATION - SUB-BASIN 32B.1 AND 32.2	0	0	0	0	48	150
NOT PROPOSED IN FY21-FY22	0	0	0	0	48	150
SW0118-WATERCOURSE MINOR REPAIRS AND MAINTENANCE	0	0	0	0	100	0
NOT PROPOSED IN FY21-FY22	0	0	0	0	100	0
SW0121-CONVEYANCE SYSTEM IMPROVEMENT	0	0	300	300	300	300
NOT PROPOSED IN FY21-FY22	0	0	300	300	300	300
WU0104-CONSTRUCTION IMPROVEMENTS - 82 AVE & FOREST AVE	0	0	145	810	0	0
NOT PROPOSED IN FY21-FY22	0	0	145	810	0	0
WU0105-DESIGN IMPROVEMENTS - 74 AVE, SE 29 ST, AND 73 AVE	0	0	0	0	0	188
NOT PROPOSED IN FY21-FY22	0	0	0	0	0	188
WU0107-TOWN CENTER WATER SYSTEM IMPROVEMENTS - 77 & 78 AVE SE	0	0	0	204	950	0
NOT PROPOSED IN FY21-FY22	0	0	0	204	950	0

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FUNDING BY CAPITAL PROJECTS 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
WU0108-WATER SYSTEM IMPROVEMENTS - AVALON DR/ BENOTHO PLACE	0	0	0	0	279	1,775
NOT PROPOSED IN FY21-FY22	0	0	0	0	279	1,775
WU0111-HYDRANT REPLACEMENT CONTRACT WORK	0	0	250	0	250	0
NOT PROPOSED IN FY21-FY22	0	0	250	0	250	0
WU0114-ABANDON 1955 12" CAST IRON WATER MAIN (RESERVOIR TO FIRST HILL)	0	0	320	0	0	0
NOT PROPOSED IN FY21-FY22	0	0	320	0	0	0
WU0120-MERCERWOOD & CRESTWOOD PL WATER SYSTEM IMPROVEMENTS	0	0	229	1,456	0	0
NOT PROPOSED IN FY21-FY22	0	0	229	1,456	0	0
SUBTOTAL (IN THOUSANDS)	\$0	\$0	\$7,898	\$12,490	\$8,225	\$10,391
TOTAL (IN THOUSANDS)	\$16,576	\$21,831	\$20,467	\$20,818	\$13,949	\$15,691

CAPITAL PROJECTS BY FUND 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
001-GENERAL FUND	\$248	\$131	\$0	\$0	\$0	\$0
GB0107-HONEYWELL SITE REMEDIATION	174	131	0	0	0	0
GB0108-FS91 SITE CHARACTERIZATION & FUEL TANK EVALUATION	74	0	0	0	0	0
104-STREET FUND	\$1,915	\$2,575	\$935	\$1,085	\$963	\$885
GT0104-MOBILE ASSET DATA COLLECTION	0	78	0	0	78	0
SP0100-RESIDENTIAL STREET RESURFACING	670	670	670	670	670	670
SP0101-ARTERIAL PRESERVATION PROGRAM	65	65	65	65	65	65
SP0102-EAST MERCER WAY OVERLAY (SE 53RD PLACE TO SE 68TH STREET)	880	0	0	0	0	0
SP0103-SE 68TH STREET AND SE 70TH PLACE OVERLAY (ICW TO EMW)	0	525	0	0	0	0
SP0114-ROADSIDE SHOULDER IMPROVEMENTS - WMW PHASE 3 (SE 70TH TO SE 65TH STREETS)	0	233	0	0	0	0
SP0118-ADA COMPLIANCE PLAN IMPLEMENTATION	0	100	0	100	0	100
SP0119-N-S BIKE ROUTE COMPLETION ICW (90TH AVE SE - SE 63RD ST)	0	50	50	200	0	0
SP0120-SUNSET HWY/77TH AVE SE IMPROVEMENTS	100	600	0	0	0	0
SP0121-MID-BLOCK CROSSWALK 76TH AVE SE BETWEEN SE 24TH AND SE 27TH	50	204	0	0	0	0
SP0122-MINOR CAPITAL - TRAFFIC OPERATIONS IMPROVEMENTS	100	0	100	0	100	0
SP0125-PBF PLAN IMPLEMENTATION	50	50	50	50	50	50
343-CAPITAL IMPROVEMENT FUND	\$3,007	\$3,785	\$2,663	\$4,870	\$1,565	\$1,733
GB0100-CITY HALL BUILDING REPAIRS	207	400	548	466	302	234
GB0101-PUBLIC WORKS BUILDING REPAIRS	65	16	21	27	17	18
GB0102-MICEC BUILDING REPAIRS	263	113	327	199	151	148
GB0103-FS91 AND FS92 BUILDING REPAIRS	105	124	130	125	128	380
GB0104-LUTHER BURBANK ADMINISTRATION REPAIRS	131	64	125	72	74	54
GB0105-THRIFT SHOP BUILDING REPAIRS	43	24	133	67	41	44
GT0109-FIBER CONDUIT INSTALLATION	75	75	90	90	0	0
PA0100-OPEN SPACE MANAGEMENT	338	338	338	338	338	338
PA0101-RECURRING PARKS MINOR CAPITAL	140	140	140	140	140	140
PA0103-TRAIL RENOVATION AND PROPERTY MANAGEMENT	59	61	63	65	68	70
PA0109-AUBREY DAVIS PARK TRAIL SAFETY IMPROVEMENTS	200	315	0	0	0	0
PA0111-AUBREY DAVIS PARK VEGETATION MANAGEMENT	37	65	115	115	115	115
PA0117-ISLAND CREST PARK NORTH INFIELD AND MINOR IMPROVEMENTS	0	381	0	0	0	0
PA0118-LINCOLN LANDING WATERCOURSE RENOVATION	300	301	0	0	0	0
PA0122-LUTHER BURBANK DOCK REPAIR AND RECONFIGURATION	171	48	442	2,975	0	0
PA0123-LUTHER BURBANK MINOR CAPITAL LEVY	95	104	0	0	0	0
PA0124-LUTHER BURBANK BOILER BUILDING ROOF AND SEISMIC RETROFIT	0	365	0	0	0	0
PA0125-MERCERDALE PLAYGROUND REPLACEMENT	490	0	0	0	0	0
PA0129-PIONEER PARK/ENGSTROM OS FOREST MANAGEMENT	191	191	191	191	191	191
PA0135-TOWN CENTER MICRO PRECINCT PLACEHOLDER	50	0	0	0	0	0
PA0136-LUTHER BURBANK SOUTH SHORELINE RESTORATION	47	660	0	0	0	0
345-TECHNOLOGY & EQUIPMENT FUND	\$208	\$157	\$101	\$61	\$101	\$61
GE0101-TRAINING TOOLS AND EQUIPMENT	39	41	0	0	0	0
GT0101-CITY INFORMATION VIA WEB BASED GIS	39	0	0	0	40	0
GT0102-ARCGIS ENTERPRISE DEPLOYMENT WITH GEOEVENT SERVER	34	0	0	0	0	0
GT0106-ENTERPRISE RESOURCE PLANNING SYSTEM PURCHASE	75	0	0	0	0	0
GT0110-PERMITTING SYSTEM UPGRADE/REPLACEMENT	0	95	40	0	0	0
PA0133-MICEC TECHNOLOGY AND EQUIPMENT REPLACEMENT	21	21	61	61	61	61
402-WATER FUND	\$6,689	\$10,663	\$4,778	\$374	\$327	\$363
GB0101-PUBLIC WORKS BUILDING REPAIRS	79	20	25	32	20	21
GB0107-HONEYWELL SITE REMEDIATION	12	9	0	0	0	0
GB0108-FS91 SITE CHARACTERIZATION & FUEL TANK EVALUATION	12	0	0	0	0	0
SP0100-RESIDENTIAL STREET RESURFACING	105	105	105	105	105	105
SP0101-ARTERIAL PRESERVATION PROGRAM	2	2	2	2	2	2
SP0102-EAST MERCER WAY OVERLAY (SE 53RD PLACE TO SE 68TH STREET)	175	0	0	0	0	0
SP0103-SE 68TH STREET AND SE 70TH PLACE OVERLAY (ICW TO EMW)	0	50	0	0	0	0
SP0114-ROADSIDE SHOULDER IMPROVEMENTS - WMW PHASE 3 (SE 70TH TO SE 65TH STREETS)	0	75	0	0	0	0
SP0121-MID-BLOCK CROSSWALK 76TH AVE SE BETWEEN SE 24TH AND SE 27TH	12	0	0	0	0	0
WU0100-EMERGENCY WATER SYSTEM REPAIRS	150	150	150	150	150	150
WU0101-BOOSTER CHLORINATION STATION	995	2,510	0	0	0	0
WU0102-SCADA SYSTEM REPLACEMENT (WATER)	675	975	1,275	0	0	0
WU0103-WATER RESERVOIR IMPROVEMENTS	375	1,735	1,715	0	0	0
WU0106-MADRONA CREST EAST ADDITION WATER SYSTEM IMPROVEMENTS	350	2,448	0	0	0	0
WU0109-WATER SYSTEM IMPROVEMENTS - 60 AVE SE, BETWEEN SE 27, SE 32, AND 62 AVE	0	229	1,456	0	0	0
WU0110-WATER SYSTEM CONSTRUCTION IMPROVEMENTS - 82 AVE SE, N OF SE 24TH ST	1,087	0	0	0	0	0
WU0112-WATER SYSTEM COMPONENTS REPLACEMENTS	35	35	35	35	35	35
WU0115-WATER MODEL UPDATES/FIRE FLOW ANALYSIS	15	50	15	50	15	50
WU0116-RRA, ERP UPDATES, AND WATER SYSTEM PLAN UPDATES	200	100	0	0	0	0
WU0117-METER REPLACEMENT IMPLEMENTATION	2,050	2,050	0	0	0	0
WU0119-RESERVOIR GENERATOR REPLACEMENT	240	120	0	0	0	0
WU0124-SOLUTIONS FOR WATER SYSTEM DEFICIENCIES - CONSULTANT SERVICES	120	0	0	0	0	0

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CAPITAL PROJECTS BY FUND 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
426-SEWER FUND	\$2,226	\$2,226	\$2,870	\$952	\$1,590	\$941
GB0101-PUBLIC WORKS BUILDING REPAIRS	79	20	25	32	20	21
GB0107-HONEYWELL SITE REMEDIATION	6	5	0	0	0	0
GB0108-FS91 SITE CHARACTERIZATION & FUEL TANK EVALUATION	6	0	0	0	0	0
SP0100-RESIDENTIAL STREET RESURFACING	15	15	15	15	15	15
SP0101-ARTERIAL PRESERVATION PROGRAM	5	5	5	5	5	5
SP0102-EAST MERCER WAY OVERLAY (SE 53RD PLACE TO SE 68TH STREET)	40	0	0	0	0	0
SP0103-SE 68TH STREET AND SE 70TH PLACE OVERLAY (ICW TO EMW)	0	5	0	0	0	0
SP0114-ROADSIDE SHOULDER IMPROVEMENTS - WMW PHASE 3 (SE 70TH TO SE 65TH STREETS)	0	2	0	0	0	0
SU0100-EMERGENCY SEWER REPAIRS	300	300	300	300	300	300
SU0102-PUMP STATION R&R IMPROVEMENTS	200	0	750	0	750	0
SU0103-EASEMENT, ACCESS CODES AND STANDARDS REVIEW	150	150	0	0	0	0
SU0108-COMPREHENSIVE PIPELINE R&R PROGRAM	500	500	500	500	500	500
SU0109-SEWER SYSTEM GENERATOR REPLACEMENT	150	150	0	0	0	0
SU0110-PUMP STATION ACCESSIBILITY IMPROVEMENTS	100	100	0	100	0	100
SU0113-SCADA SYSTEM REPLACEMENT (SEWER)	675	975	1,275	0	0	0
432-STORM & SURFACE WATER FUND	\$1,186	\$1,363	\$568	\$179	\$235	\$174
GB0101-PUBLIC WORKS BUILDING REPAIRS	39	10	12	16	10	11
GB0107-HONEYWELL SITE REMEDIATION	8	6	0	0	0	0
GB0108-FS91 SITE CHARACTERIZATION & FUEL TANK EVALUATION	8	0	0	0	0	0
SP0100-RESIDENTIAL STREET RESURFACING	110	110	110	110	110	110
SP0101-ARTERIAL PRESERVATION PROGRAM	3	3	3	3	3	3
SP0102-EAST MERCER WAY OVERLAY (SE 53RD PLACE TO SE 68TH STREET)	90	0	0	0	0	0
SP0103-SE 68TH STREET AND SE 70TH PLACE OVERLAY (ICW TO EMW)	0	100	0	0	0	0
SP0114-ROADSIDE SHOULDER IMPROVEMENTS - WMW PHASE 3 (SE 70TH TO SE 65TH STREETS)	0	175	0	0	0	0
SP0121-MID-BLOCK CROSSWALK 76TH AVE SE BETWEEN SE 24TH AND SE 27TH	3	0	0	0	0	0
SW0100-SUB BASIN 42.1 AND 42.1A WATERCOURSE STABILIZATION	390	0	0	0	0	0
SW0101-SUB BASIN 23.2 WATERCOURSE STABILIZATION	202	0	0	0	0	0
SW0102-SUB BASIN 45B.1 WATERCOURSE STABILIZATION	36	189	0	0	0	0
SW0103-SUB BASIN 27A.10 WATERCOURSE STABILIZATION	22	79	0	0	0	0
SW0104-SUB BASIN 22.1 WATERCOURSE STABILIZATION	0	24	139	0	0	0
SW0105-SUB BASIN 50B.4 (A & E) WATERCOURSE STABILIZATION	0	18	46	0	0	0
SW0106-SUB BASIN 25B.2 WATERCOURSE STABILIZATION	0	47	145	0	0	0
SW0119-CONVEYANCE SYSTEM ASSESSMENTS	112	50	112	50	112	50
SW0120-EAST & WEST MERCER WAY TRENCHLESS CULVERT REPLACEMENTS	113	504	0	0	0	0
SW0126-EMERGENCY STORMWATER CONVEYANCE REPAIRS	50	50	0	0	0	0
503-EQUIPMENT RENTAL FUND	\$986	\$733	\$531	\$607	\$794	\$944
GE0107-FLEET REPLACEMENTS	906	733	531	607	794	944
GT0107-PUBLIC SAFETY DISTRIBUTED ANTENNA SYSTEM - CITY HALL REPLACEMENT	80	0	0	0	0	0
520-COMPUTER REPLACEMENT FUND	\$113	\$200	\$123	\$199	\$150	\$200
GT0108-TECHNOLOGY EQUIPMENT REPLACEMENT	113	200	123	199	150	200
SUBTOTAL (IN THOUSANDS)	\$16,576	\$21,831	\$12,569	\$8,328	\$5,725	\$5,301
PROJECTS NOT PROPOSED IN 2021-2022						
NOT PROPOSED IN FY21-FY22	\$0	\$0	\$7,898	\$12,490	\$8,225	\$10,391
GE0100-FIRE APPARATUS REPLACEMENTS - AID CAR IN 2022	0	0	0	0	0	0
GE0102-PURCHASE AUTOMATED EXTERNAL DEFIBRILLATORS	0	0	0	0	0	0
GE0103-PURCHASE NEW MIDI PUMPER - 2024	0	0	0	440	0	0
GE0104-PURCHASE NEW FIRE COMMAND VEHICLE 2024	0	0	0	0	0	0
GE0105-REPLACE FIRE STAFF CARS - 2026	0	0	0	0	0	0
GE0106-PURCHASE NEW MAXI PUMPER 2024	0	0	0	800	0	0
GT0103-ARCGIS URBAN DEPLOYMENT	0	0	0	0	0	0
GT0105-HIGH ACCURACY ORTHOPHOTOS	0	0	35	0	0	35
PA0104-LAKE WATER IRRIGATION DEVELOPMENT	0	0	75	20	0	0
PA0105-AUBREY DAVIS PARK LID A PLAYGROUND REPLACEMENT	0	0	0	0	0	20
PA0106-AUBREY DAVIS PARK LID B PLAYGROUND REPLACEMENT	0	0	200	0	0	0
PA0107-ADP OUTDOOR SCULPTURE GALLERY IMPROVEMENTS	0	0	28	60	168	0
PA0108-AUBREY DAVIS PARK LUTHER LID CONNECTOR TRAIL	0	0	52	240	0	0
PA0110-AUBREY DAVIS PARK LID A BACKSTOP LIFECYCLE REPLACEMENT	0	0	0	0	100	770
PA0112-CLARKE BEACH SHORELINE REPAIR/RESTORATION	0	0	85	25	0	1,000
PA0113-CLARKE BEACH RESTROOM FIXTURE REPLACEMENT	0	0	53	0	0	0
PA0114-GROVELAND BEACH BULKHEAD REPLACEMENT AND BEACH UPGRADE	0	0	0	100	20	2,000
PA0115-HOLLERBACH SE 45TH TRAIL SYSTEM	0	0	85	377	0	0
PA0116-ISLAND CREST PARK SOUTH FIELD LIGHTS AND BACKSTOP LIFECYCLE REPLACEMENT AND UPGRADE	0	0	0	0	90	1,010
PA0119-LUTHER BURBANK TENNIS COURT RENOVATION	0	0	85	353	0	0
PA0120-LUTHER BURBANK PARK PARKING LOT LIGHTING	0	0	123	0	0	0
PA0121-LUTHER BURBANK PARK SWIM BEACH RENOVATION	0	0	0	117	30	875
PA0126-MERCERDALE PARK MASTER PLAN	0	0	90	0	0	0
PA0127-MERCER ISLAND COMMUNITY AND EVENTS CENTER ANNEX FACILITIES PLAN	0	0	0	90	0	0
PA0128-PIONEER PARK BIKE TRAIL PATH LIGHTING	0	0	100	0	0	0
PA0130-ROANOKE PLAYGROUND REPLACEMENT	0	0	28	176	0	0

CAPITAL PROJECTS BY FUND 2021-2026 (IN THOUSANDS)	2021	2022	2023	2024	2025	2026
PA0131-SOUTH MERCER PLAYFIELDS BALLFIELD BACKSTOP UPGRADE	0	0	995	0	0	0
PA0132-UPPER LUTHER RAVINE TRAIL PHASE 2	0	0	59	150	0	0
PA0134-AUBREY DAVIS PARK LID C FIELD DRAINAGE RENOVATION	0	0	0	990	0	0
SP0104-NORTH MERCER WAY OVERLAY (7500 BLOCK TO ROANOKE WAY)	0	0	557	0	0	0
SP0105-WEST MERCER WAY RESURFACING (SE 56TH TO EMW)	0	0	545	0	0	0
SP0106-GALLAGHER HILL ROAD OVERLAY (SE 36TH TO SE 40TH STREETS)	0	0	0	0	534	0
SP0107-SE 40TH STREET OVERLAY (88TH AVE SE TO GALLAGHER HILL RD)	0	0	0	200	0	0
SP0108-SE 36TH STREET OVERLAY (GALLAGHER HILL RD TO EMW)	0	0	0	0	548	0
SP0109-NORTH MERCER WAY OVERLAY (8400 BLOCK TO SE 35TH STREET)	0	0	0	0	0	776
SP0110-SE 27TH STREET OVERLAY (76TH AVE SE TO 80TH AVE SE)	0	0	0	548	0	0
SP0111-80TH AVE SE SIDEWALK IMPROVEMENTS (SE 28TH TO SE 32ND STREET)	0	0	1,080	0	0	0
SP0112-78TH AVE SE SIDEWALK IMPROVEMENTS (SE 32ND TO SE 34TH STREET)	0	0	712	0	0	0
SP0113-ROADSIDE SHOULDER IMPROVEMENTS - EMW PHASE 11 (SE 79TH STREET TO AVALON DRIVE)	0	0	0	475	0	0
SP0115-GALLAGHER HILL ROAD SIDEWALK IMPROVEMENTS (SE 36TH TO SE 40TH STREETS)	0	0	0	0	474	0
SP0116-SE 40TH STREET SIDEWALK IMPROVEMENTS (GALLAGHER HILL TO 93RD AVE)	0	0	0	920	0	0
SP0117-92ND AVE SE SIDEWALK IMPROVEMENTS (SE 40TH TO SE 41ST STREETS)	0	0	0	0	0	540
SP0123-NORTH MERCER WAY - MI P&R FRONTAGE IMPROVEMENTS	0	0	0	1,177	0	0
SU0104-PUMP STATION & HGMH FLOW MONITORING	0	0	300	300	1,000	0
SU0105-PIPE FLOW MONITORING	0	0	280	280	0	150
SU0106-LAKE LINE LOCATING AND MARKING	0	0	950	1,025	925	0
SU0107-LAKE LINE CONDITION ASSESSMENT	0	0	0	0	2,000	0
SU0111-COMPREHENSIVE HYDRAULIC MODEL DEVELOPMENT	0	0	0	0	0	250
SU0112-COMPREHENSIVE I/I EVALUATION	0	0	0	0	0	150
SW0107-SUB BASIN 47.4 AND SUB BASIN 10.4 WATERCOURSE STABILIZATION	0	0	56	293	0	0
SW0109-SUB BASIN 24A.1 WATERCOURSE STABILIZATION	0	0	17	57	0	0
SW0110-SUB BASIN 39A.2 WATERCOURSE STABILIZATION	0	0	16	40	0	0
SW0111-SUB BASIN 46A.3 WATERCOURSE STABILIZATION	0	0	49	372	0	0
SW0112-WATERCOURSE STABILIZATION - SUB BASIN 34.1	0	0	0	24	92	0
SW0113-WATERCOURSE STABILIZATION - SUB BASIN 45B.4	0	0	0	28	84	0
SW0114-WATERCOURSE STABILIZATION - SUB BASIN 29.3	0	0	0	45	117	0
SW0115-WATERCOURSE STABILIZATION - SUB-BASIN 42.2, 42.3, 42.8, 42.8A	0	0	0	0	87	334
SW0116-WATERCOURSE STABILIZATION - SUB BASIN 44B.3	0	0	0	0	29	68
SW0117-WATERCOURSE STABILIZATION - SUB-BASIN 32B.1 AND 32.2	0	0	0	0	48	150
SW0118-WATERCOURSE MINOR REPAIRS AND MAINTENANCE	0	0	0	0	100	0
SW0121-CONVEYANCE SYSTEM IMPROVEMENT - DRAINAGE REPAIR, EXTENSION, AND REPLACEMENT	0	0	300	300	300	300
WU0104-WATER SYSTEM CONSTRUCTION IMPROVEMENTS - 82 AVE AND FOREST AVE, WEST OF WEST MERCER WAY	0	0	145	810	0	0
WU0105-WATER SYSTEM DESIGN IMPROVEMENTS - 74 AVE, SE 29 ST, AND 73 AVE	0	0	0	0	0	188
WU0107-TOWN CENTER WATER SYSTEM IMPROVEMENTS - 77 & 78 AVE SE (SE 27 - SE 29 ST)	0	0	0	204	950	0
WU0108-WATER SYSTEM IMPROVEMENTS - AVALON DRIVE AND BENOTHO PLACE NEIGHBORHOODS	0	0	0	0	279	1,775
WU0111-HYDRANT REPLACEMENT CONTRACT WORK	0	0	250	0	250	0
WU0114-ABANDON 1955 12" CAST IRON WATER MAIN (RESERVOIR TO FIRST HILL)	0	0	320	0	0	0
WU0120-MERCERWOOD - 94TH AVE SE AND CRESTWOOD PL WATER SYSTEM IMPROVEMENTS	0	0	229	1,456	0	0
SUBTOTAL (IN THOUSANDS)	\$0	\$0	\$7,898	\$12,490	\$8,225	\$10,391
TOTAL (IN THOUSANDS)	\$16,576	\$21,831	\$20,467	\$20,818	\$13,949	\$15,691

Capital Improvement Program

PROJECTS BY DEPARTMENT		2021	2022
CITY ATTORNEY		40	40
SU0103	Easement, Access Codes and Standards Review	40	40
COMMUNITY PLANNING & DEVELOPMENT		434	751
GT0107	Public Safety Distributed Antenna System - City Hall Replacement	100	-
GT0110	Permitting System Upgrade/Replacement	-	500
PA0115	Hollerbach SE 45th Trail System	-	45
SP0120	Sunset Hwy/77th Ave SE Improvements	50	-
SP0121	Mid-block crosswalk 76th Ave SE between SE 24th and SE 27th	50	-
SU0103	Easement, Access Codes and Standards Review	40	40
SU0109	Sewer System Generator Replacement	32	32
SW0100	Sub Basin 42.1 and 42.1a Watercourse Stabilization	10	-
SW0101	Sub basin 23.2 Watercourse Stabilization	10	-
SW0102	Sub basin 45b.1 Watercourse Stabilization	10	-
SW0103	Sub basin 27a.10 Watercourse Stabilization	10	-
SW0104	Sub basin 22.1 Watercourse Stabilization	-	10
SW0105	Sub basin 50b.4 (a & e) Watercourse Stabilization	-	10
SW0106	Sub basin 25b.2 Watercourse Stabilization	-	10
SW0120	East Mercer Way Trenchless Culvert replacements	10	-
SW0126	Emergency Stormwater conveyance repairs	12	4
WU0101	Booster Chlorination Station	100	100
FINANCE		200	-
GT0106	Enterprise Resource Planning System Scoping	200	-
FIRE		56	-
GE0101	Fire Training Tools and Equipment	56	-
INFORMATION & GEOGRAPHIC SYSTEMS		1,757	620
GT0101	City Information via Web Based GIS	266	-
GT0102	ArcGIS Enterprise Deployment with GeoEvent Server	365	-
GT0103	ArcGIS Urban Deployment	416	-
GT0106	Enterprise Resource Planning System Scoping	210	-
GT0108	Technology Equipment Replacement	500	500
GT0110	Permitting System Upgrade/Replacement	-	120
PARKS & RECREATION		3,503	3,445
PA0100	Open Space Management	1,100	1,100
PA0101	Recurring Parks Minor Capital	140	140
PA0103	Trail Renovation and Property Management	160	160
PA0104	Lake Water Irrigation Development	50	20
PA0107	ADP Outdoor Sculpture Gallery Improvements	368	420
PA0109	Aubrey Davis Park Trail Safety Improvements	190	125
PA0111	Aubrey Davis Park Vegetation Management	250	40
PA0117	Island Crest Park North Infield and Backstop Replacement	-	80
PA0118	Lincoln Landing Watercourse Renovation	120	70
PA0122	Luther Burbank Dock Repair and Reconfiguration	250	150
PA0123	Luther Burbank Minor Capital Levy	140	130

PROJECTS BY DEPARTMENT		HOUR ESTIMATE 2021	HOUR ESTIMATE 2022
PA0124	Luther Burbank Boiler Building Roof and Seismic Retrofit	-	360
PA0125	Mercerdale Playground Replacement	60	-
PA0129	Pioneer Park/Engstrom OS Forest Management	650	650
PA0130	Roanoke Playground Replacement	25	-
PA0135	Town Center Micro Precinct Placeholder	-	-
POLICE		23	-
GT0107	Public Safety Distributed Antenna System - City Hall Replacement	23	-
PUBLIC WORKS		15,360	13,980
GB0100	City Hall Building Repairs	525	490
GB0101	Public Works Building Repairs	440	110
GB0102	MICEC Building Repairs	440	200
GB0103	FS91 and FS92 Building Repairs	175	160
GB0104	Luther Burbank Administration Repairs	220	120
GB0105	Thrift Shop Building Repairs	80	40
GT0109	Fiber Conduit Installation	60	60
SP0100	Residential Street Resurfacing	1,000	1,000
SP0101	Arterial Preservation Program	100	100
SP0102	East Mercer Way Overlay (SE 53rd Place to SE 68th Street)	1,050	-
SP0103	SE 68th Street and SE 70th Place Overlay (ICW to EMW)	-	750
SP0114	Roadside Shldr Improvements - WMW Ph 3 (SE 70th to SE 65th St.)	-	750
SP0118	ADA Compliance Plan Implementation	-	160
SP0119	N-S Bike Route Completion ICW (90th Ave SE - SE 63rd St)	300	500
SP0120	Sunset Hwy/77th Ave SE Improvements	300	300
SP0121	Mid-block crosswalk 76th Ave SE between SE 24th and SE 27th	300	-
SP0122	Minor Capital - Traffic Operations Improvements	260	-
SP0125	PBF Plan Implementation	250	250
SU0102	Pump Station R&R Improvements	400	-
SU0103	Easement, Access Codes and Standards Review	200	200
SU0108	Comprehensive Pipeline R&R Program	250	250
SU0109	Sewer System Generator Replacement	150	150
SU0110	Pump Station Accessibility Improvements	200	200
SU0113	SCADA System Replacement (Sewer)	750	750
SW0100	Sub Basin 42.1 and 42.1a Watercourse Stabilization	864	-
SW0101	Sub basin 23.2 Watercourse Stabilization	658	-
SW0102	Sub basin 45b.1 Watercourse Stabilization	230	508
SW0103	Sub basin 27a.10 Watercourse Stabilization	150	408
SW0104	Sub basin 22.1 Watercourse Stabilization	-	130
SW0105	Sub basin 50b.4 (a & e) Watercourse Stabilization	-	130
SW0106	Sub basin 25b.2 Watercourse Stabilization	-	170
SW0119	Conveyance System Assessments	324	8
SW0120	East Mercer Way Trenchless Culvert replacements	530	740
SW0121	Conveyance system Improvement - Drainage repair and replacement	104	152
SW0126	Emergency Stormwater conveyance repairs	50	154

Capital Improvement Program

PROJECTS BY DEPARTMENT		HOUR ESTIMATE 2021	HOUR ESTIMATE 2022
WU0101	Booster Chlorination Station	2,050	2,100
WU0102	SCADA System Replacement (Water)	750	750
WU0103	Water Reservoir Improvements	150	375
WU0106	Madrona Crest East Addition Water System Improvements	500	800
WU0109	60 Ave SE, btw SE 27 and SE 32, and 62 Ave Water System Improv.	-	400
WU0110	82nd Ave SE, N of SE 24th St Water System Improv - Construction	600	-
WU0112	Water System Components (valve, air vac, blow off, and etc.)	40	40
WU0114	Abandonment of 1955 12" water main (Reservoir to First Hill)	100	-
WU0115	Water Model Updates/Fire Flow Analysis	40	75
WU0116	RRA, ERP UPDATES, AND WATER SYSTEM PLAN UPDATES	220	150
WU0117	Meter Replacement Implementation	475	350
WU0124	Solutions for Water System Deficiencies - Consultant Services	75	-
TOTAL HOURS		21,373	18,836