

Wastewater Collection & Treatment Plant

Funded Projects

Overview

The Wastewater Services Capital Improvement Program (CIP) provides for the planning, design and construction of improvements to the City's wastewater collection, conveyance and treatment (WWTP) systems. The CIP is essential to help provide Gresham customers sustainable, reliable and affordable wastewater collection, conveyance and treatment services that are protective of the environment and public health. In addition, while preserving the existing infrastructure investment, the CIP provides capacity for future growth, as a catalyst for the economic viability of the community.

Highlights

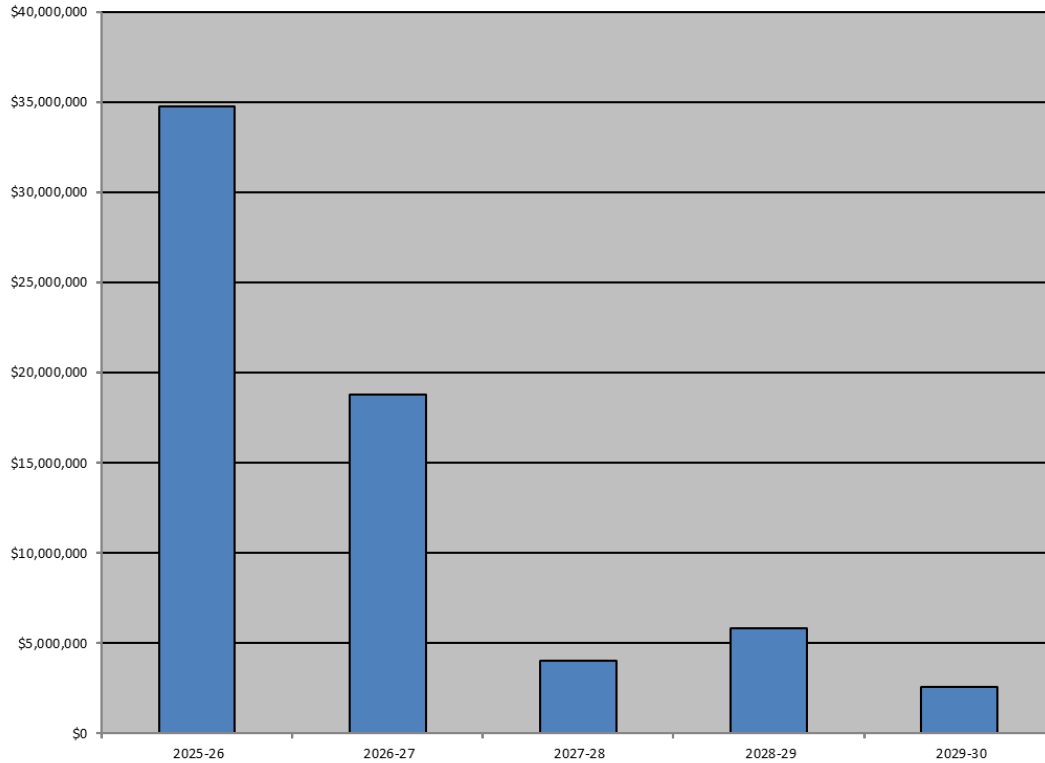
Key projects within the current CIP include:

1. Repair and replacement projects for the collection system including #CIPWW00007, #CIPWW00050 and #CIPWW00053;
2. Repair and replacement projects for the treatment plant including #CIPWW00005 for planned repairs and #CIPWW00002 for unanticipated needs that arise;
3. Collection system capacity increasing projects #CIPWW00008 – East Basin Trunk Upgrade Phase III will provide for additional capacity in the Springwater area and #CIPWW00045 – Upper Kelly Creek Basin Trunk Improvements Phase I will increase capacity and reduce inflow entering the collection system;
4. Nitrification improvement projects at the treatment plant constructed in partnership with Microchip Technology, Inc. (#CIPWW00018 – WWTP Upper Plant Nitrification Improvements and #CIPWW00049 – WWTP Upper Plant Secondary Clarifier No. 5);
5. Treatment plant projects for the refurbishment and replacement of aging equipment (#CIPWW00047 – WWTP Belt Press Replacement), as well as, for

system and processing improvements (#CIPWW00022 – WWTP Control System Improvements, #CIPWW00046 – WWTP Disinfection Improvements);

These projects will help address many ongoing and future operational and maintenance concerns as well as provide system capacity for growth.

Wastewater Expenditure Graph by Fiscal Year



Wastewater Funded Summary								
Project	Project Name	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
CIPWW00001	I & I Control Program	1,028,626	614,651	0	0	0	0	1,643,277
CIPWW00002	WWTP Maintenance Project	900,278	622,711	672,528	726,330	784,436	847,191	4,553,474
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) Proj	2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016
CIPWW00007	Mainline and Lateral Replacement Program	2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866
CIPWW00008	East Basin Trunk Upgrade Phase III	1,853,965	0	0	0	0	0	1,853,965
CIPWW00013	Wastewater Mainline Extension	687,790	375,000	0	0	0	0	1,062,790
CIPWW00018	WWTP Upper Plant Nitrification Improvements	1,000,000	9,000,000	4,150,132	0	0	0	14,150,132
CIPWW00022	WWTP Control System Improvements	2,118,395	5,000,000	1,123,153	0	0	0	8,241,548
CIPWW00023	Overhead Johnson Creek Crossing Seismic	1,964,620	0	0	0	0	0	1,964,620
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	0	0	0	600,000	1,900,000	0	2,500,000
CIPWW00030	WWTP Earthquake Resiliency Projects	297,429	145,998	151,838	170,059	183,664	198,357	1,147,345
CIPWW00035	CCTV Inspection of Collection System Large Diameter Pipe	259,103	223,000	0	0	0	0	482,103
CIPWW00045	Upper Kelly Creek Basin Trunk Improvement, Phase 1	266,958	1,512,758	0	0	0	0	1,779,716
CIPWW00046	WWTP Disinfection Improvements	1,698,677	0	0	0	0	0	1,698,677
CIPWW00047	WWTP Belt Press Replacement	747,527	4,500,000	3,533,711	0	0	0	8,781,238
CIPWW00049	WWTP Upper Plant Secondary Clarifier No. 5	1,682,155	10,000,000	6,863,909	0	0	0	18,546,064
CIPWW00050	Nechacokee Creek Bank Stabilization	601,742	114,000	0	0	0	0	715,742
CIPWW00051	185th St. Pump Station Improvements	623,542	0	0	0	0	0	623,542
CIPWW00052	San Rafael Sewer Main Replacement	747,593	0	0	0	0	0	747,593
CIPWW00053	Birdsdale Sewer Main Replacement	754,382	0	0	0	0	0	754,382
CIPWW00054	WWTP Master Plan Update	0	0	0	0	228,000	0	228,000
CIPWW00055	WWTP Lower Plant Aeration Piping Improvements	0	478,800	0	0	0	0	478,800
Grand Total		21,338,577	34,779,563	18,768,480	4,042,383	5,845,774	2,577,113	87,351,890

Wastewater Funded Summary by Resource								
Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total	
Other	2,682,155	11,644,300	0	0	0	0	14,326,455	
Grant	0	959,752	0	0	0	0	959,752	
Operating	9,114,510	12,160,155	14,699,590	170,059	2,011,664	198,357	38,354,335	
Repair/Replacement Reserves	8,626,443	7,815,356	4,068,890	3,272,324	3,534,110	2,378,756	29,695,879	
SDC	915,469	2,200,000	0	600,000	300,000	0	4,015,469	
Grand Total	21,338,577	34,779,563	18,768,480	4,042,383	5,845,774	2,577,113	87,351,890	

Wastewater Funded Resource Detail											
Project	Project Name	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total		
CIPWW00001	I & I Control Program	Operating	1,028,626	614,651	0	0	0	0	1,643,277		
CIPWW00001 Total			1,028,626	614,651	0	0	0	0	1,643,277		
CIPWW00002	WWTP Maintenance Project	Repair/Replace	900,278	622,711	672,528	726,330	784,436	847,191	4,553,474		
CIPWW00002 Total			900,278	622,711	672,528	726,330	784,436	847,191	4,553,474		
CIPWW00005	WWTP Asset Replacement and Refurbishment (R&R) P1	Repair/Replace	2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016		
CIPWW00005 Total			2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016		
CIPWW00007	Mainline and Lateral Replacement Program	Repair/Replace	2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866		
CIPWW00007 Total			2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866		
CIPWW00008	East Basin Trunk Upgrade Phase III	Operating	938,496	0	0	0	0	0	938,496		
		SDC	915,469	0	0	0	0	0	915,469		
CIPWW00008 Total			1,853,965	0	0	0	0	0	1,853,965		
CIPWW00013	Wastewater Mainline Extension	Operating	687,790	375,000	0	0	0	0	1,062,790		
CIPWW00013 Total			687,790	375,000	0	0	0	0	1,062,790		
CIPWW00018	WWTP Upper Plant Nitrification Improvements	Grant	0	959,752	0	0	0	0	959,752		
		Operating	0	2,270,570	4,150,132	0	0	0	6,420,702		
		Other	1,000,000	5,769,678	0	0	0	0	6,769,678		
CIPWW00018 Total			1,000,000	9,000,000	4,150,132	0	0	0	14,150,132		
CIPWW00022	WWTP Control System Improvements	Repair/Replace	2,118,395	5,000,000	1,123,153	0	0	0	8,241,548		
CIPWW00022 Total			2,118,395	5,000,000	1,123,153	0	0	0	8,241,548		
CIPWW00023	Overhead Johnson Creek Crossing Seismic	Operating	1,964,620	0	0	0	0	0	1,964,620		
CIPWW00023 Total			1,964,620	0	0	0	0	0	1,964,620		
CIPWW00027	Linneman Pump Station Parallel Force Main, Phase 2	Operating	0	0	0	0	1,600,000	0	1,600,000		
		SDC	0	0	0	0	300,000	0	900,000		
CIPWW00027 Total			0	0	0	0	1,900,000	0	2,500,000		
CIPWW00030	WWTP Earthquake Resiliency Projects	Operating	297,429	145,998	151,838	170,059	183,664	198,357	1,147,345		
CIPWW00030 Total			297,429	145,998	151,838	170,059	183,664	198,357	1,147,345		
CIPWW00035	CCTV Inspection of Collection System Large Diameter P	Operating	259,103	223,000	0	0	0	0	482,103		
CIPWW00035 Total			259,103	223,000	0	0	0	0	482,103		
CIPWW00045	Upper Kelly Creek Basin Trunk Improvement, Phase 1	Operating	266,958	1,512,758	0	0	0	0	1,779,716		
CIPWW00045 Total			266,958	1,512,758	0	0	0	0	1,779,716		
CIPWW00046	WWTP Disinfection Improvements	Operating	1,698,677	0	0	0	0	0	1,698,677		
CIPWW00046 Total			1,698,677	0	0	0	0	0	1,698,677		
CIPWW00047	WWTP Belt Press Replacement	Operating	747,527	4,500,000	3,533,711	0	0	0	8,781,238		
CIPWW00047 Total			747,527	4,500,000	3,533,711	0	0	0	8,781,238		
CIPWW00049	WWTP Upper Plant Secondary Clarifier No. 5	Operating	0	1,925,378	6,863,909	0	0	0	8,789,287		
		Other	1,682,155	5,874,622	0	0	0	0	7,556,777		
		SDC	0	2,200,000	0	0	0	0	2,200,000		
CIPWW00049 Total			1,682,155	10,000,000	6,863,909	0	0	0	18,546,064		
CIPWW00050	Nechacokee Creek Bank Stabilization	Operating	601,742	114,000	0	0	0	0	715,742		
CIPWW00050 Total			601,742	114,000	0	0	0	0	715,742		
CIPWW00051	185th St. Pump Station Improvements	Operating	623,542	0	0	0	0	0	623,542		

Wastewater Funded Resource Detail										
Project	Project Name	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total	
CIPWW00051	Total		623,542	0	0	0	0	0	623,542	
CIPWW00052	San Rafael Sewer Main Replacement	Repair/Replace	747,593	0	0	0	0	0	747,593	
CIPWW00052	Total		747,593	0	0	0	0	0	747,593	
CIPWW00053	Birdsdale Sewer Main Replacement	Repair/Replace	754,382	0	0	0	0	0	754,382	
CIPWW00053	Total		754,382	0	0	0	0	0	754,382	
CIPWW00054	WWTP Master Plan Update	Operating	0	0	0	0	228,000	0	228,000	
CIPWW00054	Total		0	0	0	0	228,000	0	228,000	
CIPWW00055	WWTP Lower Plant Aeration Piping Improvements	Operating	0	478,800	0	0	0	0	478,800	
CIPWW00055	Total		0	478,800	0	0	0	0	478,800	
Grand Total			21,338,577	34,779,563	18,768,480	4,042,383	5,845,774	2,577,113	87,351,890	

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00001: I & I Control Program

Description: This on-going project is to reduce the excessive stormwater and groundwater inflow and infiltration (I&I) into the sanitary sewer system and to develop and implement an I/I Implementation Plan. The I&I Implementation Plan will include, but not be limited to, installation and monitoring of flow monitoring equipment, other methods of identifying I/I sources, and remediation of any illicit or leaking sewer assets identified.

Justification: The project will reduce costs of service by reducing I&I rather than treating it at the wastewater treatment plant or increasing the collection system capacity. The project ensures compliance with the City's NPDES Waste Discharge Permit I/I Control Program requirements.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	1,028,626	614,651	0	0	0	0	1,643,277
Resources Total		1,028,626	614,651	0	0	0	0	1,643,277
Expenses	Design/Const Admin	902,326	539,151	0	0	0	0	1,441,477
	Admin (14%)	126,300	75,500	0	0	0	0	201,800
Expenses Total		1,028,626	614,651	0	0	0	0	1,643,277

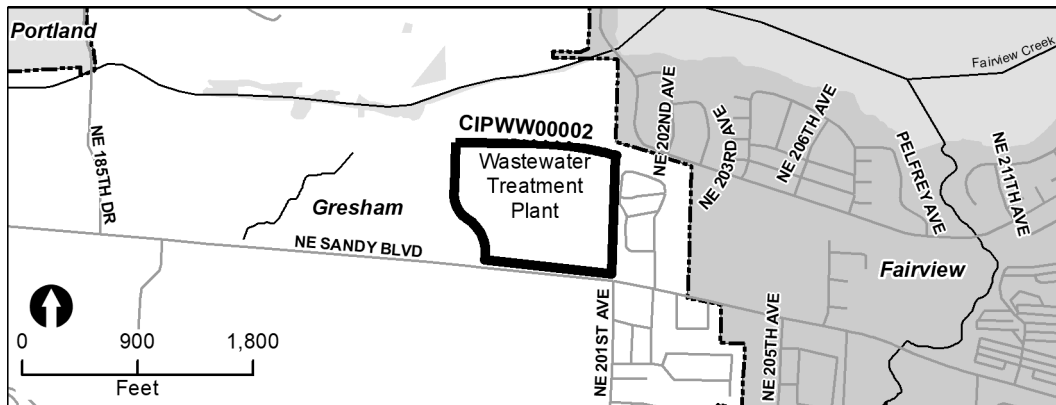
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00002: WWTP Maintenance Project

Description: This project funds unanticipated repair and replacement of Wastewater Treatment Plant and pump station equipment and processes that are not scheduled for replacement under the WWTP Asset R&R CIP #CIPWW00005. It includes contractual reimbursement to the WWTP contract operator for repair and replacement of items over \$5,000. This project also includes contractual reimbursables, such as construction related expenses and other items as required by the contract. The project is located in the North Gresham Neighborhood District.

Justification: Timely repair and replacement of the failed machinery and equipment at the WWTP and/or pump stations are critical to the overall performance of the WWTP. Asset failures can lead to loss of service and non-compliance with permits.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	900,278	622,711	672,528	726,330	784,436	847,191	4,553,474
Resources Total		900,278	622,711	672,528	726,330	784,436	847,191	4,553,474
Expenses	Design/Const Admin	90,000	109,200	118,000	127,400	137,600	148,600	730,800
	Construction	699,678	437,011	471,928	509,730	550,536	594,591	3,263,474
	Admin (14%)	110,600	76,500	82,600	89,200	96,300	104,000	559,200
Expenses Total		900,278	622,711	672,528	726,330	784,436	847,191	4,553,474

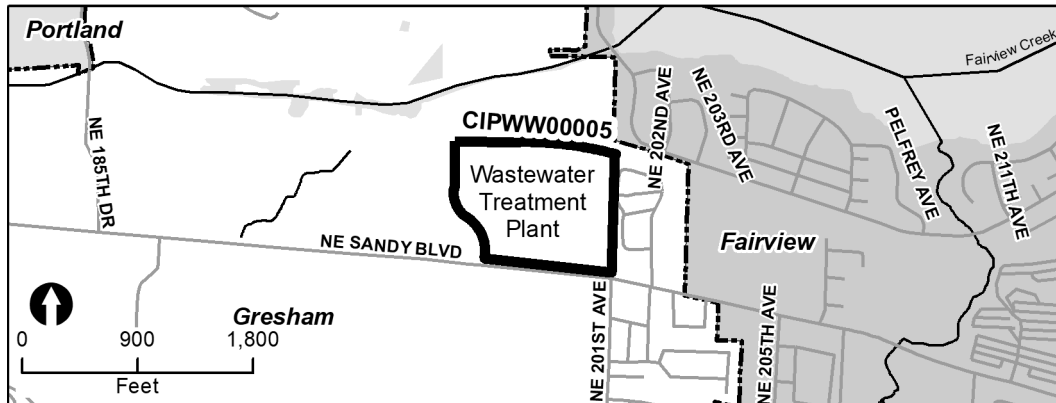
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00005: WWTP Asset Replacement and Refurbishment (R&R) Project

Description: This is an ongoing project that designs and constructs the R&R of assets at the WWTP and wastewater pumping stations that are scheduled per the WWTP asset management plan. Wastewater's Asset Management Program has developed a comprehensive asset inventory, asset condition and long range asset replacement planning methodology. This methodology will ensure that the City is appropriately planning, evaluating and replacing assets to ensure the lowest life cycle cost at an appropriate level of service with adequate long-range funding for the projects. This project may contribute eligible R&R funding to other CIP's as needed. (CIP# CIPWW00002 is in response to unanticipated asset failures, such as repairing air line leaks, replacing flow meters, repairing digester mixers, repairing rolling stock and other unanticipated items as needed.)

Justification: On-going repair and replacement of aging assets are critical to the overall performance of the WWTP. Asset failures can lead to loss of service and non-compliance with permit requirements.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016
Resources Total		2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016
Expenses	Design/Const Admin	210,000	185,699	193,127	216,300	233,600	0	1,038,726
	Construction	1,632,323	742,797	772,509	865,224	934,458	0	4,947,311
	Admin (14%)	257,900	129,990	135,189	151,400	163,500	0	837,979
Expenses Total		2,100,223	1,058,486	1,100,825	1,232,924	1,331,558	0	6,824,016

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00007: Mainline and Lateral Replacement Program

Description: This ongoing city-wide project designs and constructs planned, and systematic pipeline rehabilitation and maintenance projects as identified from the Wastewater Asset Management Program. This project improves ongoing and anticipated operational concerns, primarily with the oldest sanitary sewer lines in the City. This project also designs and constructs unanticipated repair or replacement of wastewater collection system assets, such as, but not limited to, mainlines, laterals and manholes, that are not scheduled for replacement but have been determined to be failing. Funds from this CIP may be used as needed for portions of other wastewater collection CIP project's that will repair or replace existing wastewater collection system assets. This project is related to Unfunded project #320400.

Justification: Repair and replacement of wastewater collection system assets that create operational or maintenance concerns, have exceeded their industry standard lifespan and will reduce long term operational and maintenance costs and lower the risk of system failures. System failures can lead to non-compliance with NPDES permit requirements resulting in fines or penalties, in addition to loss of service, sewage backups and possibly spills to streams.

Type of Project: Repair and rehabilitation of pipeline facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866
Resources Total		2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866
Expenses	Design/Const Admin	200,600	119,500	123,500	138,400	149,400	161,400	892,800
	Construction	1,558,672	875,359	904,884	1,013,370	1,094,516	1,182,065	6,628,866
	Admin (14%)	246,300	139,300	144,000	161,300	174,200	188,100	1,053,200
Expenses Total		2,005,572	1,134,159	1,172,384	1,313,070	1,418,116	1,531,565	8,574,866

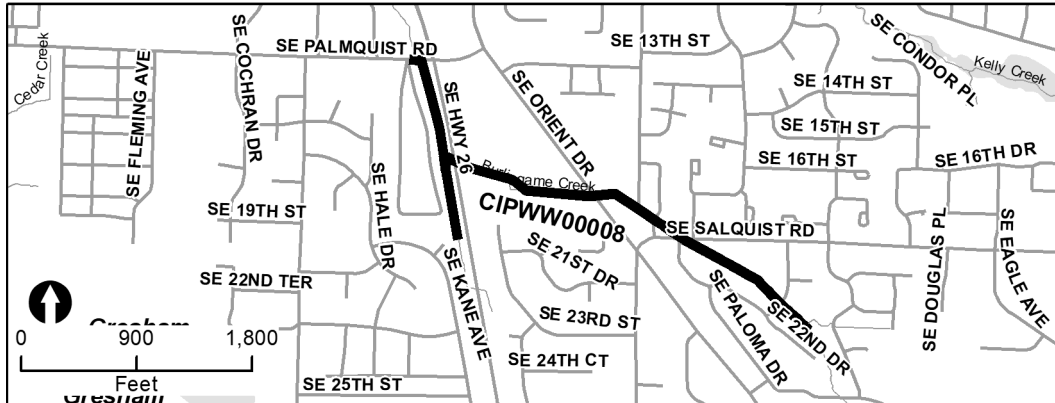
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00008: East Basin Trunk Upgrade Phase 3

Description: This project is phase 3 of east basin sanitary sewer trunk improvements and will upsize approximately 1,500 linear feet of sewer main using pipe bursting or other means as determined during design. This project will increase the capacity of the sanitary sewer system as needed for growth. This is 2020 collection system master plan project E1 (near term) and SDC project #6.3.

Justification: Wastewater collection system upsize required as detailed in 2020 collection system master plan for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	938,496	0	0	0	0	0	938,496
	SDC	915,469	0	0	0	0	0	915,469
Resources Total		1,853,965	0	0	0	0	0	1,853,965
Expenses	Design/Const Admin	259,600	0	0	0	0	0	259,600
	Construction	1,366,665	0	0	0	0	0	1,366,665
	Admin (14%)	227,700	0	0	0	0	0	227,700
Expenses Total		1,853,965	0	0	0	0	0	1,853,965

FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00013: Wastewater Mainline Extension

Description: This project constructs wastewater mainlines with associated laterals on an as needed basis for in-fill situations. The next potential projects are located on SE Chase Rd @ SE Inverness and SW 14th Street. These projects rely on the formation of reimbursement districts. Locations may change based on need.

Justification: This project is to meet the immediate needs of citizens with failed or failing septic systems. The properties involved are within the urban growth boundary.

Type of project: Construction of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	687,790	375,000	0	0	0	0	1,062,790
Resources Total		687,790	375,000	0	0	0	0	1,062,790
Expenses	Design/Const Admin	82,500	8,900	0	0	0	0	91,400
	Construction	520,790	320,000	0	0	0	0	840,790
	Admin (14%)	84,500	46,100	0	0	0	0	130,600
Expenses Total		687,790	375,000	0	0	0	0	1,062,790

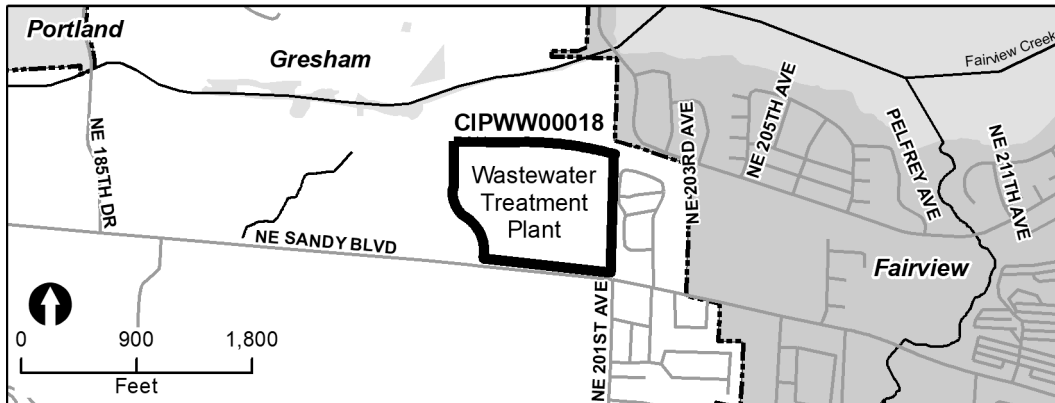
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00018: WWTP Upper Plant Nitrification Improvements

Description: This project will design and construct improvements and modifications to the upper plant secondary treatment system and supporting processes that will allow the nitrification of the upper plant secondary treatment system. This will include aeration basin improvements, blower building modifications, chemical feed installation, standby power, dissolved oxygen control improvements and other improvements identified as needed during design of the project. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 7.

Justification: This project is needed to construct the nitrification capabilities of the upper plant secondary treatment system in order to comply with NPDES wastewater discharge permit requirements and the Microchip Public Works Improvement Contract.

Type of project: Upgrade of existing facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Other	1,000,000	5,769,678	0	0	0	0	6,769,678
	Grant	0	959,752	0	0	0	0	959,752
	Operating	0	2,270,570	4,150,132	0	0	0	6,420,702
Resources Total		1,000,000	9,000,000	4,150,132	0	0	0	14,150,132
Expenses	Design/Const Admin	877,200	500,000	200,000	0	0	0	1,577,200
	Construction	0	7,394,700	3,440,432	0	0	0	10,835,132
	Admin (14%)	122,800	1,105,300	509,700	0	0	0	1,737,800
Expenses Total		1,000,000	9,000,000	4,150,132	0	0	0	14,150,132

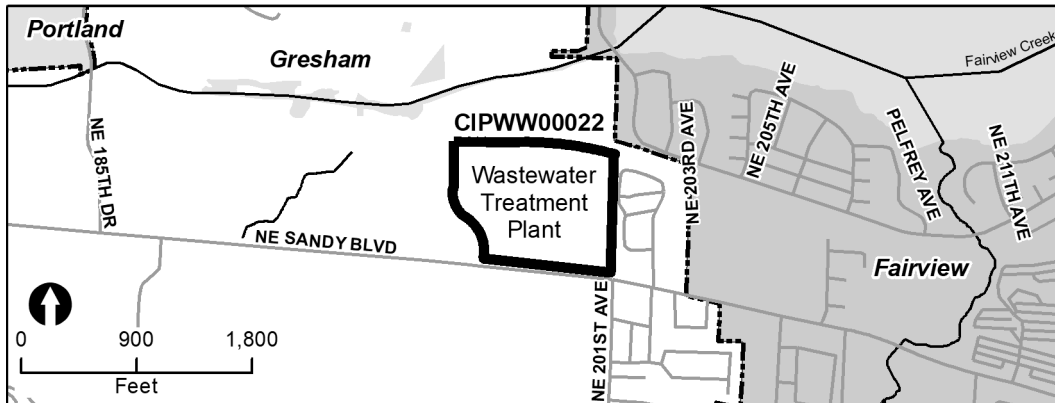
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00022: WWTP Control System Improvements

Description: This project will design, upgrade and modernize the control system at the WWTP. The current control system, comprising of hardware, software, programming, reporting and other functions will be evaluated and updated as necessary to increase reliability and security while modernizing and improving the system. The current control system was originally installed in 2000 and partially upgraded in 2010. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: This project is needed to ensure that the control systems that operate, report and alarm complex processes throughout the WWTP are evaluated and upgraded as needed. This project is required of the City of Gresham/OMI operations and maintenance contract.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	2,118,395	5,000,000	1,123,153	0	0	0	8,241,548
Resources Total		2,118,395	5,000,000	1,123,153	0	0	0	8,241,548
Expenses	Design/Const Admin	1,500,000	100,000	100,000	0	0	0	1,700,000
	Construction	358,195	4,286,000	885,253	0	0	0	5,529,448
	Admin (14%)	260,200	614,000	137,900	0	0	0	1,012,100
Expenses Total		2,118,395	5,000,000	1,123,153	0	0	0	8,241,548

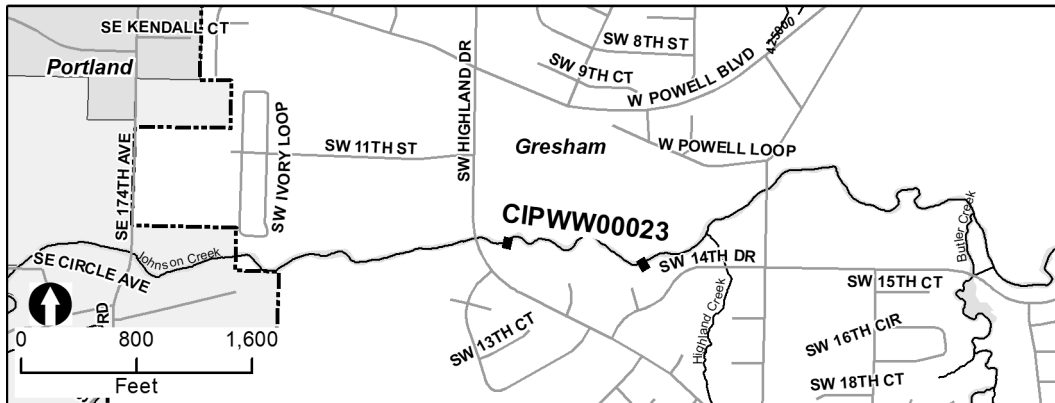
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00023: Overhead Johnson Creek Crossing Seismic

Description: This project consists of a concrete bridge over the creek and the bridge abutments and manholes that transport and support the ductile iron pipe conveying the flow over the creek. The seismic upgrade will replace the concrete bridge with a steel pipe that will include the sewer pipe in its interior. Micro-piles will be used to support the bridge abutments and manholes hardening the structure to new seismic standards. The grant is a Federal Emergency Management Agency Pre-Disaster Mitigation Program grant.

Justification: This project is needed to meet seismic standards so the structure can withstand a seismic event without collapsing allowing raw sewage to flow into the creek.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	1,964,620	0	0	0	0	0	1,964,620
Resources Total		1,964,620	0	0	0	0	0	1,964,620
Expenses	Design/Const Admin	196,500	0	0	0	0	0	196,500
	Construction	1,526,820	0	0	0	0	0	1,526,820
	Admin (14%)	241,300	0	0	0	0	0	241,300
Expenses Total		1,964,620	0	0	0	0	0	1,964,620

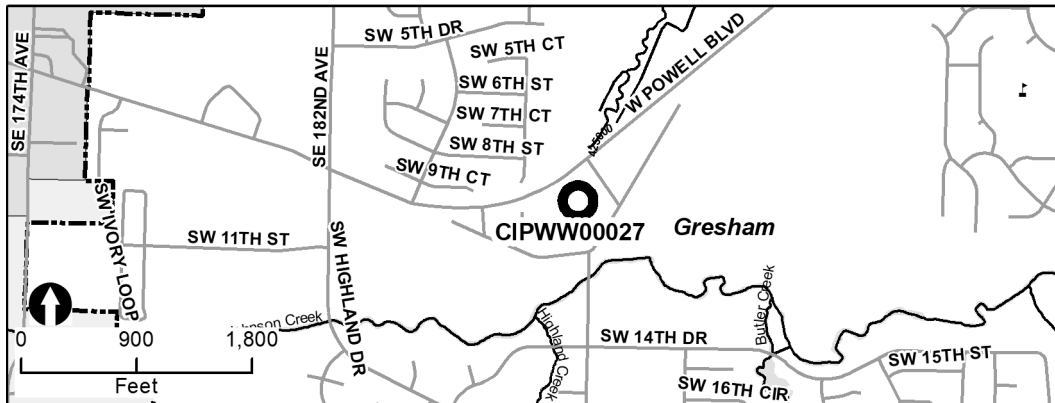
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00027: Linneman Pump Station Parallel Force Main, Phase 2

Description: This project constructs additional capacity at the Linneman Pump Station as identified in the 2005 Linneman Pump Station Master Plan to provide capacity for growth in the South Gresham area. The project consists of finishing the second phase of a new parallel force main to the pump station. SDC project #WWTP 2.

Justification: This project will provide the needed capacity for additional growth in the Johnson Creek Basin, including the Pleasant Valley and Springwater areas.

Type of Project: Construction of new facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	0	0	0	0	1,600,000	0	1,600,000
	SDC	0	0	0	600,000	300,000	0	900,000
Resources Total		0	0	0	600,000	1,900,000	0	2,500,000
Expenses	Design/Const Admin	0	0	0	426,300	15,000	0	441,300
	Construction	0	0	0	100,000	1,651,700	0	1,751,700
	Admin (14%)	0	0	0	73,700	233,300	0	307,000
Expenses Total		0	0	0	600,000	1,900,000	0	2,500,000

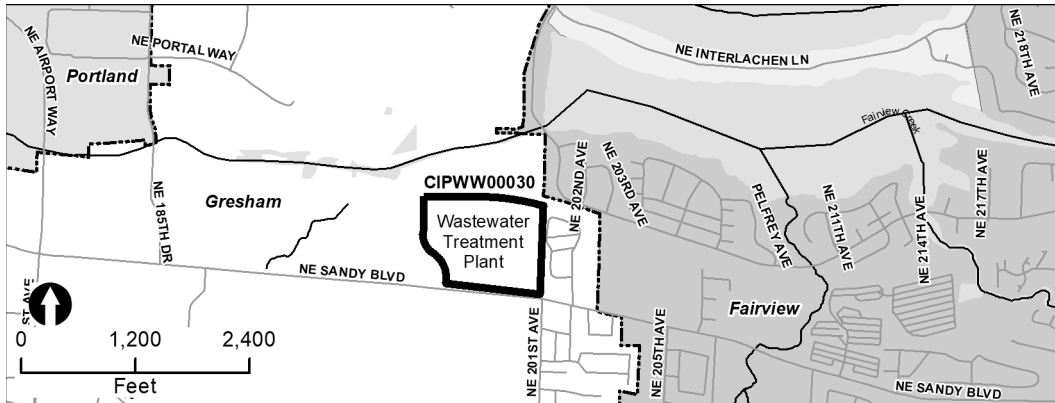
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00030: WWTP Earthquake Resiliency Projects

Description: This project will design and construct earthquake resiliency improvements at the WWTP and wastewater pumping stations. These projects were identified in the 2019 Wastewater Seismic Resilience Plan. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: This project will upgrade specific assets at the WWTP and wastewater pumping stations to better withstand a catastrophic seismic event. This project will strengthen elements and allow facilities to more rapidly return to normal operations after an event.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	297,429	145,998	151,838	170,059	183,664	198,357	1,147,345
Resources Total		297,429	145,998	151,838	170,059	183,664	198,357	1,147,345
Expenses	Design/Const Admin	29,700	25,614	26,638	30,600	33,000	35,700	181,252
	Construction	231,229	102,454	106,553	118,559	128,064	138,257	825,116
	Admin (14%)	36,500	17,930	18,647	20,900	22,600	24,400	140,977
Expenses Total		297,429	145,998	151,838	170,059	183,664	198,357	1,147,345

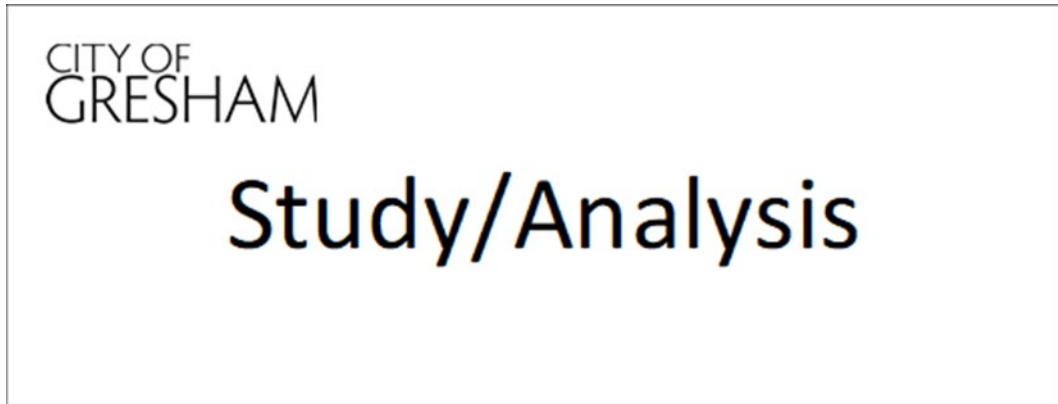
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00035: CCTV Inspection of Collection System Large Diameter Pipe

Description: This project will fund the CCTV inspection of the larger wastewater pipes in the collection system. The project will include the use of modern multi-sensor inspection methods to determine condition of the pipe as well as any supporting services that aid in the pipe inspection. With the use of this advanced equipment, the structural and operational condition of the pipe can be determined. This project includes the analysis of the condition scores and development of asset repair or replacement recommendations. This project is related to Unfunded project #320500.

Justification: This project is needed to provide structural and operational information on a system of pipes that have not been inspected since constructed. System failures can lead to non-compliance with NPDES permit requirements resulting in fines or penalties, in addition to loss of service, sewage backups and possibly spills to streams.

Type of project: Inspection/Study.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	259,103	223,000	0	0	0	0	482,103
Resources Total		259,103	223,000	0	0	0	0	482,103
Expenses	Design/Const Admin	227,303	195,600	0	0	0	0	422,903
	Admin (14%)	31,800	27,400	0	0	0	0	59,200
Expenses Total		259,103	223,000	0	0	0	0	482,103

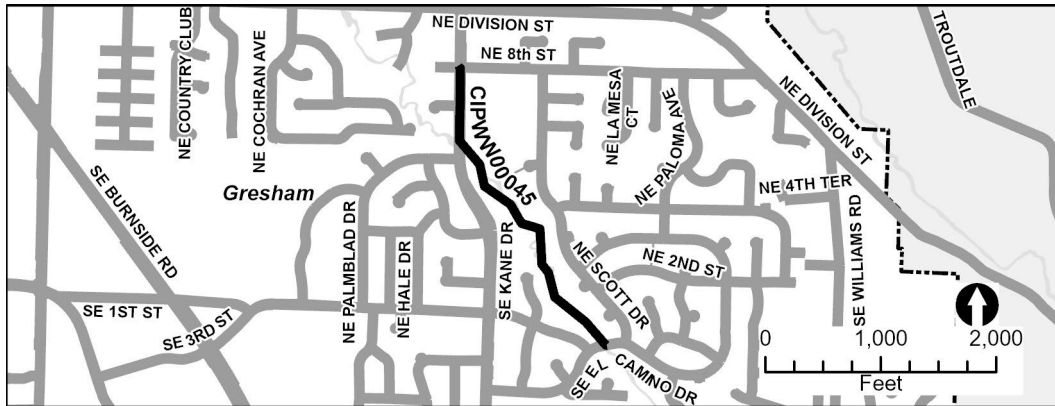
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00045: Upper Kelly Creek Basin Trunk Improvement, Phase 1

Description: This project would increase the capacity of the system in the problem area and reduce the amount of inflow entering the system. 2020 Collection Master Plan Project KC1 and SDC project #1.1.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows.

Type of project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	266,958	1,512,758	0	0	0	0	1,779,716
Resources Total		266,958	1,512,758	0	0	0	0	1,779,716
Expenses	Design/Const Admin	150,000	100,000	0	0	0	0	250,000
	Construction	84,158	1,226,958	0	0	0	0	1,311,116
	Admin (14%)	32,800	185,800	0	0	0	0	218,600
Expenses Total		266,958	1,512,758	0	0	0	0	1,779,716

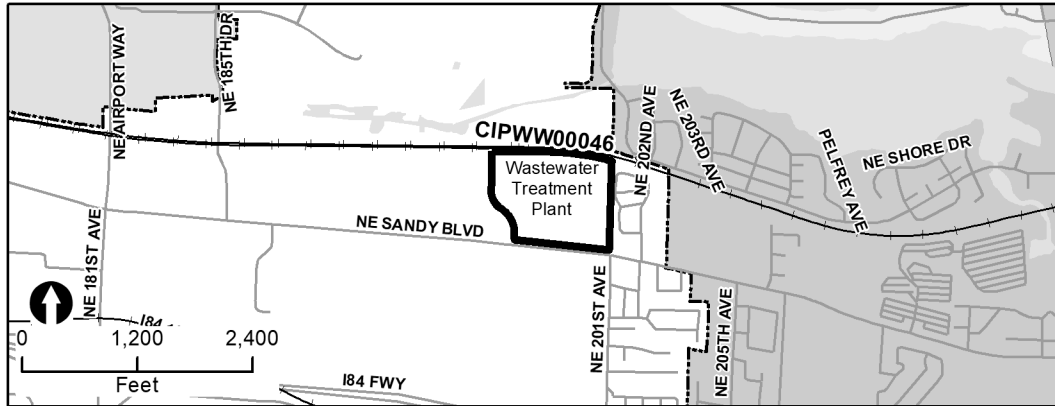
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00046: WWTP Disinfection Improvements

Description: This project will improve and modernize existing disinfection equipment such as the chlorine contact basins, residual chlorine sensors, equipment controls, and ancillary components. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 9.

Justification: Much of the existing disinfection equipment requires replacement or upgrades to continue operating reliably. Failure of disinfection system components could result in not meeting NPDES permit requirements. The existing equipment was installed in 1995 and has reached the end of its useful life.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	1,698,677	0	0	0	0	0	1,698,677
Resources Total		1,698,677	0	0	0	0	0	1,698,677
Expenses	Design/Const Admin	100,000	0	0	0	0	0	100,000
	Construction	1,390,077	0	0	0	0	0	1,390,077
	Admin (14%)	208,600	0	0	0	0	0	208,600
Expenses Total		1,698,677	0	0	0	0	0	1,698,677

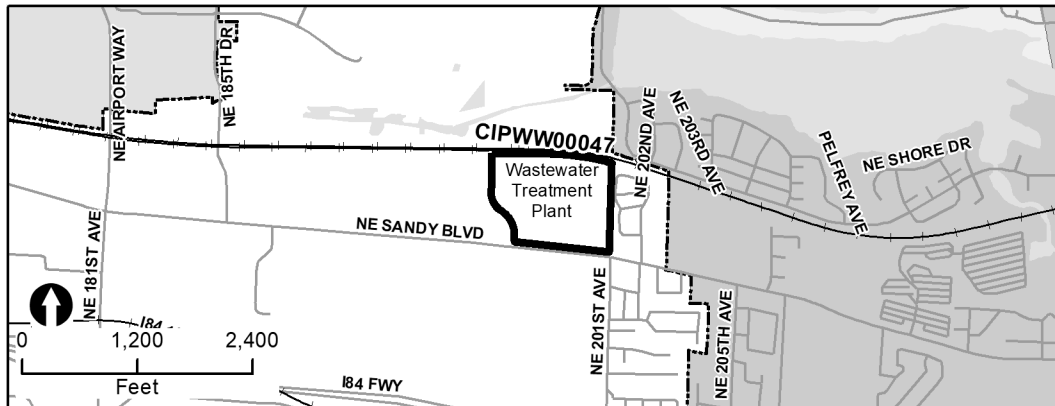
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00047: WWTP Belt Press Replacement

Description: This project designs and constructs the replacement of the WWTP Belt Press Thickener and ancillary equipment. The existing equipment is reaching the end of its useful life and requires replacement and modernization. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: Replacing existing aging equipment with new modern equipment will improve reliability and performance, as well as reducing the cost of solids handling and disposal. The existing belt press was installed in 1987 and has reached the end of its useful life.

Type of project: Design and construction of wastewater facilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	747,527	4,500,000	3,533,711	0	0	0	8,781,238
Resources Total		747,527	4,500,000	3,533,711	0	0	0	8,781,238
Expenses	Design/Const Admin	655,727	400,000	100,000	0	0	0	1,155,727
	Construction	0	3,547,400	2,999,711	0	0	0	6,547,111
	Admin (14%)	91,800	552,600	434,000	0	0	0	1,078,400
Expenses Total		747,527	4,500,000	3,533,711	0	0	0	8,781,238

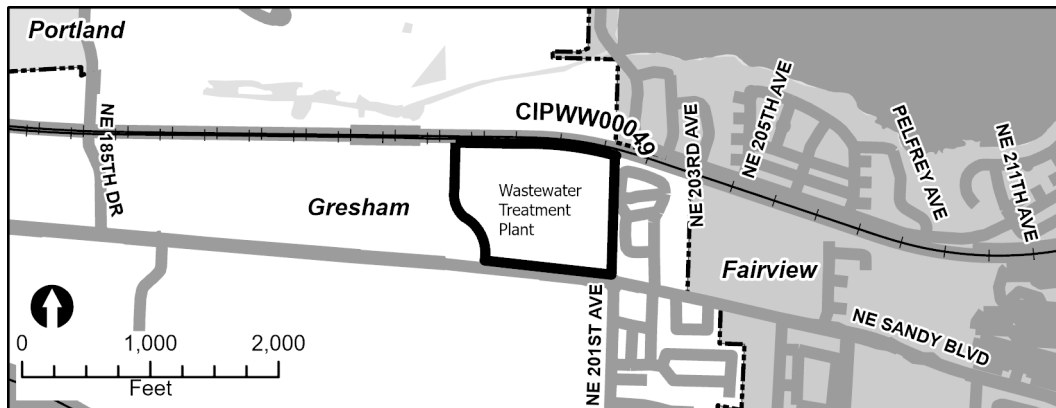
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00049: WWTP Upper Plant Secondary Clarifier No. 5

Description: This project will design & construct a new secondary clarifier No. 5 at the WWTP. As identified in the October 2017 WWTP Master Plan Update following construction, this project would provide increased WWTP capacity and redundancy as needed for projected growth and increased flows to the WWTP. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets. SDC project #WWTP 1 and #WWTP 4.

Justification: The project would provide increased WWTP capacity to provide treatment for projected growth and increased flows to the WWTP. In addition, the project is needed to provide a redundant secondary clarifier to the existing clarifier No. 4. Currently, failure of secondary No. 4 would result in not meeting NPDES permit requirements.

Type of project: Design and construction of facilities for growth.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Other	1,682,155	5,874,622	0	0	0	0	7,556,777
	Operating	0	1,925,378	6,863,909	0	0	0	8,789,287
	SDC	0	2,200,000	0	0	0	0	2,200,000
Resources Total		1,682,155	10,000,000	6,863,909	0	0	0	18,546,064
Expenses	Design/Const Admin	675,555	200,000	100,000	0	0	0	975,555
	Construction	800,000	8,571,900	5,921,009	0	0	0	15,292,909
	Admin (14%)	206,600	1,228,100	842,900	0	0	0	2,277,600
Expenses Total		1,682,155	10,000,000	6,863,909	0	0	0	18,546,064

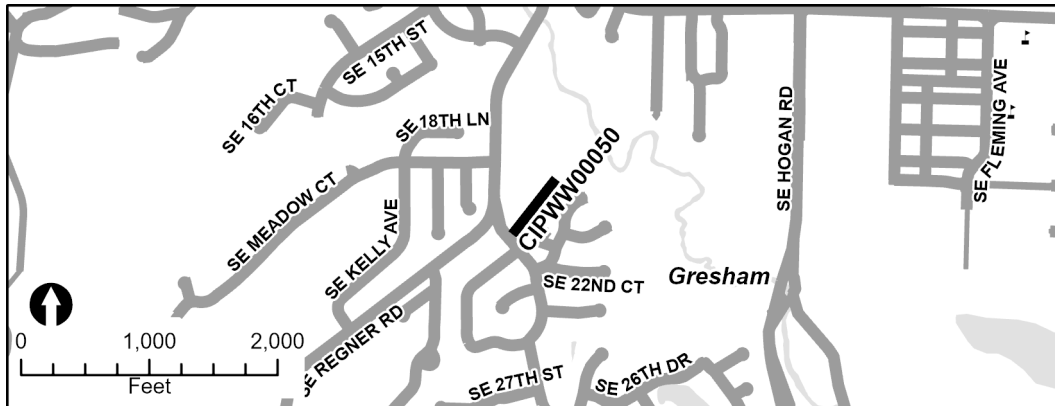
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00050: Nechacokee Creek Bank Stabilization

Description: This project will design & construct stream bank stabilization improvements where previously installed wastewater collection pipes are exposed or nearing exposure from excessive streambank erosion.

Justification: The project would provide stream bank stabilization improvements which will significantly decrease the risks of wastewater collection pipe failure and potential wastewater discharge to the environment from pipe failure.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	601,742	114,000	0	0	0	0	715,742
Resources Total		601,742	114,000	0	0	0	0	715,742
Expenses	Design/Const Admin	60,200	0	0	0	0	0	60,200
	Construction	467,642	100,000	0	0	0	0	567,642
	Admin (14%)	73,900	14,000	0	0	0	0	87,900
Expenses Total		601,742	114,000	0	0	0	0	715,742

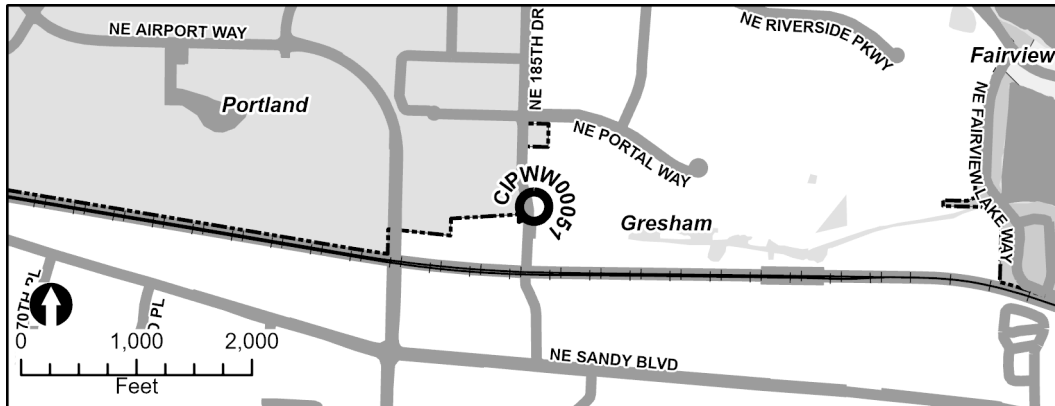
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00051: 185th St. Pump Station Improvements

Description: This project will design & construct wet well improvements to the 185th street wastewater pump station. These improvements include new wastewater wet well mixing equipment and the associated ancillary equipment needed to properly control grease buildup at the pump station. Funds from CIP #CIPWW00005 may be used as needed for portions of the project that will repair or replace existing assets.

Justification: The project would install wet well mixing equipment that will decrease the frequency of staff cleaning required due to ongoing grease buildup. It is expected that a significant decrease in operation and maintenance costs will result from this project.

Type of project: Upgrade of existing facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	623,542	0	0	0	0	0	623,542
Resources Total		623,542	0	0	0	0	0	623,542
Expenses	Design/Const Admin	50,000	0	0	0	0	0	50,000
	Construction	496,942	0	0	0	0	0	496,942
	Admin (14%)	76,600	0	0	0	0	0	76,600
Expenses Total		623,542	0	0	0	0	0	623,542

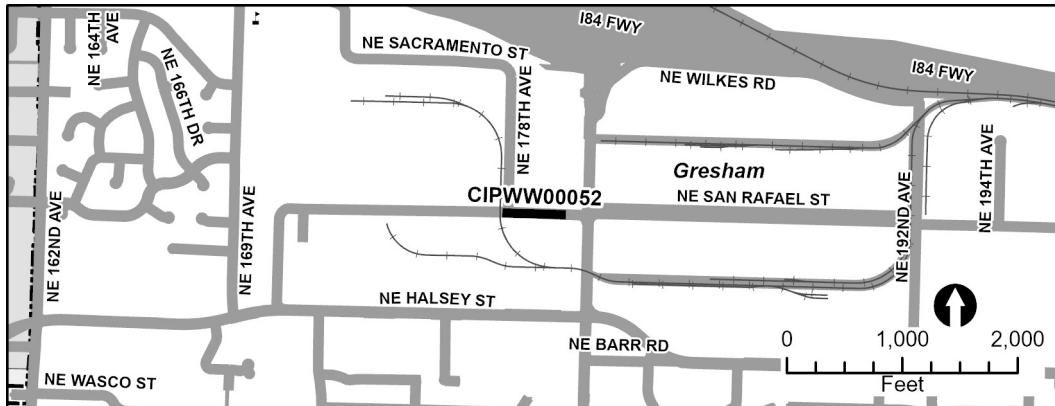
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00052: San Rafael Sewer Main Replacement

Description: This project will design & construct main line and lateral replacement near 181st and San Rafael where system deficiencies have been verified.

Justification: The project will replace pipes that have failed and bring them back to their original function and capacity.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	747,593	0	0	0	0	0	747,593
Resources Total		747,593	0	0	0	0	0	747,593
Expenses	Design/Const Admin	37,400	0	0	0	0	0	37,400
	Construction	618,393	0	0	0	0	0	618,393
	Admin (14%)	91,800	0	0	0	0	0	91,800
Expenses Total		747,593	0	0	0	0	0	747,593

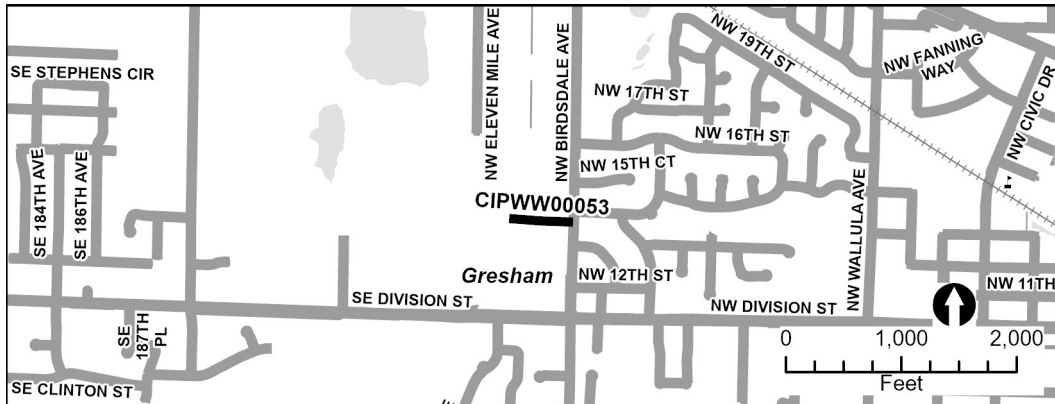
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00053: Birdsedale Sewer Main Replacement

Description: This project will design & construct main line and lateral replacement near Division street and Birdsedale where system deficiencies have been verified.

Justification: The project will replace pipes that have failed and bring them back to their original function and capacity.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Repair/Replacement Reserves	754,382	0	0	0	0	0	754,382
Resources Total		754,382	0	0	0	0	0	754,382
Expenses	Design/Const Admin	37,700	0	0	0	0	0	37,700
	Construction	624,082	0	0	0	0	0	624,082
	Admin (14%)	92,600	0	0	0	0	0	92,600
Expenses Total		754,382	0	0	0	0	0	754,382

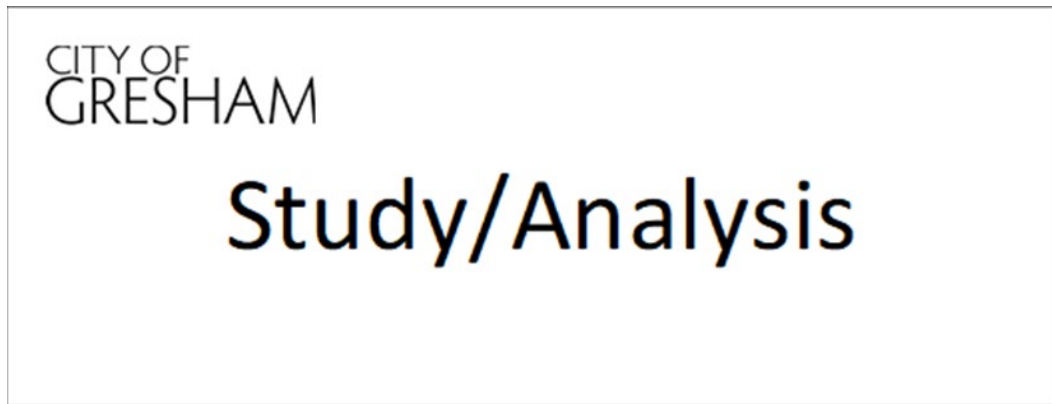
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00054: WWTP Master Plan Update

Description: This project will provide a Plan for the ongoing capital improvements needed at the WWTP to comply with NPDES Permit requirements and ensure the WWTP can treat the wastewater current and projected flows while meeting water quality criteria in the Columbia River.

Justification: The project is needed to meet Oregon DEQ requirements for planning for ongoing WWTP NPDES Permit compliance.

Type of project: Study.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	0	0	0	0	228,000	0	228,000
Resources Total		0	0	0	0	228,000	0	228,000
Expenses	Design/Const Admin	0	0	0	0	200,000	0	200,000
	Admin (14%)	0	0	0	0	28,000	0	28,000
Expenses Total		0	0	0	0	228,000	0	228,000

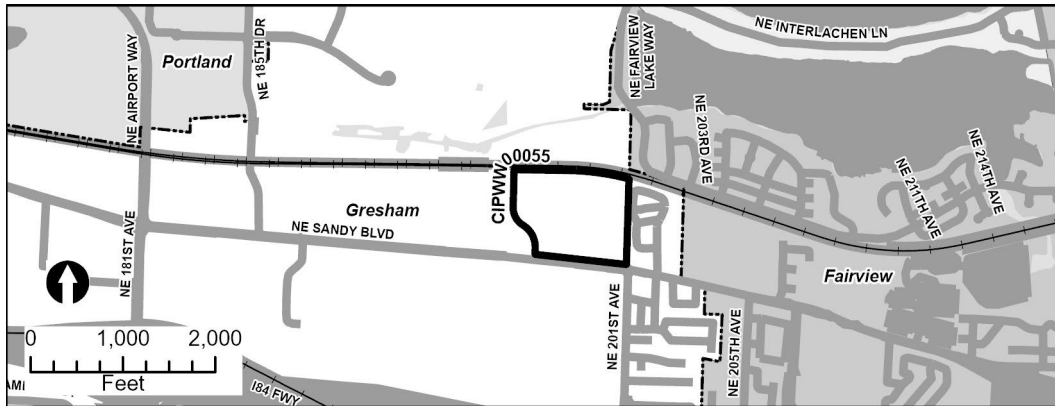
FUNDED PROJECT
Wastewater Collection and Treatment Plant

CIPWW00055: WWTP Lower Plant Aeration Piping Improvements

Description: This project will design and construct the lower blower building aeration piping replacement.

Justification: The project is needed to repair ongoing aeration piping leaks between the lower blower building and the aeration basins.

Type of project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Resources	Operating	0	478,800	0	0	0	0	478,800
Resources Total		0	478,800	0	0	0	0	478,800
Expenses	Design/Const Admin	0	50,000	0	0	0	0	50,000
	Construction	0	370,000	0	0	0	0	370,000
	Admin (14%)	0	58,800	0	0	0	0	58,800
Expenses Total		0	478,800	0	0	0	0	478,800

Wastewater Unfunded and Future Summary								
Project	Project Name	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total
314100	Johnson Creek - Springwater Trunk	0	0	0	0	0	0	1,412,560
316100	WWTP Anaerobic Digestion and Cogeneration Expansion,	0	0	0	0	0	0	16,977,837
320200	Linneman Pump Station Capacity Upgrade	0	0	0	0	0	0	2,070,468
320300	WWTP Asset Replacement and Refurbishment (R&R) Proj	0	0	0	0	0	0	22,922,441
320400	1960's Pipe Rehabilitation/Maint. Program	0	0	0	0	0	0	42,428,554
320500	Collection System Trunk Assessment	0	0	0	0	0	0	2,066,000
322300	Tier 2 Seismic Upgrades	0	0	0	0	0	0	72,220,760
322400	Glisan St Bank Stabilization Seismic	0	0	0	0	0	0	675,000
322500	Jenne Rd. Major Bank Stabilization Seismic	0	0	0	0	0	0	3,500,000
322600	Johnson Creek Large Diameter Mains	0	0	0	0	0	0	15,368,942
CIPWW00026	Lower Kelly Creek Trunk Upgrade Phase 1	0	0	0	0	0	0	4,897,125
CIPWW00034	WWTP Columbia Slough Bridge Replacement	0	0	0	0	0	0	726,403
CIPWW00036	Bridge Crossing at NE 185th Street	0	0	0	0	0	0	236,744
CIPWW00037	Upper Johnson Creek Upgrade	0	0	0	0	0	0	3,317,227
CIPWW00038	Upper Regner Rd Trunk	0	0	0	0	0	0	2,936,518
CIPWW00039	Stark Basin Improvement	0	0	0	0	0	0	844,656
CIPWW00040	East Basin Trunk Upgrade Phase 4	0	0	0	0	0	0	1,868,705
CIPWW00042	Lower Kelly Creek Trunk Upgrade Phase 2	0	0	0	0	0	0	104,352
CIPWW00044	Tier 1 Seismic Upgrades	0	0	0	0	0	0	30,133,814
CIPWW00048	WWTP Biosolids Storage Facility Expansion	0	0	0	0	0	0	3,613,292
CIPWW00056	Upper Kelly Creek Basin Trunk Improvement, Phase 2	0	0	0	0	0	0	169,127
CIPWW00057	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	12,629,855
CIPWW00058	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	10,559,386
CIPWW00059	Anaerobic Digestion and Cogeneration Expansion, Phase	0	0	0	0	0	0	28,779,505
Grand Total		0	0	0	0	0	0	280,459,271



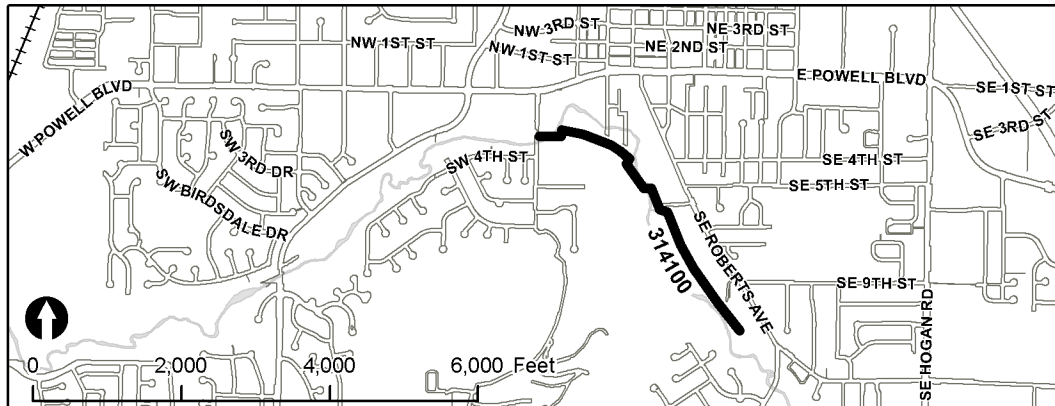
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

314100: Johnson Creek - Springwater Trunk

Description: This project will upsized an existing 12" sanitary sewer line to a 24" diameter line to meet increased flow demands as identified in the Wastewater Masterplan. SDC project #3.

Justification: This project is needed to provide adequate wastewater conveyance capacity for growth.

Type of Project: Design and construction of facilities and utilities for growth.



Estimated Dollars:

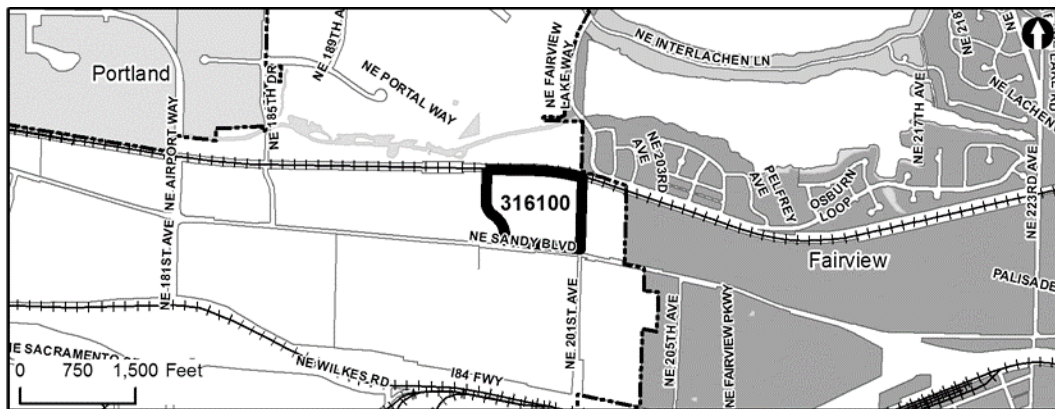
Funds	Description	Total
Resources	Operating	918,164
	SDC	494,396
Resources Total		1,412,560
Expenses	Design/Const Admi	169,468
	Construction	1,069,587
	Admin (14%)	173,505
Expenses Total		1,412,560

316100: WWTP Anaerobic Digestion and Cogeneration Expansion, Phase 1

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 1 of the project will design and construct a third thermophilic anaerobic digester and associated support systems as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 13.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.

**Estimated Dollars:**

Funds	Description	Total
Resources	Operating	5,942,243
	SDC	11,035,594
Resources Total		16,977,837
Expenses	Design/Const Admi	2,037,341
	Construction	12,855,535
	Admin (14%)	2,084,961
Expenses Total		16,977,837

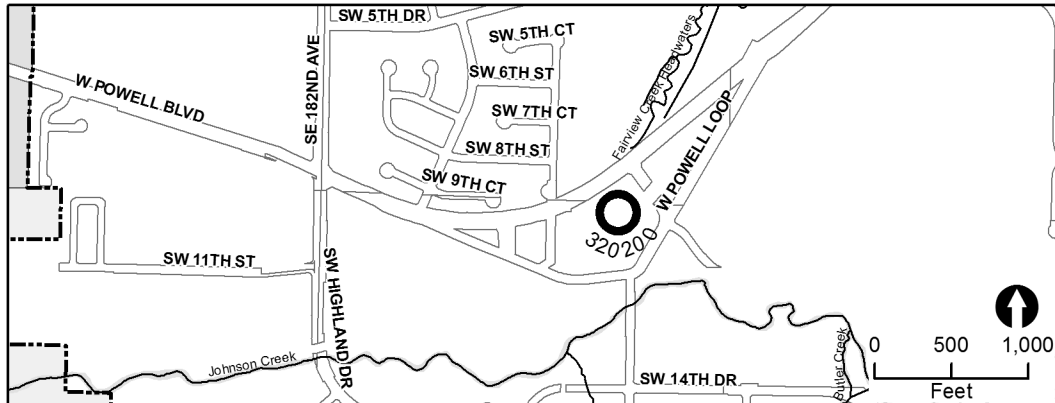
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

320200: Linneman Pump Station Capacity Upgrade

Description: This project constructs additional capacity at the Linneman Pump Station as identified in the 2005 Linneman Pump Station Master Plan. The project consists of adding additional pumps at the pump station. SDC project #WWTP 3.

Justification: This project will provide the needed capacity for additional growth in the Johnson Creek Basin, including the Pleasant Valley and Springwater areas.

Type of Project: Construction of new facilities.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	2,070,468
Resources Total		2,070,468
Expenses	Design/Const Admi	248,456
	Construction	1,567,759
	Admin (14%)	254,253
Expenses Total		2,070,468

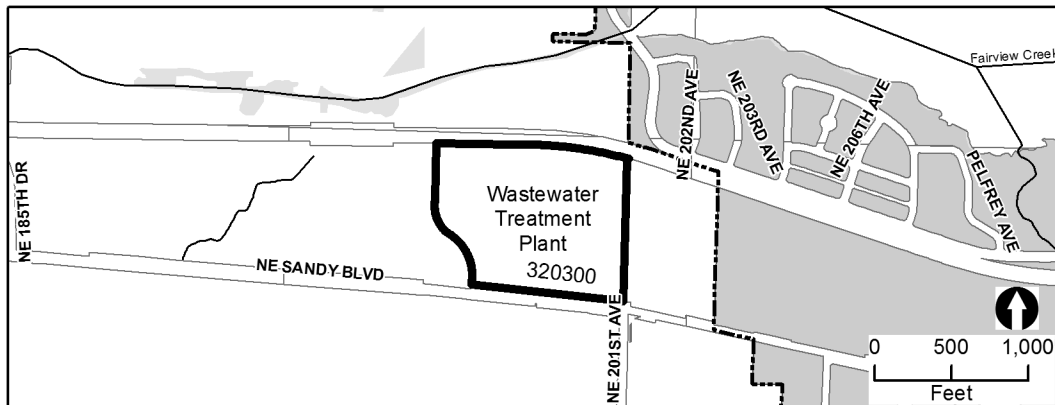
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

320300: WWTP Asset Replacement and Refurbishment (R&R) Project (Yrs 6-20)

Description: This is an ongoing project that designs and constructs the R&R of assets at the WWTP and WW pumping stations that are scheduled per the asset management plan. Wastewater's newly completed Asset Management Program has developed a comprehensive asset inventory, asset condition and long range asset replacement planning methodology. This methodology will ensure that the City is appropriately planning, evaluating and replacing Assets to ensure the lowest life cycle cost at an appropriate level of service with adequate long range funding for the projects.

Justification: This project provides the needed funding for anticipated asset replacement and refurbishment as identified in the long range WWTP Asset Replacement Plan.

Type of Project: Repair and rehabilitation of facilities and utilities.



Estimated Dollars:

Funds	Description	Total
Resources	Repair/Replacemer	22,922,441
Resources Total		22,922,441
Expenses	Design/Const Admi	4,021,481
	Construction	16,085,924
	Admin (14%)	2,815,036
Expenses Total		22,922,441

UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

320400: Mainline and Lateral Replacement Program

Description: This ongoing city-wide project designs and constructs planned, and systematic pipeline rehabilitation and maintenance projects as identified from the Wastewater Asset Management Program. This project improves ongoing and anticipated operational concerns, primarily with the oldest sanitary sewer lines in the City. This project also designs and constructs unanticipated repair or replacement of wastewater collection system assets, such as, but not limited to, mainlines, laterals and manholes, that are not scheduled for replacement but have been determined to be failing. Funds from this CIP may be used as needed for portions of other wastewater collection CIP project's that will repair or replace existing wastewater collection system assets. This project is related to Funded project #CIPWW00007, but due to limited staff capacity and funding, it is unfunded.

Justification: These assets have all passed their industry standard lifespan. The assets also have developed visually confirmed physical failures. The failure of these assets can lead to loss of service, backups and possibly overflows.

Type of Project: Repair and rehabilitation of pipeline facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	42,428,554
Resources Total		42,428,554
Expenses	Design/Const Admi	5,582,700
	Construction	31,635,354
	Admin (14%)	5,210,500
Expenses Total		42,428,554

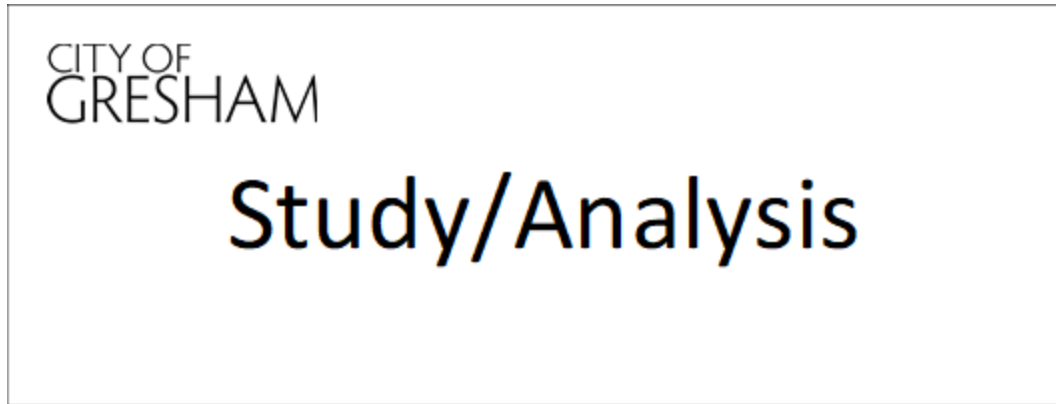
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

320500: Collection System Trunk Assessment

Description: This program will provide assessment of the large trunk lines of the sanitary sewer collection system. These lines (generally larger than 24 inch diameters) cannot be inspected with the City's standard CCTV inspection program. The program will provide laser and sonar as well as CCTV inspection to provide a thorough condition assessment of the City's large trunk lines. This project is related to Funded project #CIPWW00035, but due to limited staff capacity and funding, it is unfunded.

Justification: This program will provide the City the condition of the uninspected large trunk lines. The data from this inspection will be used by asset management software to prioritize the replacement/repair of the sanitary trunk sewer system.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:	Funds	Description	Total
	Resources	Operating	2,066,000
	Resources Total		2,066,000
	Expenses	Design/Const Admi	1,812,300
		Admin (14%)	253,700
	Expenses Total		2,066,000

UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

322300: Tier 2 Seismic Upgrades

Description: This project hardens the existing large diameter pipe to resist seismic events. The use of cured in place pipe using woven fiberglass that uses the host pipe will meet seismic standards. SDC project #29.

Justification: These backbone systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	61,517,643
	SDC	10,703,117
Resources Total		72,220,760
Expenses	Design/Const Admi	8,666,461
	Construction	54,685,035
	Admin (14%)	8,869,264
Expenses Total		72,220,760

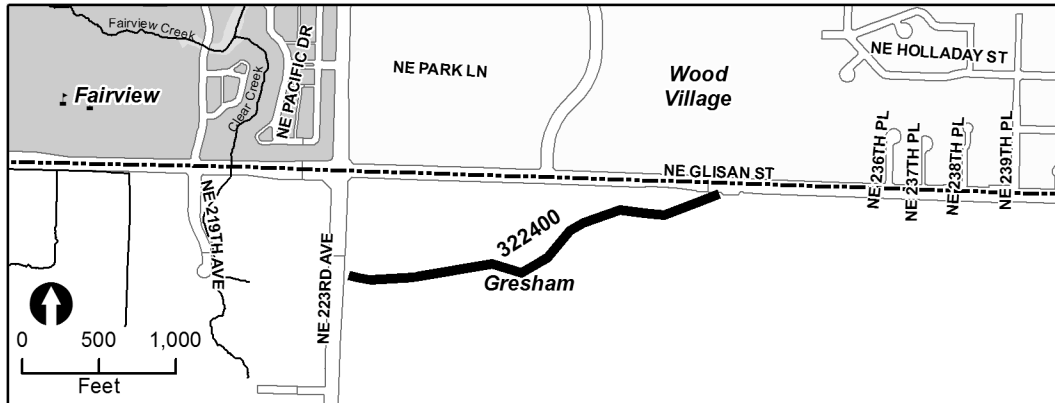
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

322400: Glisan St Bank Stabilization Seismic

Description: This project designs and constructs the stabilization of the sewerline in Glisan St. This section of the roadway is listed as a landslide hazard area.

Justification: Securing this section of the system is necessary to insure the continued service to the large commercial area.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Grant	506,250
	Operating	168,750
Resources Total		675,000
Expenses	Design/Const Admi	88,800
	Construction	503,300
	Admin (14%)	82,900
Expenses Total		675,000

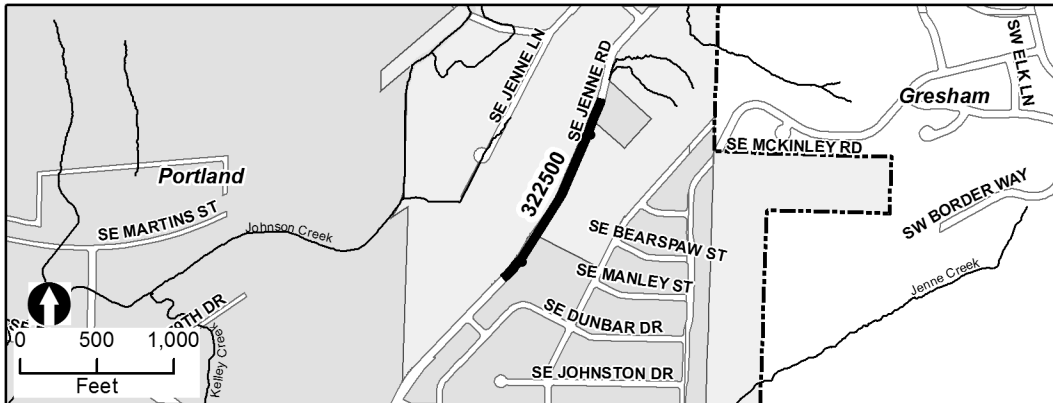
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

322500: Jenne Rd. Major Bank Stabilization Seismic

Description: This project designs and constructs a roadway stabilization project for over 1,500 feet of Jenne Road to protect a 24 inch wastewater line. The roadway is benched into the steep hillside with a narrow roadway and steep slopes on the downhill side of the road.

Justification: This area has been identified as a severe landslide area with potential damage to numerous utilities, the roadway and nearby structures.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Grant	2,625,000
	Operating	875,000
Resources Total		3,500,000
Expenses	Design/Const Admi	460,500
	Construction	2,609,700
	Admin (14%)	429,800
Expenses Total		3,500,000

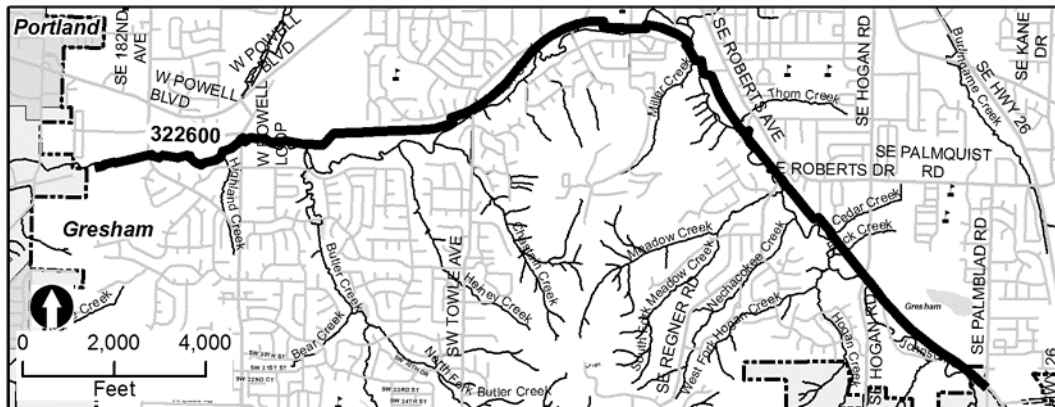
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

322600: Johnson Creek Large Diameter Mains

Description: This multi-year seismic project designs and constructs an effort to stabilize banks along Johnson Creek that hold a sewer line and have a moderate threat of landslide that would threaten the alignment of the sewer line. Destruction of the sewer line would result in sewage flowing directly into the creek. SDC project #27.

Justification: Stabilizing the creek bank will ensure that the existing utilities in the vicinity will function properly and not spill into the creek.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	13,091,265
	SDC	2,277,677
Resources Total		15,368,942
Expenses	Design/Const Admi	1,844,269
	Construction	11,637,234
	Admin (14%)	1,887,439
Expenses Total		15,368,942

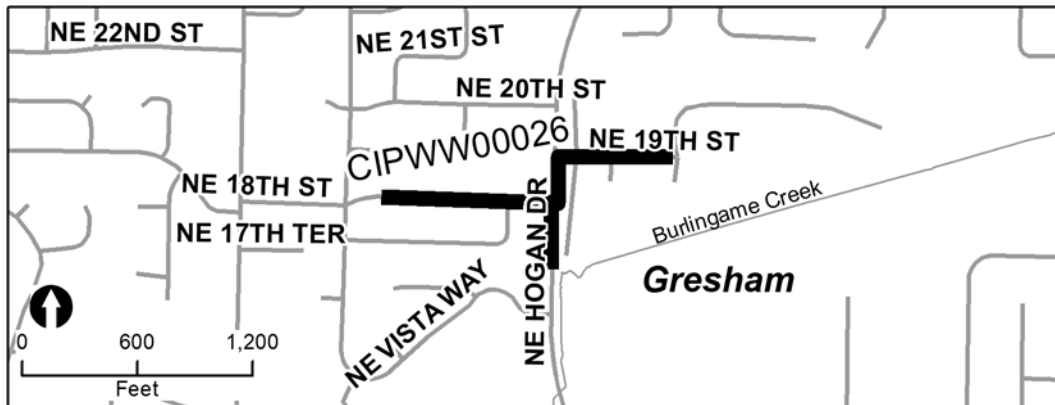
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00026: Lower Kelly Creek Trunk Upgrade Phase 1

Description: This project would increase the capacity of the system in the problem area and reduce the amount of inflow entering the system. This sewer line is located in a low lying area within the Gresham Golf Course. The construction of the project is time sensitive because of the impact on the golf course and the creek in the area. 2020 Collection Master Plan Project KC2 (near term) and SDC project #2.1.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows. The addition of the flows from Barlow High School into this basin add to the justification for construction of this project.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	3,330,045
	SDC	1,567,080
Resources Total		4,897,125
Expenses	Design/Const Admi	685,716
	Construction	3,610,045
	Admin (14%)	601,364
Expenses Total		4,897,125

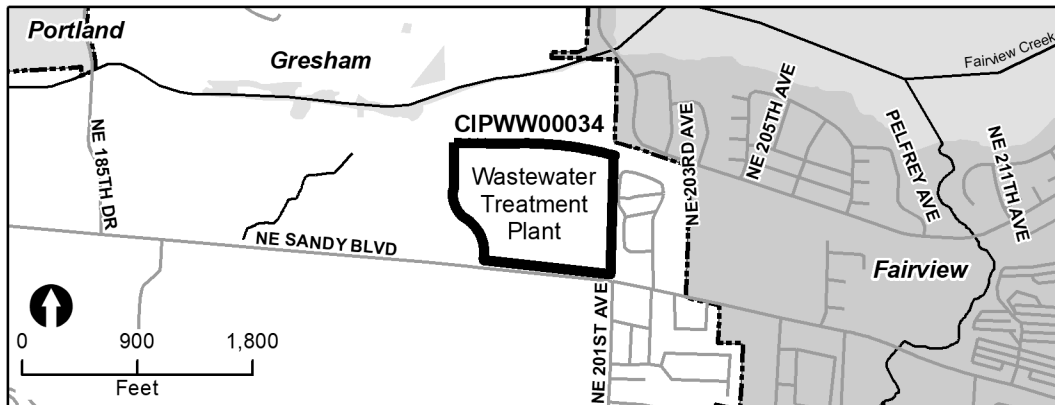
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00034: WWTP Columbia Slough Bridge Replacement

Description: This project constructs a replacement Columbia Slough Access Bridge to the WWTP property as identified in the October, 2017 WWTP Master Plan Update currently estimated to begin in 2030. SDC project #WWTP 14.

Justification: The project is needed to replace an antiquated bridge that was installed for temporary use by the Multnomah County Drainage District.

Type of Project: Construction of new WWTP facilities.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	726,403
Resources Total		726,403
Expenses	Design/Const Admi	87,167
	Construction	549,999
	Admin (14%)	89,237
Expenses Total		726,403

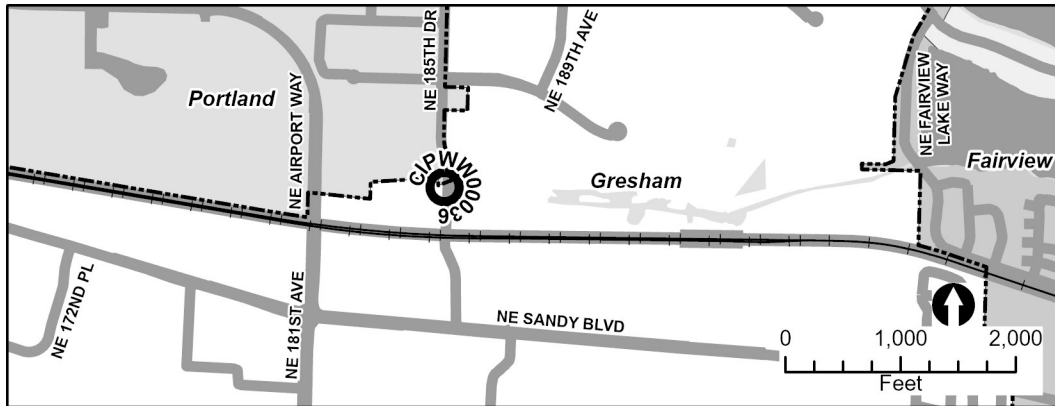
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00036: Bridge Crossing at NE 185th Street

Description: This project hardens the existing pipe spanning the NE 185th street bridge to better resist seismic events. This is the 2020 master Plan project C-13 and SDC project #28.

Justification: These critical backbone piping systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	201,659
	SDC	35,085
Resources Total		236,744
Expenses	Design/Const Admi	28,365
	Construction	179,289
	Admin (14%)	29,090
Expenses Total		236,744

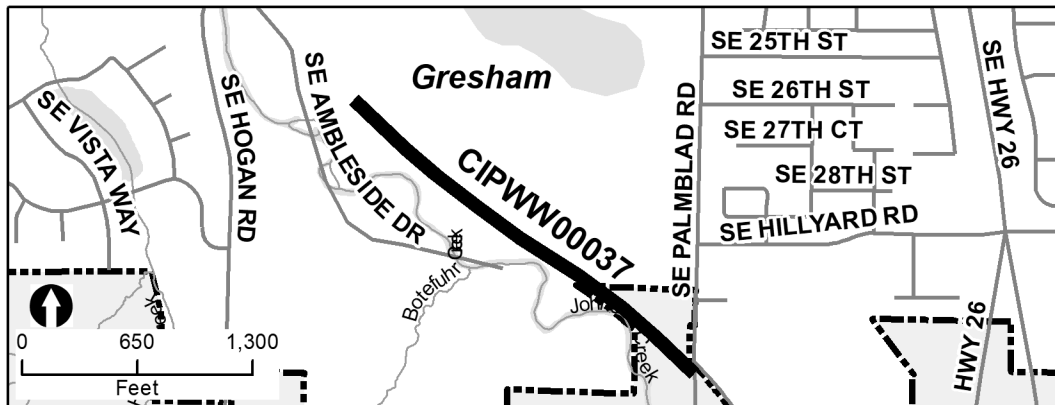
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00037: Upper Johnson Creek Upgrade

Description: This project will upsize an existing 12" sanitary sewer line to a 24" diameter line to meet increased flow demands as identified in the Wastewater Masterplan. 2020 Collection Master plan project JC4 (near term) and SDC project #22.

Justification: This project is needed to provide adequate wastewater conveyance capacity for growth.

Type of Project: Design and construction of facilities and utilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	2,720,126
	SDC	597,101
Resources Total		3,317,227
Expenses	Design/Const Admi	398,047
	Construction	2,511,815
	Admin (14%)	407,365
Expenses Total		3,317,227

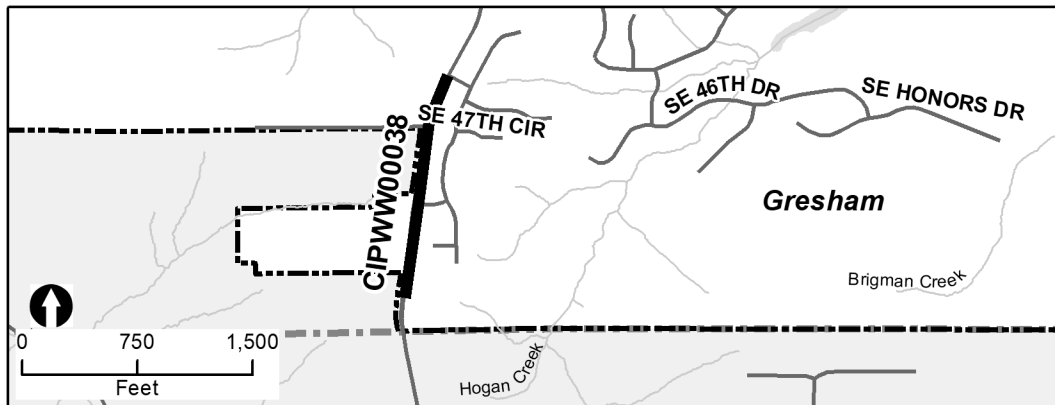
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00038: Upper Regner Rd Trunk

Description: This project extends the wastewater system south in Regner Rd. to serve properties not presently served. This is Collection Master Plan project JC3 (medium term).

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	2,936,518
Resources Total		2,936,518
Expenses	Design/Const Admi	234,172
	Construction	2,341,721
	Admin (14%)	360,625
Expenses Total		2,936,518

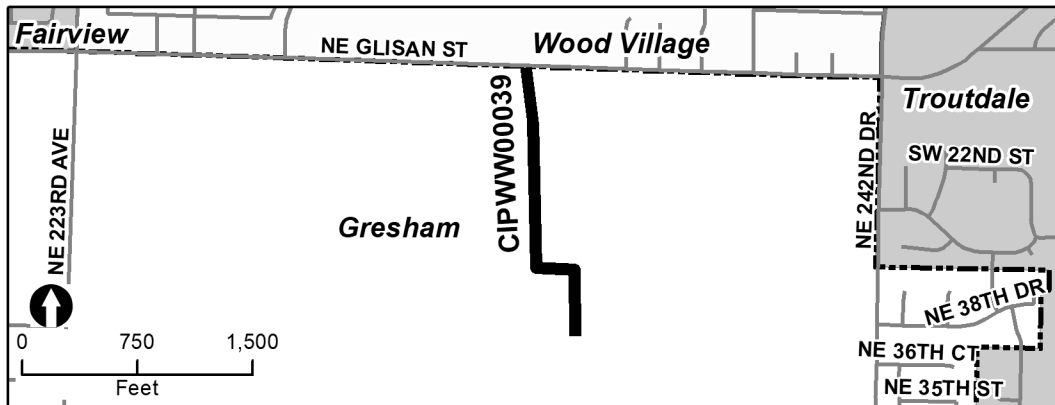
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00039: Stark Basin Improvement

Description: This project will install approximately 2,022-feet of 12-inch sewer main using open trench excavation methods. This project will extend wastewater service into the Gresham Vista Business area. This is Collection Master Plan project SB1 (long term) and SDC project #25.

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	844,656
Resources Total		844,656
Expenses	Design/Const Admi	101,349
	Construction	639,577
	Admin (14%)	103,730
Expenses Total		844,656

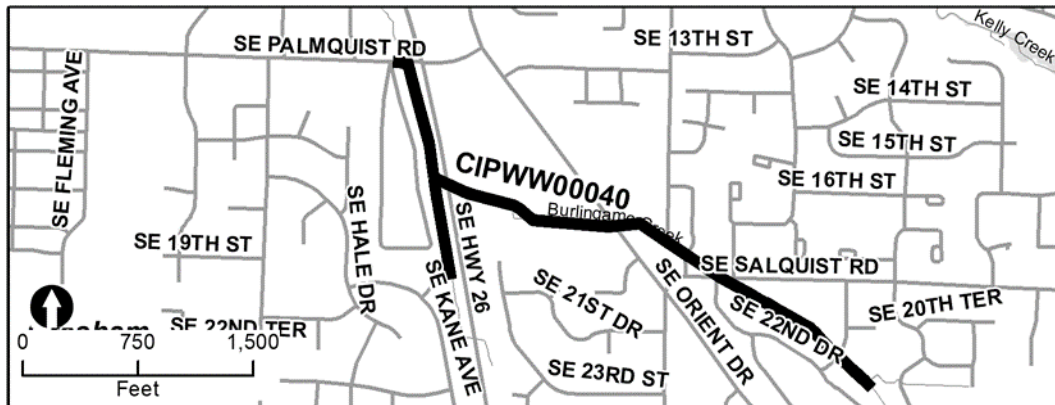
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00040: East Basin Trunk Upgrade Phase 4

Description: This project will install approximately 4,784-feet of 12-, 14-, and 20-inch sewer main using pipe bursting in several phases; this is phase 4 of 5. This project will correct surcharged areas of the sanitary sewer system. This is Collection Master Plan project E1 (medium term) and SDC project #6.4.

Justification: Wastewater collection system extension required for future development of area.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	1,868,705
Resources Total		1,868,705
Expenses	Design/Const Admi	224,232
	Construction	1,414,962
	Admin (14%)	229,511
Expenses Total		1,868,705

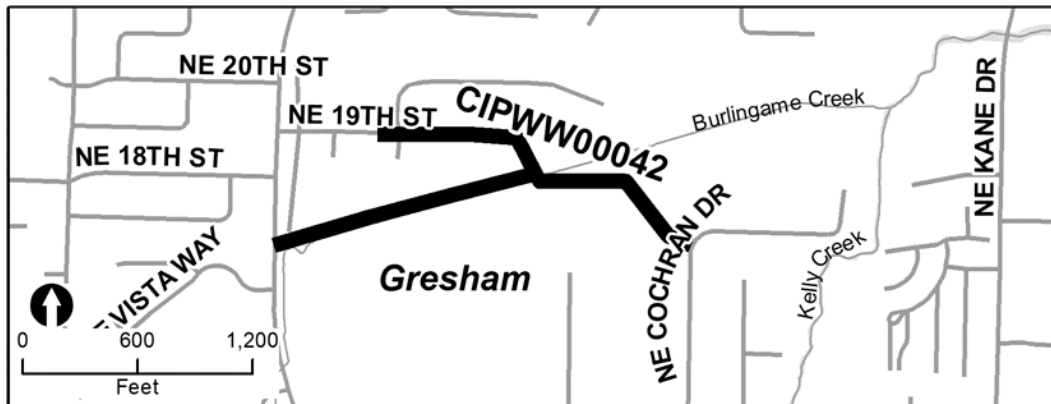
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00042: Lower Kelly Creek Trunk Upgrade Phase 2

Description: This project will increase the capacity of the system in problem areas and reduce the amount of inflow entering the system. This sewer line is located in a low lying area within the Gresham Golf Course. The construction of the project is time sensitive because of the impact on the golf course and the creek in the area. This phase will replace the pipe in the golf course. 2020 Collection Master Plan project KC2 (Medium Term) and SDC project #2.2.

Justification: This project provides sewerage system capabilities for transmitting current and projected sewerage flows. The potential addition of the flows from Barlow High School into this basin add to the justification for construction of this project.

Type of Project: Construction of facilities and utilities for growth and to correct deficiencies.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	73,046
	SDC	31,306
Resources Total		104,352
Expenses	Design/Const Admi	18,364
	Construction	73,174
	Admin (14%)	12,814
Expenses Total		104,352

**UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant**

CIPWW00044: Tier 1 Seismic Upgrades

Description: The Tier 1 upgrades include trunk sewers serving hospitals, City Hall and the Police Station (Emergency Response Center) within the City. These pipe segments generally consist of concrete sewer piping susceptible to joint separation and manhole damage during a seismic event. The anticipated repair method is likely structural CIPP lining or pipe bursting. SDC project #30.

Justification: These backbone systems are vital to the continued service of our major piping network to insure the safe functioning of our city in the event of a seismic event.

Type of Project: Design and construction of WW facilities.



Estimated Dollars:	Funds	Description	Total
	Resources	Operating	25,667,983
		SDC	4,465,831
	Resources Total		30,133,814
	Expenses	Design/Const Admi	3,616,072
		Construction	22,817,092
		Admin (14%)	3,700,650
	Expenses Total		30,133,814

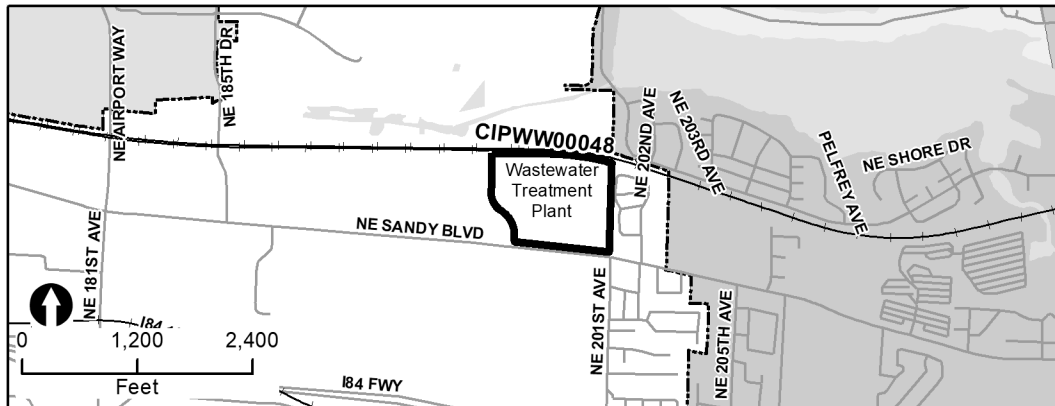
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00048: WWTP Biosolids Storage Facility Expansion

Description: This project constructs additional biosolids storage bays to meet the need for increased biosolids storage capacity as identified in the October, 2017 WWTP Master Plan Update currently estimated to begin in 2030. SDC project #WWTP 12.

Justification: Additional storage capacity will be needed to maintain the 60-day storage requirement for biosolids.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	SDC	3,613,292
Resources Total		3,613,292
Expenses	Design/Const Admi	433,556
	Construction	2,736,035
	Admin (14%)	443,701
Expenses Total		3,613,292

UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00056: Upper Kelly Creek Trunk Improvements, Phase 2

Description: This project upsizes a total of 2,000 linear feet of pipe from North of SE El Camino Dr. to NE 8th St. Installation by bursting and open trench excavation of pipe with from 15" to a diameter of 21" to 27". 2020 Collection Master Plan Project KC1 (medium-term) and SDC project 1.2.

Justification: Capacity for future growth, seismic resiliency of backbone infrastructure serving critical customers and reduction of inflow and infiltration.

Type of Project: Design and construction of wastewater facilities for growth.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	123,463
	SDC	45,664
Resources Total		169,127
Expenses	Design/Const Admi	20,291
	Construction	128,028
	Admin (14%)	20,808
Expenses Total		169,127

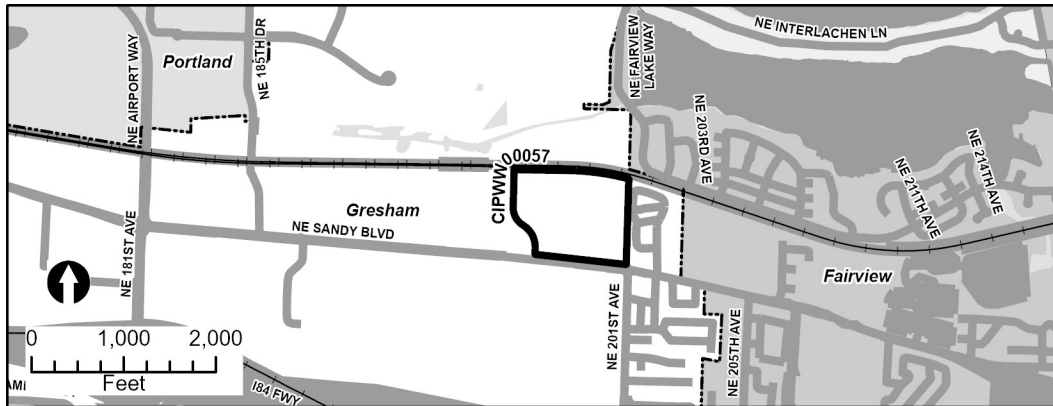
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00057: Anaerobic Digestion and Cogeneration Expansion, Phase 2

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 2 of the project will design and construct existing Digester 1 and 2 improvements, and a new biogas storage facility as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 13.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	4,420,449
	SDC	8,209,406
Resources Total		12,629,855
Expenses	Design/Const Admi	1,515,583
	Construction	9,563,284
	Admin (14%)	1,550,988
Expenses Total		12,629,855

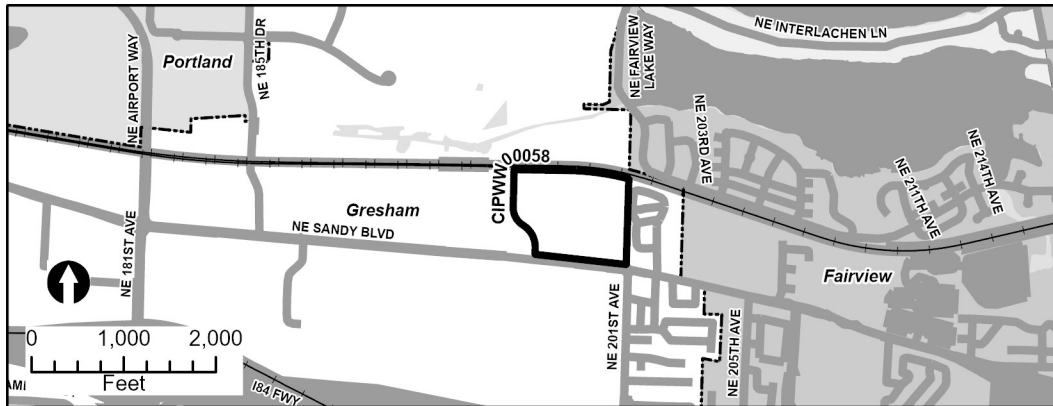
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00058: Anaerobic Digestion and Cogeneration Expansion, Phase 3

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 3 of the project will design and construct expanded high strength organic waste receiving facilities as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 13.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	3,695,785
	SDC	6,863,601
Resources Total		10,559,386
Expenses	Design/Const Admi	1,267,126
	Construction	7,995,526
	Admin (14%)	1,296,734
Expenses Total		10,559,386

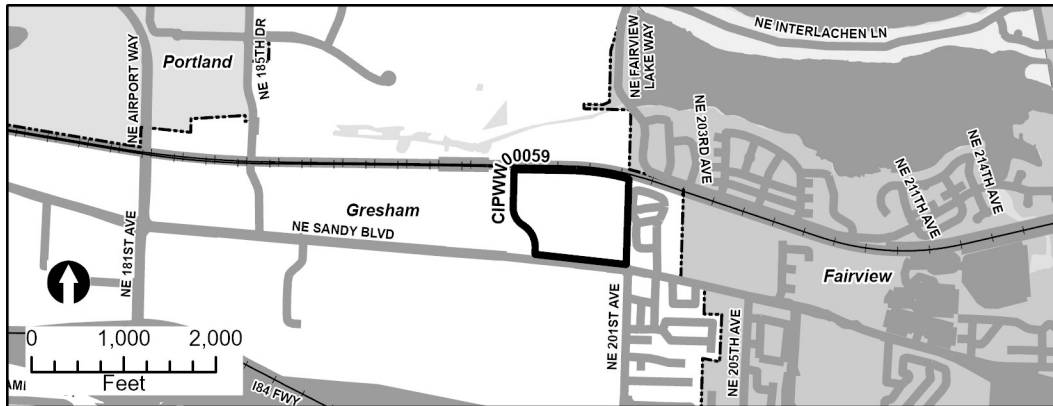
UNFUNDED and FUTURE PROJECT
Wastewater Collection and Treatment Plant

CIPWW00059: Anaerobic Digestion and Cogeneration Expansion, Phase 4

Description: This project will design and construct the WWTP Anaerobic Digestion and Cogeneration Expansion. These improvements will include installing a third anaerobic digester and expanding the liquid organic receiving facilities. The resulting increase in biogas production will be used in an expanded cogeneration power production facility. Phase 4 (the final phase of the project) of the project will design and construct a new cogeneration facility and a new RNG treatment facility as detailed in the 2023 predesign report for the WWTP Anaerobic Digestion and Cogeneration Expansion Project. WWTP Master Plan Project and SDC project WWTP 13.

Justification: This project is needed to expand the solids treatment capacity of the WWTP. The two existing anaerobic digesters were installed in 1989 and due to growth need to be expanded. The revenues from increased liquid organics deliveries and energy production will provide an approximate 9-year payback when all phases are completed.

Type of Project: Construction of new WWTP Processes.



Estimated Dollars:

Funds	Description	Total
Resources	Operating	10,072,827
	SDC	18,706,678
Resources Total		28,779,505
Expenses	Design/Const Admi	3,453,541
	Construction	21,791,675
	Admin (14%)	3,534,289
Expenses Total		28,779,505