



DATE: AUGUST 5, 2024
TO: MAYOR AND CITY COUNCIL
FROM: SCOTT SPENCE, CITY MANAGER
SUBJECT: PUBLIC WORKS STATUS UPDATE

Following are summaries of the status of Public Works major projects and activities:

WATERSHED

Watershed Road System

- Routine road maintenance – our Water Source Operator has been conducting routine road system maintenance.
- Cedar Creek Bridge Project (ON HOLD)
 - Staff and the City Forester, Ben Hayes, developed a concept plan for the replacement of the failing Cedar Creek road crossing within the City watershed. The concept plan included a new bridge crossing along the existing road alignment. Updated estimates for the construction increased dramatically (\$500,000 +/-) due to inflation so this option has been taken off the table. The Oregon Department of Fish and Wildlife (ODFW) has also made a determination that the bridge project would not qualify for mitigation for the Spur 12 culvert project.
 - The City Forester is working with the Oregon Department of Forestry and ODFW on a new option for meeting our mitigation obligation that will most likely include some form culvert replacement project in our watershed.
 - Options for the road crossing and failing culvert problem are being investigated and may include a more cost-effective option of removing the creek crossing, restoring the streambed and developing a simpler crossing at another location.

2024 Timber Harvest Project (Tippy Top)

- Solicitations for Logging Services, Sort Sale and Road Construction and Maintenance for the 2024 Timber Harvest Project were issued on January 23, 2024, to complete a 58-acre variable retention harvest.

- The Logging Services contract was awarded to JWN Trucking, LLC; the Road Construction and Maintenance Contract was awarded to Warrenton Fiber Company; and the Sort Sale contracts were awarded to Stimson Lumber Company and Hampton Tree Farms.



- Road construction and maintenance began in March and logging services are underway. The harvest project is to be complete no later than October 31, 2024.
- The net proceeds to the Capital Improvement Fund total \$504,704.30.

WATER SYSTEM

16th Street Distribution Waterline Project (ARPA Grant Project)

- Grant agreement with Infrastructure Finance Authority (IFA) has been approved.
- HDR Engineering was awarded the engineering services contract.
- CMGC contract was awarded to Emery & Sons Construction Group.
- Construction is anticipated during the summer of 2025.

Pipeline Road Waterline Resilience Project (ARPA Grant Project)

- Grant agreement with Infrastructure Finance Authority (IFA) has been approved.
- Tetra Tech was awarded the engineering services contract.
- Tetra Tech is preparing the final design documents and bid advertisement is anticipated to begin in August 2024.
- The design plans have been advanced to 60%.
- Construction is anticipated during the summer of 2025.

Irving Ave from 20th St to 28th St Waterline Project (Congressionally Directed Spending)

- Project will replace an existing 6-inch cast iron waterline that is nearly 100 years old with a new 12-inch pipe constructed of modern resilient materials.
- City was notified by U.S. Senator Jeff Merkley's office that \$1.8 million in grant funding has been allocated for this project.
- Further updates and details will be provided to Council as they become available.

Automated Water Meter Reading (AMR) System Project

- The Public Works Department has completed the installation and implementation of the new AMR system for downtown, large commercial customers, and a handful of new residential customers.
- Residential water meters that need replacement are being replaced with AMR meters to meet the future needs of our water system.
- Staff had previously submitted a Letter of Interest for the Safe Drinking Water Program Funding through the Infrastructure Finance Authority (IFA). Currently, the City can receive a loan for the project, which is 50% forgivable. In lieu of incurring debt for the project, staff is hopeful that stimulus funding may provide a full grant opportunity for the project in the future. Staff has been informed that this funding source is currently unavailable.
- Staff presented to Council a strategy to purchase and install AMR's of a 4-5 year period. We have budgeted \$200,000 this fiscal year for new meters and the City will be hiring a new staff member to help install the meters over time. This plan will be more cost effective than hiring the work out.

Old Highway 30 – Emergency Waterline Relocation Project

- Department of Labor plans to complete landslide mitigation work immediately adjacent to a City-maintained waterline along Old Highway 30. The City needs to relocate the waterline pipe to accommodate their construction project and to minimize potential damage.
- Engineering staff has finalized waterline plans.
- We are working with the City Attorney to coordinate an agreement for relocation of the utility with the Department of Labor. The Department of Labor has indicated that the landslide mitigation work has been postponed due to funding. The City has not been able to finalize the agreement with the Department of Labor at this time.

Dam Safety Program Projects, Bear Creek Dam Emergency Spillway, Main & Wickiup Dam seismic Studies (Oregon Water Resources Grant Projects)

- After a favorable dam stability analysis that determined our dam is not subject to significant failure during a Cascadia Subduction Zone seismic event, the Oregon Water Resources Department (OWRD) concluded that our next step was to proceed with the development of an emergency spillway strategy and eventual construction.
- The next step was to complete a flood study referred to as a Probable Maximum Flood (PMF). This work is complete.
- Staff had worked with the OWRD to pursue grant funding for the next step, which is a hydraulics study and a design concept plan of the needed improvements to the existing dam to pass a probable maximum flood event. OWRD has obtained full funding and the study is underway. OWRD staff will be managing the project. We are currently reviewing a 30% design report for the project.

- OWRD has also notified us that they have grant funding for three additional studies in our watershed. The studies include a seismic evaluation of Middle Lake Dam, a seismic evaluation of Wickiup Lake Dam, and a conduit evaluation of all of the reservoirs. Conduit is a term used for the drain pipes that release water from the bottom of each reservoir to drop the reservoir level during an emergency. This work is currently underway.

Skyline Place Waterline Improvement Project

- *No status change since the last update.*
- This project will replace two 2” water lines that serve the Skyline Place neighborhood. It will also reroute several water services that are currently inaccessible in that area.
- The project is nearing final design but has been placed on hold due to other water improvement priorities.
- The City recently secured an easement with the adjacent property owner to accommodate the project.

SANITARY SEWER SYSTEM

COVID-19 Wastewater Monitoring

- *No status change since the last update.*
- Staff is still providing COVID-19 testing results from the City Wastewater Treatment Plant (WWTP) for the Oregon Health Authority (OHA) Program. OHA has launched a statewide COVID-19 wastewater-monitoring project to study the presence of the SARS-CoV-2 virus in more than 40 small- to medium-sized communities around the state. The project, which will include weekly wastewater testing over a 30-month period, will enable epidemiologists to better understand the circulation of COVID-19 in some of Oregon’s communities. It will serve as an “early warning” system to tell if COVID-19 is spreading silently in communities. Staff is now receiving feedback from the program. According to the wastewater monitoring data, the viral concentration rates at the WWTP have plateaued.

Industrial Pretreatment Program

- The City identified industrial user loads that were causing issues at the wastewater treatment plant and in the sewer collection system which necessitated the development of an Industrial Pretreatment Program.
- Pretreatment Ordinance No. 22-10 was adopted on May 16, 2022.
- Resolution No. 22-21 establishing conditions for the waste allocation to the fermentation beverage industry sector was adopted on June 20, 2022.
- The new sewer rate structure became effective on January 1, 2024.

Wastewater Treatment Plant Improvements Project (ARPA Grant Project)

- Gibbs & Olson was awarded the engineering services contract.
- Grant agreement for the ARPA funding for \$4,860,000 has been fully executed.
- Funding Agreement with OBDD fully executed in May 2024 that includes \$425,000 grant and \$2,006,500 loan.
- An amendment to the OBDD Funding Agreement is being prepared by Business Oregon for an additional loan amount of \$2,527,732. It is anticipated that the funding agreement amendment will be presented to Council on August 19th.
- Big River Construction was awarded the construction contract.
- Construction will begin in spring of 2025.

Floral Ave. Sanitary Sewer Project

- The construction associated with this project is complete.
- Staff is working on project close-out documentation at this time.
- Staff will be coordinating with impacted residents to provide information and timelines associated with connection to the new sanitary sewer pipe.

Melbourne Ave. SS Replacement Project

- This project includes replacement of approximately 120 feet of deteriorated sanitary sewer pipe on Melbourne Ave.
- This project has temporarily been placed on hold to accommodate other project priorities.

Sewage Lift Stations Rehabilitation Project

- Three sewage lift stations have been maintained for approximately 50 years with uninterrupted use. Recent maintenance activity is exceeding normal levels due to the components being beyond their design life.
- Design phase funding agreements were authorized in May 2024; 1) OSG grant amount of \$185,880 and DEQ CWSRF loan amount of \$119,920 with 50% principal forgiven funds.
- Design scope and fee is being prepared by Richwine Environmental.

COMBINED SEWER OVERFLOW (CSO) SYSTEM

Next CSO Separation Project

- *No status change since the last update.*
- Staff is in the planning phase of the next CSO project.
- No construction will take place this year. Construction is not anticipated until 2025 or later.

TRANSPORTATION SYSTEM

Emergency Bank Stabilization Project

- As a result of king tides and a wind storm at the end of December 2022, the Columbia River bank adjacent to the River Trail experienced extensive erosion that requires immediate attention.
- FEMA funding is not available for this project.
- Staff withdrew permits for the work due to projected approval timelines and restructured the project to avoid impacts on jurisdictional waters.
- The project has been awarded to Big River Construction and construction is anticipated to be completed by Fall 2024.

OR202 Sidewalk Project: Dresden – 4th Street (ODOT Grant)

Original project scope consisted of installing a new sidewalk from Dresden to the DMV and Astoria High School to 4th St as well as stormwater improvements.

- ODOT designed the project, including all permitting and right-of-way acquisition.
- The project was bid for the third time with a reduced scope that includes sidewalk on the north side of OR202 from the Astoria High School driveway to Hanover St. and ADA ramps at Denver St.
- ODOT awarded the construction contract to Big River Construction.
- Construction is currently underway and anticipated to be complete by the end of October 2024.



23rd Street Rectangular Rapid Flashing Beacon (RRFB) Project (ODOT Grant)

- Brown Contracting has completed this project and the system is working with some minor project cleanup taking place.
- City Council approved an IGA amendment for this project that included additional funding and time for completion.

City and Hwy 30 Chairwall Issues

- *No status change since the last update.*
- The City of Astoria has a downtown where the roadways are supported by a wall system commonly referred to as a Chairwall system built in 1919 and 1922.
- US Hwy 30 through town is supported by the wall system between 5th Street and 17th Street.
- There are two locations where the wall system supporting Highway 30 is failing. The first location is on Marine Drive between 9th and 10th Streets and the second location is between 16th and 17th Streets.
- Staff has communicated with ODOT regarding the need to repair the failing wall segments supporting the highway. ODOT has informed staff that they will route oversized loads away from the wall segments through their oversized freight traffic permit process.

Trolley Infrastructure Maintenance Planning

- The City will be working with the RTA to update the operational agreement that guides their use of the tracks and associated infrastructure.
- The Riverfront Trolley Association (RTA) has worked very hard to repair a number of the track deficiencies identified by the Oregon Department of Transportation (ODOT) Rail Division during their track inspection. This has included the replacement of numerous deteriorated railroad ties. The City has worked in partnership with the RTA to ensure that materials and equipment are available for the maintenance work. This has yielded very positive results. No issues identified will prohibit the Trolley from operation at this time.
- The City has planned striping for the trolley to meet operational and crossing requirements. This is planned for completion by the end of June to meet ODOT inspection requirements.
- The City is working with the RTA to advance a project to replace the 15th Street rail crossing to remedy both rail and roadway deficiencies.

Trolley Trestle Repair Project

- Bergerson Construction completed project construction in Spring 2024.
- We are currently working on close-out administrative tasks.

STORM SYSTEM

Pre-Disaster Landslide Storm Drainage Project (FEMA & IFA Grant)

- Grant agreements with FEMA (through Oregon Emergency Management) and Infrastructure Finance Authority (IFA) have been approved.
- Engineering staff completed project design and the project is currently being bid. The goal is to award a contract to the selected Contractor in early August 2024.

- Construction is anticipated during fall of 2024. This project will be constructed during the driest time of the year to minimize the potential for land movement.

SANITATION

Landfill Post-Closure Activities

- Household Hazardous Waste Facility -staff will continue to work with County staff on DEQ gas monitoring requirements.
- Staff is continuing to work with the Oregon Department of Environmental Quality on post-closure activities consisting of gas monitoring and groundwater monitoring. A final permit has been issued and staff is currently working on the final document requirements for the site. Once all operation manuals are complete, staff will continue with annual reporting as required for the term of the post-closure period.
- During periodic utility inspections, it was determined that a critical stormwater pipe through the site was showing signs of failure. Staff is working on a plan to replace the pipe and will monitor its condition in the meantime. Funding is currently not identified for this project.
- Public works staff is currently assisting the Astoria School District with a settlement issue occurring at the concessions area of the site.

FACILITIES

LED lighting at City Hall

- *No status change since the last update.*
- Staff is working with the Energy Trust of Oregon and their contract electrician to develop a strategy for replacing all of the City Hall overhead lights with LED lighting. The project will involve both fixtures and simple bulb replacements.
- The work is budgeted for fiscal year 2023-24.

LANDSLIDE RESPONSE AND UTILITY REPAIR

27TH Street and Grand Avenue Landslide

- Public Works repaired the water line on 27th Street and it is currently active.
- Engineering Division staff are currently working on a design to restore infrastructure in the area with a consultant.
- We are targeting at least partial utility replacement in Fall 2024, though this may get postponed until 2025.

PUBLIC WORKS ENGINEERING

Development Review Workload

- In calendar year (CY) 2024, the Engineering Division expects a significant increase in the volume of development review-related tasks. We are working on ways to increase review efficiency and minimize impacts on Public Works priorities. However, the submittal volume is expected to have a substantial impact on staff resources available for capital improvement projects this year.
- We anticipate the need to coordinate, review and approve close to \$300 million in private development within the next year.

GIS Updates

- Staff has continued to make progress on the development of the public works infrastructure system in GIS. We have also been working on our mobile application for both Staff and public use.
- Operations Staff have implemented tablets for use in the field making their access to GIS data more efficient and helpful. The use of the tablets has indicated that more tablets are needed to expand the beneficial use of the system by more operational field staff.

Administration, Personnel and Training

- Participated in a Public Works Vehicle and Equipment Parade for Astor Elementary Students
- Held National Public Works Week Coloring Contest for Astor Elementary Students
- Sarah Hammond celebrated 5-year anniversary with the City
- Sarah Hammond obtained Project Management Professional certification



PUBLIC WORKS OPERATIONS

The following items highlight some of Operation's recent work:

Personnel and Training:

- One resignation this quarter – new hire is scheduled to start August 5th
- Burke Matthews passed his Water Distribution Level I Certification
- Hosted Public Works Departments from Warrenton, Seaside, and Cannon Beach for National Public Works Week Appreciation event with over 50 attendees

- Held in Public Works Vehicle and Equipment Parade at Astor Elementary School for students
- Kevin Daw recognized for 35 years of service
- GIS Training for Utility Workers
- Inhalation and asbestos pipe training for all workers
- Aaron Bladen and Haden Culver passed their CDL driving tests and Levi Greer obtained his HAZMAT endorsement
- Jim Hatcher gave an in-depth presentation to the Utility Workers about Astoria's water distribution system
 - 290 Work Orders Initiated
 - 197 Work Orders Completed
 - 268 Active Work Orders as of 06/30/2024
 - 18 Work Orders for other departments



Water:

- Completed annual hydrant flushing
- Installed 2" waterline on 46th Street
- Installed 2" waterline on Industry at Hamburg
- Cleaned Reservoir 2 and Reservoir 3 floating covers
- 12 water leaks / main breaks repaired
- 60 fire hydrants painted

Sewer:

- Repaired collapsed sewer at 453 W. Marine Drive with assistance from Big River Excavating
- Re-grout manholes at 12th and Grand
- Rebuild 2 Mixer/Blower pontoons at Wastewater Treatment Plant
- Removed drying bed at Treatment Plant in preparation for new Headworks construction
- Completed 6 Work Orders to TV sewer mains
- Herbicide application at Wastewater Treatment Plant to reduce brush on lagoon banks to minimize damage from burrowing animals

Stormwater:

- Completed inlet inspections for late spring rains
- Investigated storm lines at Portway and Industry for Clatsop Behavioral Health project
- Cleaned out catch basins

- Investigate sinkhole on Columbia caused by an abandoned stormline
- Replaced 3 catch basins

Transportation:

- 9 Work Orders for potholes in addition to potholes repaired during pothole patrol
- Street sign installation, replacement, cleaning and maintenance
- Completed 51 WOs – potholes, signs, dead animals, etc.
- Installed thermoplastic markings at crosswalks on 16th and 17th Streets at Marine Drive and at 45th and Lief Erickson

Shop and Yard:

- Completed reroofing and residing of truck barn
- Installed landscaping at Shops as was required by design code
- Commissioned 2 new utility trucks. Surplus of one 2002 utility truck
- 193 hours of interdepartmental vehicle maintenance (APD, AFD, Parks)

Other:

- Investigated and repaired power issue at 17th St. Dock
- Installed gangway landing for cruise ships at 17th St. Dock
- Replaced hotbox at water service on west mooring at 17th St. Dock
- One transient camp clean-up
- Heritage Square Inspection
- Gas Monitoring at CMH Field

BY: JEFF HARRINGTON, PUBLIC WORKS DIRECTOR

SUMMARY OF INFRASTRUCTURE GRANTS AWARDED

Staff has dedicated many hours of hard work in securing and administering grant funding for projects that would have otherwise been funded by incurring debt service and resulted in subsequent rate increases. Since 2006, Public Works has secured or assisted with approximately \$50 million in grant funding to the City.

**Funding source for the following projects: American Recovery Plan Act (ARPA) Discretionary Funds*

GRANT FUNDED OR202 Waterline Replacement Project - \$1,772,000

This project replaces an undersized older waterline that runs along the project limits of the upcoming OR202 Sidewalk Project. The pipe is required to be replaced before repaving the highway adjacent to the new sidewalk between the Short Stop Market and the Astoria High School. **[PROJECT COMPLETED]**

**Funding source for the following projects: State of Oregon Coronavirus State Fiscal Recovery Fund Grants administered through Infrastructure Finance Authority (IFA)*

GRANT FUNDED Wastewater Treatment Plant (WWTP) Improvements Project - \$4,860,000 + \$425,000 (OBDD Grant) An increase in the loan amount to cover inflation is in the works.

The Wastewater Treatment Plant upgrades, which include flow measurement, screening, influent grit removal, and pond baffles, have been in the works for many years.

GRANT FUNDED Pipeline Road Waterline Resilience Project - \$2,930,000

This project includes re-aligning some of the most landslide-prone sections of our transmission main to more stable ground. This will be the start of many other project recommendations made in our Pipeline Road Transmission Main Resilience Study.

GRANT FUNDED 16th Street Distribution Waterline Project - \$2,790,000

This project is the first section of our water distribution piping leaving Reservoir 2 and feeding a large section of the City including downtown and the Port area. The pipe was constructed in 1895 and runs through a tunnel from Reservoir 2 to 16th and Jerome Street.

**Funding sources for the following projects: FEMA Oregon Legislative Pre-Disaster Mitigation (LPDM) Funds and Infrastructure Finance Authority (IFA)*

GRANT FUNDED Pre-Disaster Landslide Storm Drainage Project - \$902,487.50

(75% or \$676,875 FEMA grant funded with 25% or \$225,615 City match funded by IFA) This project includes two of six landslide areas identified for storm pipe replacement of pipe placed in the early 1950s after three very large landslides destroyed many homes along the north slopes of Astoria.

**Funding source for the following projects: Oregon Department of Transportation*

GRANT FUNDED OR 202 Sidewalk Project - \$4,172,000 (90% or \$3,743,450 grant funded with 10% or \$428,550 City match)

The construction of a new sidewalk and drainage infrastructure between Hanover St. and the Astoria High School. This area is experiencing high pedestrian volumes where walkers and bicyclists have to navigate the highway shoulder around a curved roadway.

GRANT FUNDED Marine Drive and 23rd Street Crosswalk Enhancements Project - \$200,000

This project will provide a Rapid Flashing Rectangular Beacon and crosswalk enhancements at the request of the CO-OP and Columbia Memorial Hospital, both of which have resulted in increased pedestrian activity at the crossing.

**Funding source for the following project: Oregon Department of Water Resources*

GRANT FUNDED Bear Creek Dam Spillway Pre-design - \$140,000

The second phase of the spillway study will eventually result in meeting a requirement of the Oregon State Dam Safety Program that requires our High Hazard Dam to have the capability of passing a probable maximum flood event over the dam without causing damage to the dam and without reducing the dam's seismic stability.

**Funding source for the following projects: Congressional Directed Spending*

GRANT FUNDED Irving Avenue (20th - 28th St.) Waterline Resiliency Project - \$1,894,662

This project will upgrade 2800 LF old 6-inch cast-iron water pipe to new resilient 12" HDPE pipe from 20th Street to 28th Street along Irving Ave. and will provide a critical alternate route for over a mile of the City's 21-inch transmission main that connects Reservoirs 2 and 3 through several landslide susceptible areas. The existing pipe was installed in 1928 and 1970 and is aligned through several mapped landslide areas.

**Funding source for the following projects: Department of Environmental Quality (DEQ)*

GRANT/LOAN FUNDED Sewer Lift Stations Rehabilitation Project - \$3,670,000

The City has three sewage lift stations that convey sewage around Astoria starting on the Young's Bay side of town and to the wastewater treatment plant on the east side of town. Built in the early 1970s, these lift stations are in dire need of an overhaul with breakdowns occurring periodically and costly repairs burdening our budget.

For the design phase, DEQ awarded a \$185,880 grant through their Overflow Sewer & Stormwater program and a loan of \$119,920 with 50% forgiveness (grant) through their Clean Water State Revolving Fund (CWSRF). **Staff has applied for a DEQ loan for \$3,370,000 for the construction phase, which, we anticipate that half of the loan (\$1,685,000) amount will be a forgivable loan (grant).**

PROJECT LIST FOR FUTURE GRANT/LOAN REQUESTS

AWAITING FUNDING AWARD Water System Automatic Meter Reading (AMR) System Project - \$1,902,384

The City has placed approximately 13 AMRs in our downtown area and we will need to eventually place approximately 4,000 AMRs in our residential areas. A letter of interest has been submitted to the State Safe Water Drinking Program for this project. Funding will likely consist of a low-interest loan of which up to half may be a forgivable loan or grant.

AWAITING FUNDING OPPORTUNITY Water System Clearwell Project - \$5,000,000

This project would improve operations at the water treatment facility and provide updated laboratory facilities. A study was completed in 2018 identifying the project's purpose, scope, cost and benefits.

AWAITING FUNDING OPPORTUNITY Phase 5 CSO Program Projects - \$18,000,000

Grant funding for the remaining CSO program projects would reduce the length and amount of future CSO surcharge rates to the ratepayer. While this amount of grant funding is not highly likely, we will continue to look for funding opportunities.

AWAITING FUNDING OPPORTUNITY Irving at 33rd Street Bridge - \$6,000,000

Public Works staff has applied for funding for our last of nine City-owned bridges twice and have not been awarded funding for this existing timber bridge built in 1951. Once federal stimulus funding works its way down to the Oregon Department of Transportation Local Bridge Program, it is our hope that the bridge replacement will be funded. Past bridge funding has consisted of 90% grant and 10% City match. **Staff will be submitting an application due October 16th, 2023, but our consultant who is assisting with the application anticipates that our project may not qualify for this round of funding.**

AWAITING FUNDING OPPORTUNITY Denver and Alameda Sidewalk Project - \$960,000

This project is a transportation safety project identified in the City Transportation System Plan (TSP) as a priority sidewalk project linking neighborhoods above Tapiola Park and the Astoria High School to the Hwy 202 sidewalk corridor.