



CITY OF ASTORIA

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MEMORANDUM • PUBLIC WORKS DEPARTMENT

DATE: APRIL 15, 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
 - 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 anticipated to begin in June. 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 and has begun work on the alternatives evaluation.
- CMGC contract was awarded to Emery & Sons Construction Group at the April 1st Council meeting.
- 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 and completed the alternatives evaluation.
- City staff is currently reviewing 30% complete design documents.
- 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 has 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 is investigating the possibility of hiring a new staff member to install residential AMR's and help with the backload of water meter-related utility work in the department. This may prove to be more cost effective than contracting out the installation in light of the loss of a grant opportunity.

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.

Bear Creek Dam Emergency Spillway (Oregon Water Resources Grant Project)

- 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.
- An option that includes utilizing enhanced downstream scour protection to accommodate dam overtopping in an emergency flood situation is being considered. Original options included significant earthwork, were very expensive and had significant environmental impacts.
- 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 drainpipes 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

- 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 was approved by Council in June as part of the Sewer Resolution. It became effective on January 1, 2024.
- Staff sent sewer rate change notification letters to approximately 200 impacted customers in the Commercial 2 and Commercial 3 categories.

Wastewater Treatment Plant Improvements Project (ARPA Grant Project)

- Grant agreement for the ARPA funding for \$4,860,000 has been fully executed.
- An additional funding agreement is being prepared by Business Oregon for a combination of grant and loan funds to cover the estimated increase in project

construction costs. It is anticipated that the funding agreement will be presented to Council at their May 6th meeting along with authorization to bid the project.

- Final bid documents are currently being prepared by the engineering consultant, Gibbs & Olson.
- Construction may begin as early as summer of 2024 with the majority of the construction activity anticipated in the summer 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 for deteriorated sanitary sewer pipe on Melbourne Ave.
- Staff is currently preparing project documents for advertising in May 2024.

6th St. & Bond St. Sewer Project

- This project includes the addition of a manhole and clean-out over existing sanitary sewer pipes to provide maintenance access for our Public Works Operations staff.
- The project is currently being solicited and we anticipate selecting a Contractor for the project by the end of the month.

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; therefore, a rehabilitation project is warranted.
- City staff submitted a funding application to DEQ Clean Water State Revolving Fund in September that will include a loan and potentially principal forgiveness component. A funding strategy for this project is anticipated to be presented to City Council in June 2024 with construction timeline being dependent on equipment procurement timelines.
- The City has been notified that we qualify for the requested loan/grant.

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.
- The City was notified that FEMA funding would not be available for the project.
- Staff withdrew permits for the work due to projected approval timelines and restructured the project to avoid impacts on jurisdictional waters.
- Staff is working on preparation of construction documents for the most critical repairs. Funding is not currently available for this work so we are currently planning a project for FY 24/25.



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.
- Project has been bid twice without successful award of the construction contract due to bids being higher than the funding amount.
- The project was recently 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. City staff is awaiting news from ODOT on the bid results.
- Construction timeline to be determined after bid award.

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

- Brown Contracting is currently working on this project with an anticipated completion date of late May 2024.
- 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 is currently working on the trestle repairs.
- We anticipate project completion by the end of April 2024.



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 are currently working on project design.
- 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.
- **Note: staff has not had adequate time to develop the design of this project due to development review and grant project workload. We are looking into hiring a consultant to assist to help meet our schedule. Grant extensions have already been requested and granted.**

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 an application for a grant from DEQ to study a settlement issue occurring at the concessions area of the site.**

FACILITIES

Public Works Equipment Shed Roof and Siding

- Coastline Roofing and Construction has started construction on this project.
- We anticipate construction being completed in mid-May 2024.
- Staff is currently working on an RFQ for landscape services to meet the conditions of approval for the project.

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 to obtain survey information in preparation of utility replacement in this area.
- Preliminary design is anticipated to begin Summer 2024

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.

PUBLIC WORKS OPERATIONS

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

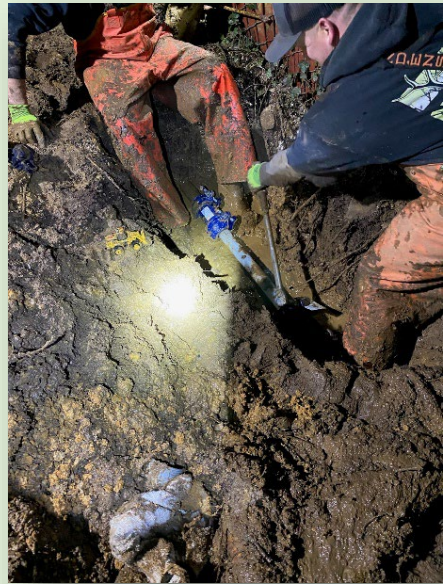
Personnel and Training:

- Hired 1 new personnel; Haden Culver – Utility I
- Department is fully staffed.
- Tim Johnson marked his 30 year anniversary with the City
- Levi Greer celebrated his 5th anniversary
- Kyle Bryan obtained his Water Distribution I certification and was promoted to Utility Worker II
- Nathan Barber obtained his Water Treatment I certification
- Matt Miller obtained his Wastewater Collections II certification
- Ole Gifford, Tim Johnson, and Jim Hatcher attended CEU training in Sun River, OR
- Matthew Burgher attended Wastewater Collections training in Keizer, OR
- Aaron Bladen and Nathan Barber attended a one day class on control valves in Tualatin, OR

Water:

- 2023 Water Quality Report was completed and distributed
- Conducted yearly hydrant flushing
- Installed a pump control system for the Astoria Column to provide reliable water service

- Several repairs made on fire hydrants due to vehicular damage
- Two new hydrants installed; repaired 6 others
- Abandoned 1600 feet of old 6" cast iron pipe in Blue Ridge
- Tested water meters for our large customers (3" or greater service)
- 7 new or replaced services
- Transmission line on Pipeline blow-offs checked and flushed
- 117 work orders completed
 - 91 PMs
 - 26 reactive



Stormwater:

- Completed inlet inspections several times during rain events
- Unplugged several inlets with vacuum truck
- Cleaned out catch basins
- 4 Reactive work orders completed
- Replaced catch basin at 4th and Klaskinine
- Repaired 15" storm line at the Columbia Baseball Field

Transportation:

- 3 potholes repaired
- Street sign installation, replacement, cleaning and maintenance
- Completed 36 WOs – potholes, signs, dead animals, etc.
- Removed the last parking meters from downtown

Shop and Yard:

- Completed lower barn rebuild – installed shelving and moved all portable pumping equipment to barn.
- 158 hours of service on outside department equipment
- Sold 4 surplus vehicles – 1 F250, International 6 yard dump truck, 2 Chevy Tahoes
- Worked with Engineering to develop a landscaping plan for the shops

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

The Wastewater Treatment Plant upgrades, which include flow measurement, screening, influent grit removal, and pond baffles, have been in the works for many years. This grant opportunity prevents rate increases that would be needed to pay the debt service on a loan for the full amount.

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 the Short Stop Market and the Astoria High School will connect large neighborhood areas to the 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 \$180,080 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.