

From The Director's Office:

Smart Cities Pilot Project

The City is partnering with Portland General Electric on a Smart Cities initiative to use automatic controllers for both streetlights and water meters. The Streetlight/Water Meter Pilot Project will use data and technology to monitor, operate and record information from city infrastructure.

For the streetlight portion of the Pilot Project, 42 high pressure sodium streetlights along Town Center Loop were replaced with LED streetlight with controller nodes. Using Sensus software, the streetlight controllers can determine if a light is malfunctioning, to trim or dim the lights or even flash the lights.

The 20 Pilot Project water meters will have radios that can transmit hourly water usage. The data will be sent to an office computer thereby eliminating the need for personnel to perform water meter readings in the field. Also, a few of the meters will have the ability to be shut off remotely, again eliminating the need for staff to go to the meter location and physically turn it off.

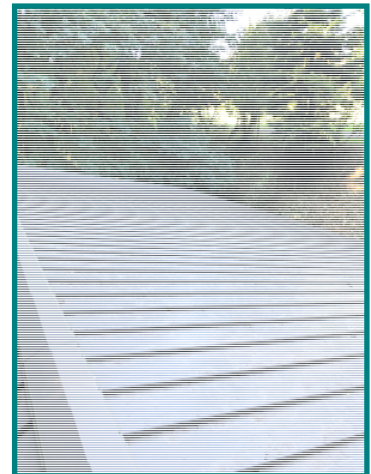
Once the infrastructure and software is fully implemented, the Pilot Project will operate for six months and the results of the Project will help us to determine if or how we might want to deploy this Smart Cities technology elsewhere in the City as streetlights and water meters are replaced.



Facilities Division

Annual Roof and Gutter Cleaning

Facility Technicians Ivan Crumrine and Javid Yamin have been performing the annual cleaning of roof and gutter systems on facilities throughout the City. There is over 100,000 square feet of various types of building roofs including: asphalt shingles, Thermoplastic Polyolefin (TPO), and corrugated metal. Each roof comes with its own list of maintenance challenges, which means some roof types require more maintenance than others. Pictured to the right is a before and after photo of the roof on the Forest Shelter at Memorial Park.

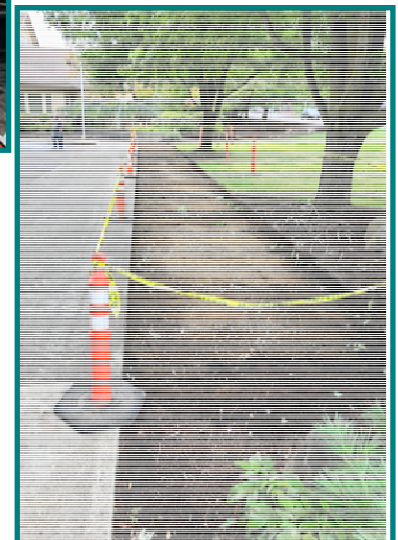


Vehicle Charging Stations Prep Work

The Wilsonville Public Library is receiving an exterior addition in the form of charging stations for electric vehicles. The City is working in conjunction with EV4 LLC, CTS Engineers, and Portland General Electric to install six charging stations (two “Level 2 chargers” and four quick chargers) along the northern perimeter of the parking lot.

Next to the project site there are two root bound maple trees. To provide extra growing space and water drainage for the trees, it was determined that one lane of the sidewalk should be removed.

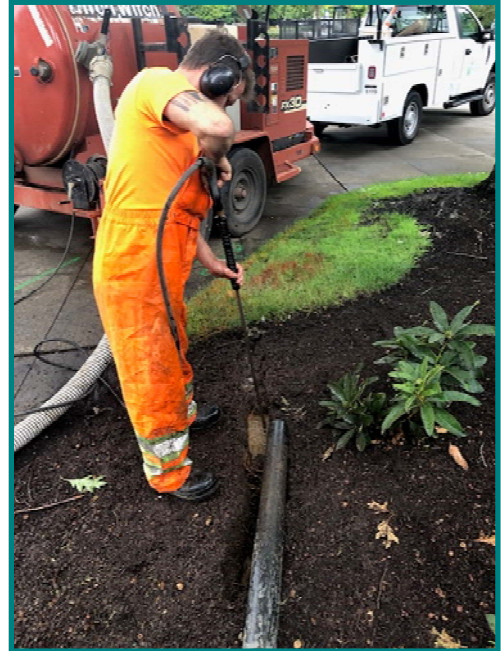
After installation of the charging stations and associated sidewalk ramps, the area around the base of the trees will be backfilled with soil. Below are photos showing the before and after condition of the area.



Facilities Division

Waterline Break at the Parks and Recreation Building

Earlier in the month, Park Maintenance staff noticed water pooling around the oak tree near the northwest corner of the Parks and Recreation Building. It was realized there was a mainline break seemingly right underneath the oak tree. In order to not disturb the root zone to the point where it could be detrimental for the tree, it was decided to bypass the broken segment of pipe by trenching in a new line to reconnect at a point away from the tree roots. Building Maintenance Specialist Ivan Crumrine and Park Maintenance Specialist Tim Skipper did the majority of the trench work carefully so not to disturb the integrity of the tree's lateral root structure. Below are photos of the staff in action and web of tree roots that needed to be avoided.



Roads & Storm Water Division

Bus Shelter Replacements

Roads staff teamed up with Fleet staff to remove and install six bus shelters in two days. These larger bus shelters upgrades were much needed as the old shelters were too small and had aged quite badly.



Montebello Flooding

Unanticipated flooding occurred on Montebello Road due to an outfall that was installed in the 1970's that was buried in three feet of sediment. Once the cause of the flooding was determined, Storm and Roads staff cleared the outfall, reconstructed the ditch line and installed all the necessary Best Management

Practices (BMP) structures within two days. We are happy to report no flooding occurred after the next rain event.



Utilities Division

Chad Whiting, Utilities Maintenance Specialist

Due to retirements and shifting of responsibilities, the sanitary sewer group has been short staffed, but has recently filled the Utility Maintenance Specialist position with a focus on Sewer. The Utilities Division is happy to welcome Chad Whiting to the team. Chad has a strong background in heavy equipment operation and over 14 years of experience working with water utilities for the Springfield Utility Board. Chad's primary duties will be operating the combination cleaning truck to clean sanitary sewer lines and manholes as well as making repairs to collections system structures. We are excited to utilize Chad's experience with water utilities and heavy equipment operation to assist with projects along with the Public Works divisions.



Large Water Meter Calibration

This month large meters for the various turnouts in the distribution system were calibrated by Buell Calibration & Controls. Buell uses ultrasonic flow meter verification to include ultrasonic flow rate comparison, analog output calibration and coil resistance testing. All of the meters that were tested passed with no errors and are operating accurately. The turnout meter calibration is performed on annual schedule to ensure that the meters are operating within specifications.

Painting and Replacing Fire Hydrants

The water distribution team has been taking advantage of the last dry days of summer to work on tasks that would be difficult to perform during the wet months. One of these tasks includes replacing meters that require driving on grass or dirt to access or are located in low spots where the meter may be submerged in water. Another dry weather task is painting fire hydrants. A few members of the water crew have been experimenting with different methods to paint hydrants in order to determine the most efficient process, whether it be with a paint sprayer, brush, or spray can.

