

# **Woodward Upgrades Project Newsletter**

A part of the Clean Harbour Program

December 2021



On October 22, 2021 the last pump ran at the original Main Pumping Station. Nominated by John Beaton, Shane Blanchard was given the honour of running the last pump before the facility was officially decommissioned. John wrote, "Today is a sad day to see the old pumphouse be decommissioned and taken out of service to complete the upgrades. It served this great city amazingly well since 1964 and weathered many storms. From a historical point of view, I think it would be very fitting for you to be the one to run a pump for the very last time before decommissioning today...and deserve to be the one to drop anchor and report "finished with main engines"; figuratively speaking as it were, as we turn the page to start a new chapter of Hamilton Water History."





#### Woodward site refer to it simply as, The Pumphouse, has been serving the City of Hamilton since 1964. The Operations and Maintenance teams of past and present have relied on this Main Pumping Station to keep the flow of wastewater moving through the plant. This station ran 24 hours a day, 365 days year for over 50 years without even so much as a rest. This station ran well over it's lifetime but not without the help of the Operations and Maintenance teams. From routine inspections to major pump overhauls, our teams have been monumental in keeping The Pumphouse running. Just before we shut the station down for good, Ops and Maintenance staff were chasing some foreign object around the wet well. It seemed to be moving from pump to pump causing a lot of issues when pumps were running. Ops and Maintenance staff came together to utilize for the first time in its history, the clam shell bucket, used for pulling debris from the bottom of the wet well. We were unsuccessful in pulling anything up but at least we can say we used the clam shell before putting the station to rest. The Pumphouse got this City through extreme weather, rain storms, ice storms, black outs and more. It was truly the most reliable member of the Woodward team. As we move forward with the new Pumping station, I hope everyone can appreciate what The Pumphouse has meant to Hamilton Water and the Community." – Shane Blanchard, Process Supervisor

"The iconic Main Pumping Station, or as staff at the 700

## **Interesting Facts**

- Proctor and Redfern (P&R) were the engineers of the original MPS.
  P&R was purchased by Earth Tech, Earth Tech was purchased by Aecom and Aecom designed the New Station
- Originally designed as an 8 pump station, it ran with only 6 until 2005 when 2 more were added

#### Lost and Found

- Car tires
- Traffic cones
- Chrome fire extinguishers
- Tarps
- Facility has no prescreening so anything in the sewer will be in the station

#### Wastewater Volume

• Since 1964 it is estimated that 6.72 trillion litres of wastewater flow has been pumped through the MPS! That would equate to 2.686 million Olympic swimming pools worth of wastewater.

What's Next? By February 2022 everything above grade will be removed, all equipment below ground will be removed. Only the underground concrete shell will remain, and it will be backfilled rather than removed. Landscaping will occur at grade level.

## Tertiary Treatment









Phase 2 of the South Plant construction is progressing with concrete work on the Aeration tank and mechanical installs underway. As well, preparation work for commissioning of the new Secondary Clarifier has commenced. Concrete work is mostly complete at the new Chlorine Contact Tank with mechanical installs underway. Work continues on the new effluent outfall channel. Construction of the Tertiary Treatment Building continues with mechanical, electrical, and HVAC work, and preparation for commissioning is ongoing.

Construction: May 2019 - June 2022

Progress to Date

88%

100%

## Main Pumping Station

The majority of site grading and paving is finished with the final portion around the discharge channel to be complete after demolition of existing MPS. The 60-day run test of the new station has been completed and the station has been handed over to Plant Operations. The second and final discharge channel connection is anticipated on or before December 24 and the new pumping station will be able to operate at full capacity. Decommissioning of the old station has begun. The power has been disconnected and designated substance removal has started.



Progress to Date

92%

0%

Construction: May 2017 - Apr. 2022

100%

### Electrical Power Centre

All WWTP loads have been transferred to the new power centre with the exception of the Co-Gen, which is in the transfer process. This allows the fourth and final utility power feeder to be transferred to the new power centre. With power now transferred, demolition of both the existing WWTP electrical substation and auxiliary power building is proceeding. Work continues to correct deficiencies that have been identified, with minor commissioning activities occurring. As part of this contract, the dewatering building HVAC commissioning continues, as does the Chlorine Building commissioning activities. Landscaping and final grading is anticipated spring 2022.

Progress to Date

97%