

Portsmouth Pumping Station & Flow reversal Project

Jim Miller, RPP
Director Utilities Engineering and Human Resources



Agenda

- Project Component Details
- Timing
- Traffic/Road closures
- Emergency/Transit/Garbage during construction
- Questions



Preliminary Comments

- At 90% design/tender completion
- Details and logistics to be confirmed and finalized over the next 2 months
- Successful Contractor will influence sequencing and timing of work.



1. Pumping Station – Aberdeen Park

- Estimated Construction Cost is \$1,875,000.
- Construction timing 2019-2020 timed in conjunction with completion of the Cataraqui Bay WWTP upgrade.



1 Pumping Station – Aberdeen Park

- Work Scope expansion of the wet well, pump upgrades, electrical and pump controls and associated internal piping and connections to the new forcemain.
- The above grade portion of the building is not anticipated to change.

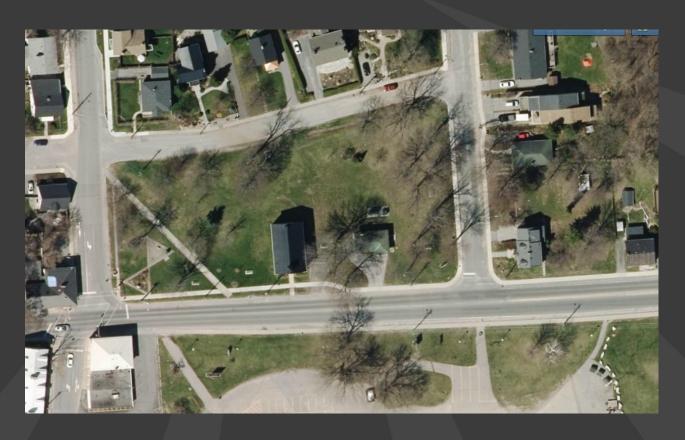


1 Pumping Station – Aberdeen Park

- The expansion of the wet well will require excavations for the installation of underground infrastructure.
- Details pending.
- Wet well location proposed for south side of the building in order to minimize impacts to existing infrastructure, landscaping, trees and the Historic Town Hall.



Portsmouth Pumping Station





Linear Assets

- Coordinated to permit the construction of two large linear utility projects within common ROW sections.
- To minimize future disruptions to the local community several smaller local utility replacement projects will also be coordinated within the design.
- Majority of the work will be constructed by means of conventional open cut trenching, with a 250m long section tunneled under the bridge at the Little Cataraqui Creek.
- Tunnel section will include the both the sanitary sewer forcemain and the trunk watermain.



Linear Assets Portsmouth Forcemain

- Estimated Construction Cost is \$5,400,000.
- Construction timing start in 2018 with completion in 2019,.
- Work Scope New 600mm dia. sanitary sewer forcemain from Portsmouth PS (Aberdeen Park) to Cataraqui Bay WWTP.
- 2.7 km in length on City property and municipal ROW(s)



Linear Assets Front Road Trunk Watermain

- Estimated Construction Cost is \$9,400,000.
- Construction timing start in 2018 with completion in 2019.
- Work Scope New 1050mm dia. trunk watermain from Sand Bay Lane at Front Road to Union Street at Sir John A Macdonald Blvd.
- 3.0 km in length on City property and municipal ROW(s)
- New trunk watermain will connect to the existing 600mm watermain at Union and SJAM and the existing 1050mm watermain.



Linear Assets King Street West Collector Sewer

- Estimated Construction Cost is \$1,225,000.
- Construction timing start in 2018 with completion in 2019.
- Work Scope Replacement/upsize of the existing 400/350mm sanitary sewer with a new 450mm sanitary sewer in King Street West from Country Club Drive to McDonald Ave.



Linear Assets Union, Church, Kennedy Streets

- Estimated Construction Cost is \$400,000.
- Construction timing start in 2018 with completion in 2019.
- Work Scope Replacement/upsize of existing sanitary sewer with a new 375mm sanitary sewer from Union & Mowat to Union & Church, Church & Kennedy to Kennedy and Yonge.
- These sewer(s) have been flagged for rehabilitation/replacement through CCTV and I&I studies.



Linear Assets Kennedy Street

- Estimated Construction Cost is \$200,000.
- Construction timing start in 2018 with completion in 2019.
- Work Scope Replacement of the existing 150mm watermain with a new 200mm watermain from Union & Church to Church & Kennedy to Kennedy and Yonge.



Other Considerations

- Traffic Island: Church/Union/Kennedy will be maintained/protected.
- Access During Construction: to be reviewed but generally limited to local traffic, alternate parking, emergencies TBC.
- **Service Disruptions**: to be reviewed, but generally short term, water/sewer/gas/electric services maintained during construction.



Other Considerations

 Emergency/Transit/Garbage: To be reviewed further but, preliminary discussions indicate that Kingston Transit will utilize Baiden Street to maintain transit routes as close as possible to existing stops when King Street West is closed. KT will utilize King Street W and SJAM when Union Street is closed. Discussions to be held with emergency services. Garbage typically handled by contractor.



Traffic/Road Closures

- Preliminary discussions with City Engineering and Public Works with respect to traffic control and detours – current thinking is:
- 1. Front Road/King Street West between Portsmouth Ave and Sand Bay Lane maintain 1 lane of traffic in each direction.



Traffic/Road Closures

- 2. King Street West between Portsmouth Ave and Mowat Street full closure of King Street West with the following Traffic Detours:
 - 1. East bound traffic on King Street West will be detoured north on Portsmouth to Johnson to SJAM and south to King Street West.
 - West Bound Traffic on King Street West will be detoured north on SJAM to Johnson to Portsmouth and south to King Street West.
 - 3. To be explored: traffic calming measures for Baiden Street to avoid short cutting of the detour. Transit use maintained though.
 - 4. To be explored: the option of temporarily reconfiguring the intersection of Union/Mowat/King Street West.



Traffic/Road Closures

- Union Street construction full closure of Union Street
 - East and west bound traffic on Union to be detoured along King Street and SJAM
 - South bound traffic on Yonge Street Closed at Union local traffic only.
 - 3. Access to Queen's West Campus to be further reviewed.
- Contract to have provisions that Union Street and King Street cannot be closed at the same time.
- Depending on construction sequencing, south bound traffic on Yonge Street may be open to either east or west bound traffic while constructing on Union Street



Other Considerations

- Public Meeting: mid January 2018 more details will be finalized & available.
- Tender late January 2018
- Last Public meeting February 2018 with contractor.



Thank you

Questions?