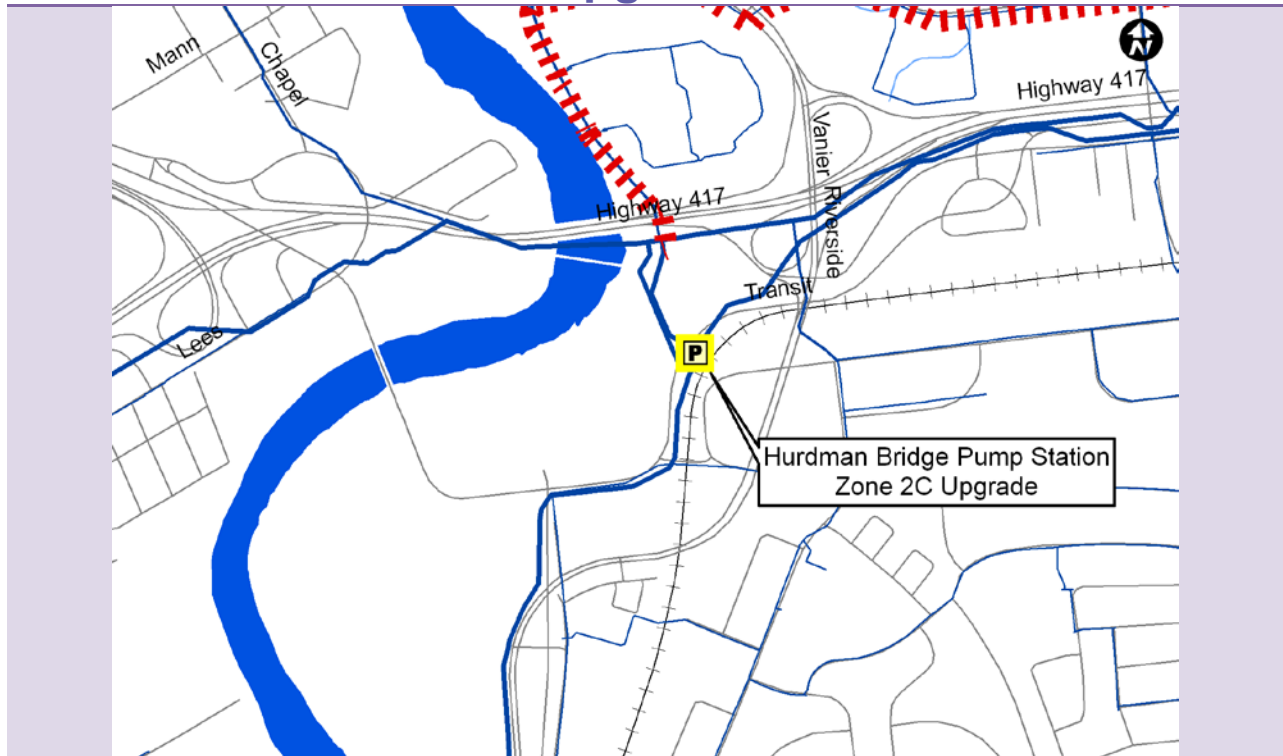


## A.2 Detailed Infrastructure Project Sheets (water and wastewater)

Water Projects

## Hurdman Bridge Pump Station (HBPS) Zone 2C Upgrade



### **Scope and Justification**

Increase pumping capacity at the HBPS to supply Zone 2C through the Zone 1E/2C Link Pipe to augment 2031 back-up supply.

### **Timing**

2013-2018: Increase pumping capacity to Zone 2C

### **Action Item Funding**

Construction Cost Estimate = \$2.4M

Capital Cost Estimate\* = \$5.0M (50% Development Charges, 50% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

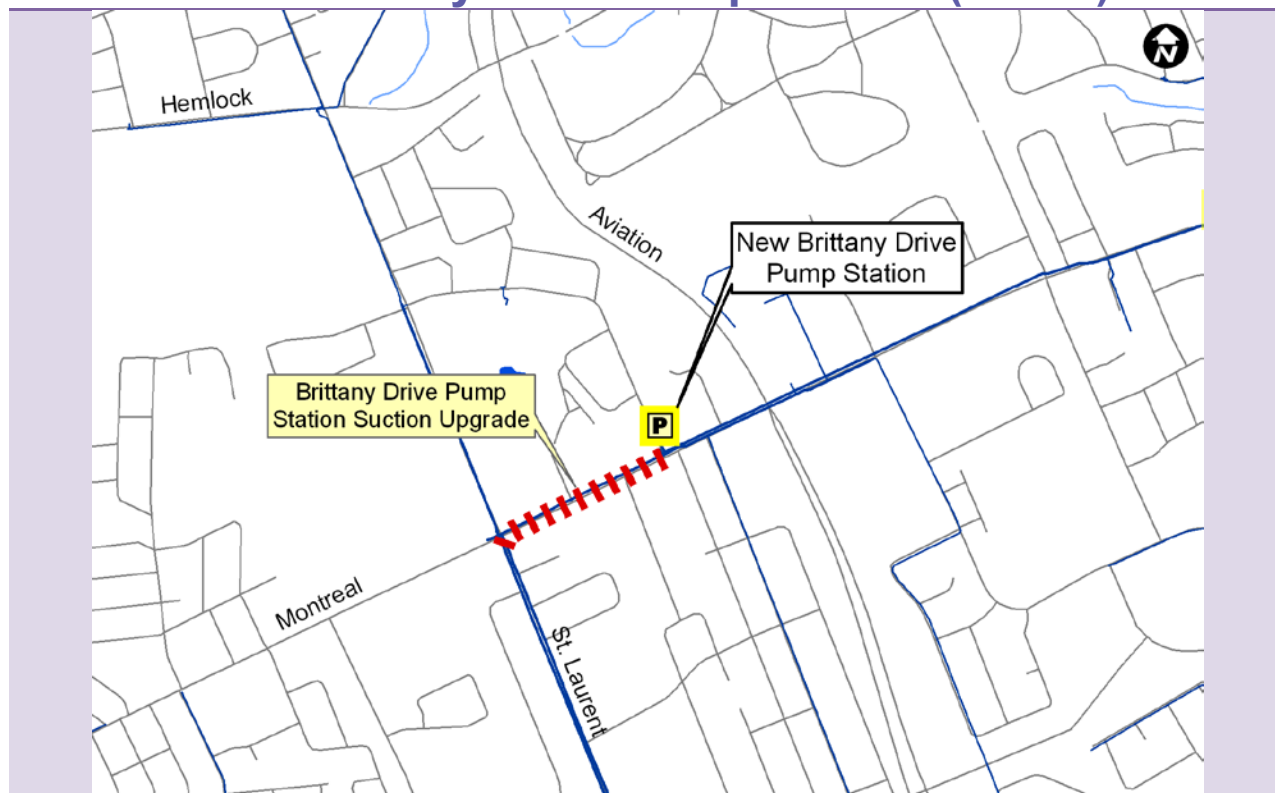
Class EA Schedule 'A' project. No consultation required prior to implementation.

### **Follow Up Actions**

Explore coordination opportunities for renewal and reliability upgrades at the station.

Review future capacity needs at the design stage to confirm the increase required.

## New Brittany Drive Pump Station (BDPS)



### **Scope and Justification**

Increase pumping capacity at the BDPS and increase back-up power supply to provide 2031 back-up supply to Zone MONT. An expansion of the facility is assumed.

### **Timing**

2013-2018: Station expansion and back-up power upgrade

### **Action Item Funding**

Construction Cost Estimate = \$1.6M

Capital Cost Estimate\* = \$3.4M (50% Development Charges, 50% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

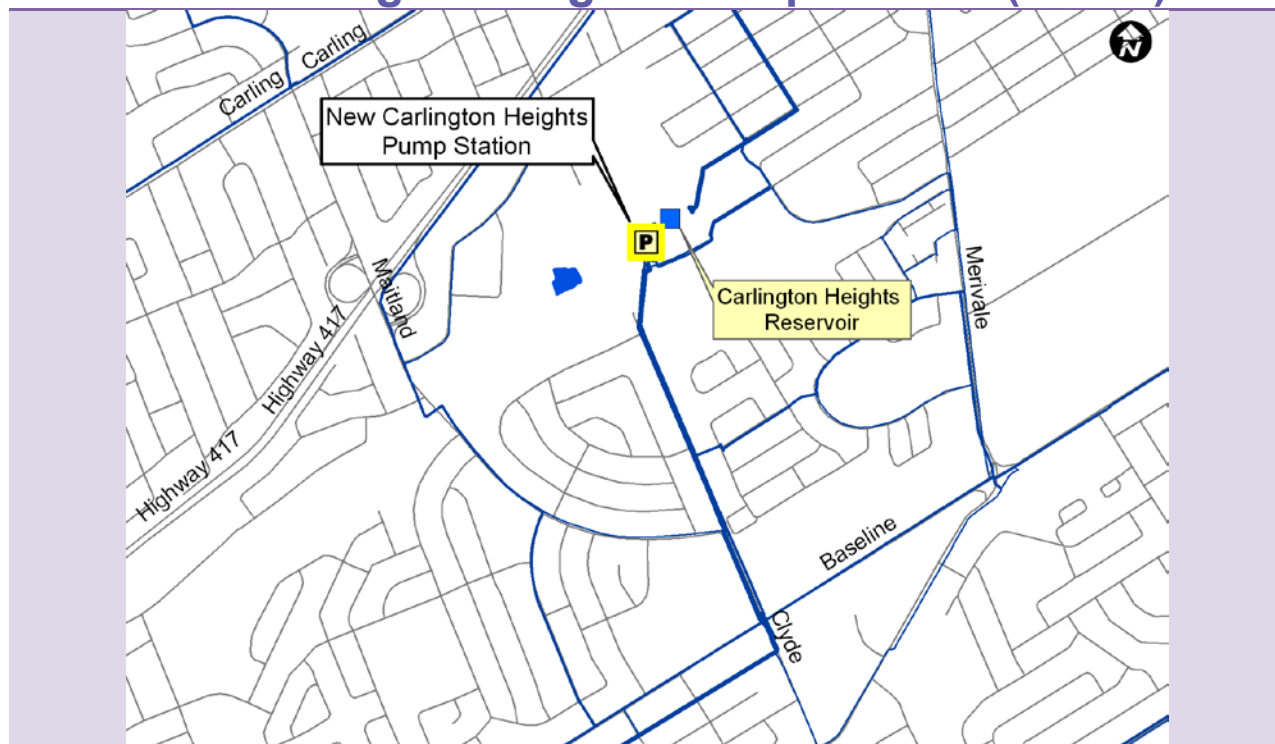
Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review was completed in 2006. An addendum may be required due to past deferral of the project.

### **Follow Up Actions**

Review future capacity needs at the design stage to confirm the increase required.

Prepare addendum to Class EA.

## New Carlington Heights Pump Station (CHPS)



### **Scope and Justification**

Construct new larger PS and yard piping to replace existing facilities to provide 2031 back-up and peaking supply to Zone 2W and 2031 peak supply to Zone ME. Include automated valving to allow flow from Zone 2W to Zone ME under emergency conditions.

### **Timing**

2013-2018: Construct new pump station and yard piping

### **Action Item Funding**

Construction Cost Estimate = \$4.9M

Capital Cost Estimate\* = \$10.3M (28% Development Charges, 72% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

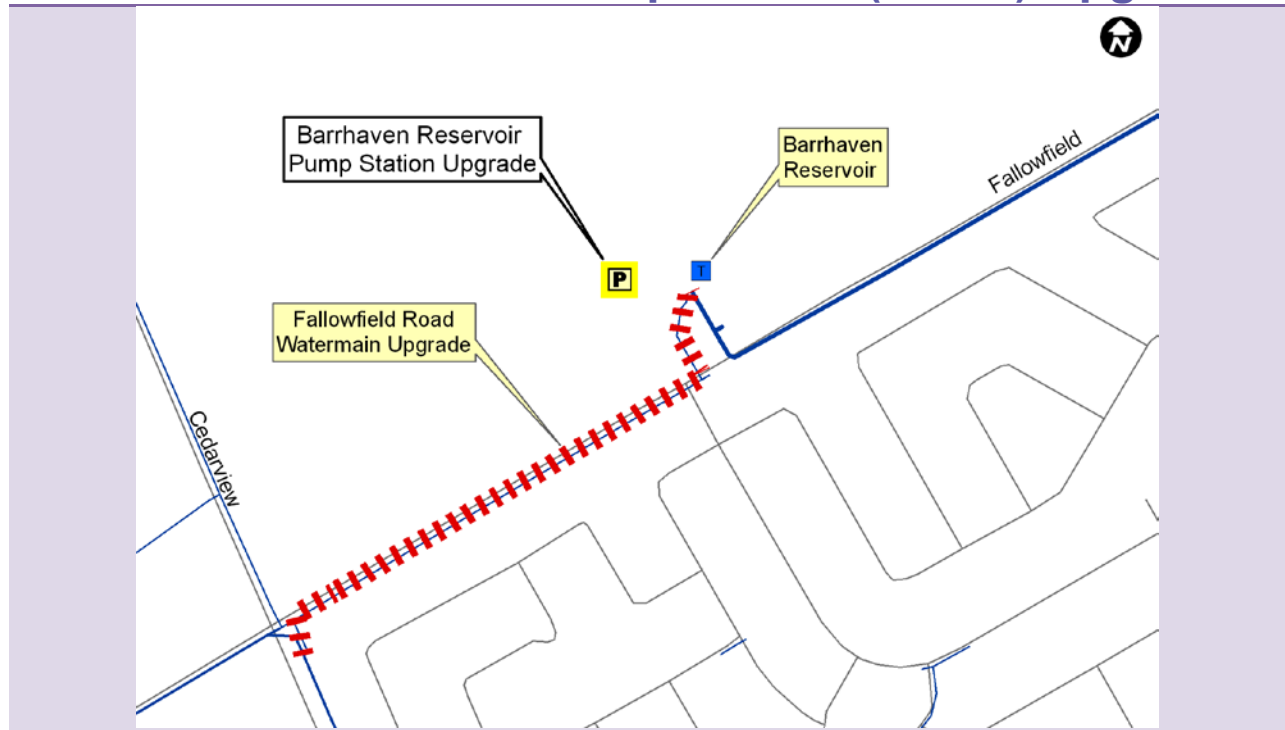
### **EA Requirements and Consultation**

Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review will be completed in 2013.

### **Follow Up Actions**

Review future capacity needs at the design stage to confirm the increase required.

## Barrhaven Reservoir Pump Station (BRPS) Upgrade



### **Scope and Justification**

Increase pumping capacity and provide back-up power at the BRPS (to Zone BARR) to provide adequate back-up and peaking supply demands to Zone BARR.

### **Timing**

2013-2018: Complete upgrades to the BRPS

### **Action Item Funding**

Construction Cost Estimate = \$0.6M

Capital Cost Estimate\* = \$1.2M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

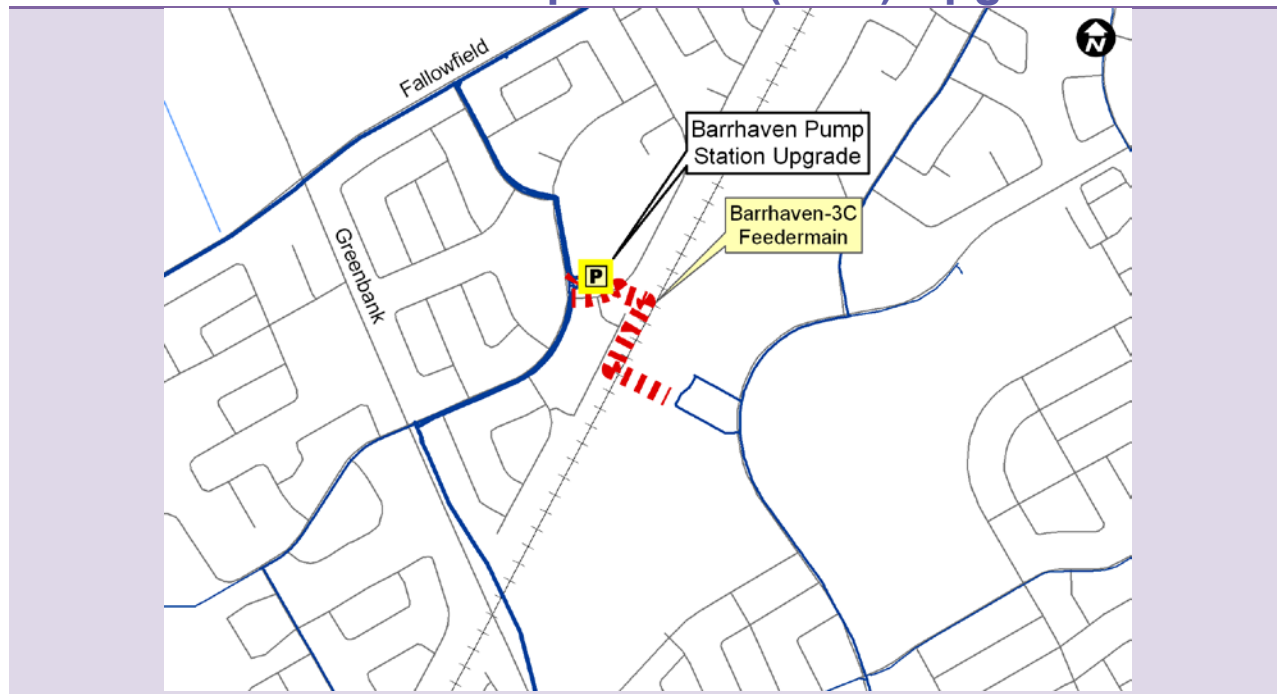
### **EA Requirements and Consultation**

Class EA Schedule 'A' project. No consultation required prior to implementation.

### **Follow Up Actions**

Review future capacity needs at the design stage to confirm the increase required. Coordinate with Fallowfield watermain project (needed to provide adequate station discharge capacity).

## Barrhaven Pump Station (BPS) Upgrade



### **Scope and Justification**

Reconfigure BPS to provide dual zone service (3C and BARR). Replace all pumping units to contribute to 2031 peak demand and back-up supply requirements for Zone 3C and Zone BARR. Upgrade back-up power.

### **Timing**

2013-2018: Reconfigure and upgrade station (Phase 1)  
 2019-2024: Zone 3C capacity increase (Phase 2)

### **Action Item Funding**

Phase 1 Construction Cost Estimate = \$1.7M  
 Phase 1 Capital Cost Estimate\* = \$3.5M (90% Development Charges, 10% Rate)  
 Phase 2 Construction Cost Estimate = \$0.3M  
 Phase 2 Capital Cost Estimate\* = \$0.6M (90% Development Charges, 10% Rate)  
*\*including construction cost, engineering, city internal costs and contingency allowance.  
 Funding split subject to review as part of 2014 Development Charges by-law.*

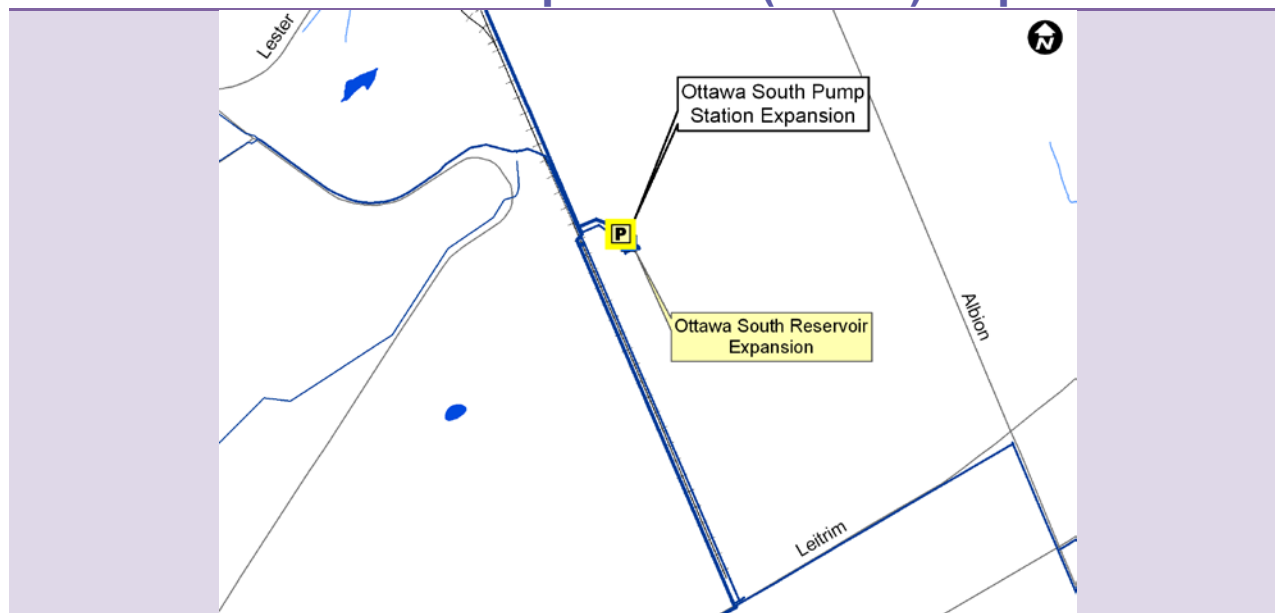
### **EA Requirements and Consultation**

Class EA Schedule 'A' project. No consultation required prior to implementation.

### **Follow Up Actions**

Review future capacity needs at the design stage to confirm the increase required.  
 Coordinate works with 2017 electrical renewal.

## Ottawa South Pump Station (OSPS) Expansion



### **Scope and Justification**

Reconfigure OSPS to provide dual zone service (3C and Uplands). Increase pumping capacity to provide 2031 peak demand to Uplands Zone and contribute to 2031 peak demand and back-up supply to Zone 3C. An expansion of the facility superstructure is required.

### **Timing**

2013-2018: Reconfigure and upgrade pump station (Phase 1)

2019-2024: Zone 3C capacity increase and power upgrades (Phase 2)

### **Action Item Funding**

Phase 1 Construction Cost Estimate = \$2.4M

Phase 1 Capital Cost Estimate\* = \$5.1M (90% Development Charges, 10% Rate)

Phase 2 Construction Cost Estimate = \$2.3M

Phase 2 Capital Cost Estimate\* = \$4.8M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

Class EA Schedule 'B' project (subject to review) - Notices, consultation and filing of Environmental Project File for public review may be required. Federal Land Use Approval may also be required.

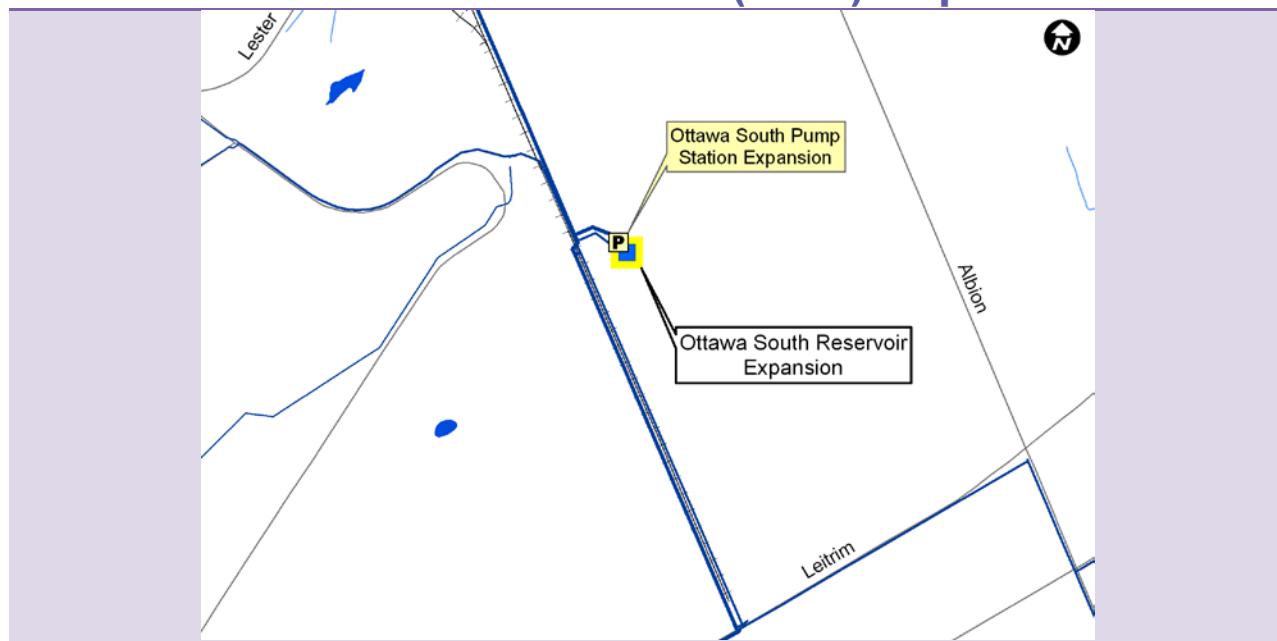
### **Follow Up Actions**

Review future capacity needs at the design stage to confirm the increase required.

Coordinate works with previously budgeted 2022 electrical renewal.



## Ottawa South Reservoir (OSR) Expansion



### **Scope and Justification**

Add 16 ML of storage volume at the OSR to defer and reduce pumping expansion needs to Zone 2C from the Billings Bridge and Hurdman Bridge PSs, and defer Water Purification Plant expansion. Should land availability be an issue, a smaller increase of 12ML would be acceptable.

### **Timing**

2019-2024: Increase storage at OSPS

### **Action Item Funding**

Construction Cost Estimate = \$5.9M

Capital Cost Estimate\* = \$13.3M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

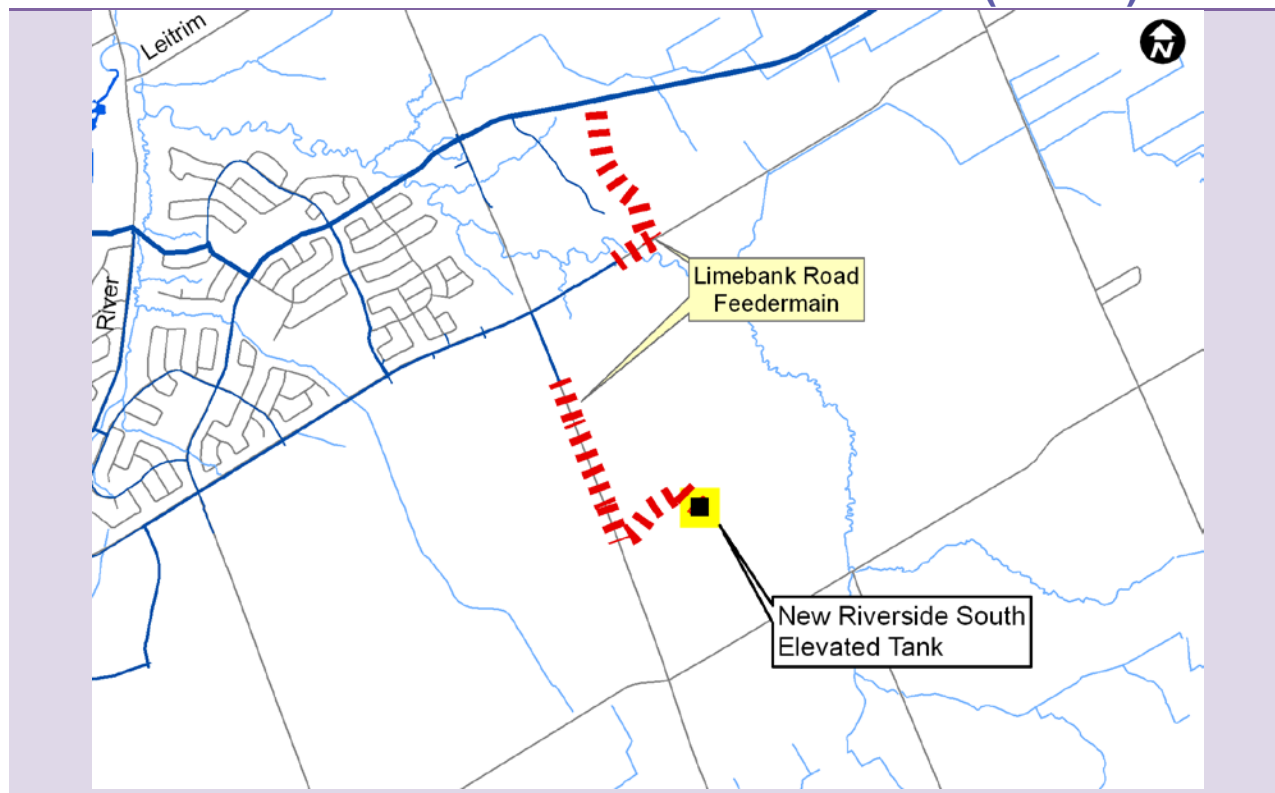
### **EA Requirements and Consultation**

Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review required. Federal Land Use Approval may also be required.

### **Follow Up Actions**

The Official Plan projections and actual development pressures will determine the exact timing for implementation. Monitor development needs to ensure infrastructure is constructed in a manner that is coincident with development.

## New Riverside South Elevated Tank (RSET)



### **Justification and Scope**

Construct new elevated storage tank to defer and reduce pumping expansion needs to Zone 3C from the Barrhaven and Ottawa South PSs.

### **Timing**

2019-2024: New elevated storage tank in Riverside South (Zone 3C)

### **Action Item Funding**

Construction Cost Estimate = \$6.0M

Capital Cost Estimate\* = \$13.5 (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

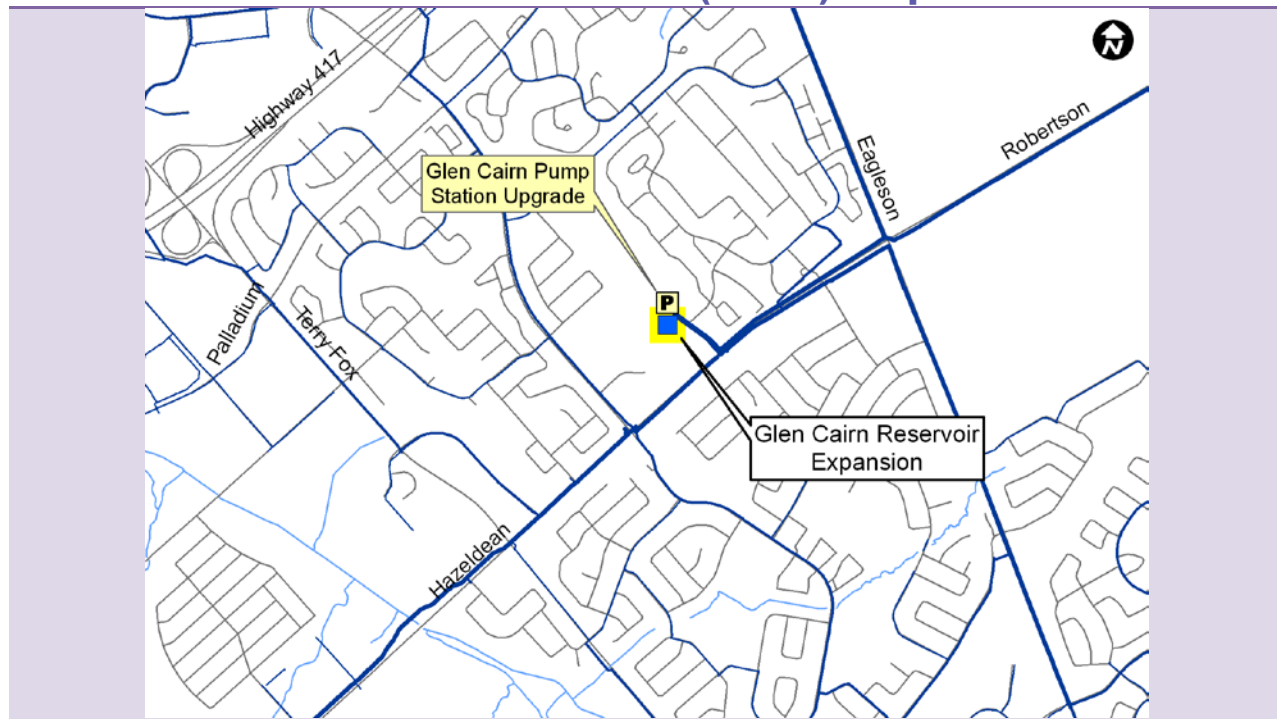
### **EA Requirements and Consultation**

Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

The Official Plan projections and actual development pressures will determine the exact timing for implementation. Monitor development needs to ensure infrastructure is constructed in a manner that is coincident with development.

## Glen Cairn Reservoir (GCR) Expansion



### **Scope and Justification**

Add 17 ML storage volume at the GCR to defer and reduce pumping expansion needs to Zone 2W from the Carlington Heights PS and defer Water Purification Plant expansion.

### **Timing**

2019-2024: Increase storage at GCPS

### **Action Item Funding**

Construction Cost Estimate = \$6.2M

Capital Cost Estimate\* = \$13.1M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

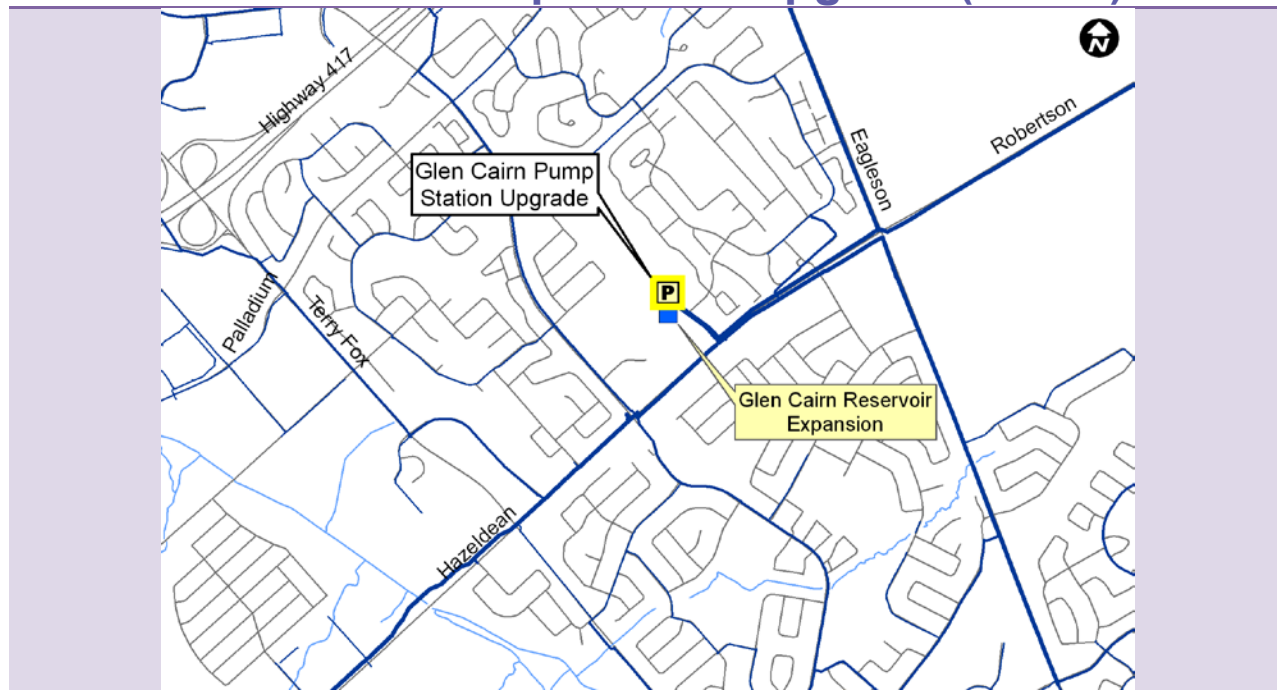
### **EA Requirements and Consultation**

Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

The Official Plan projections and actual development pressures will determine the exact timing for implementation. Monitor development needs to ensure infrastructure is constructed in a manner that is coincident with development.

## Glen Cairn Pump Station Upgrade (GCPS)



### **Scope and Justification**

Increase pumping capacity at the GCPS to meet 2031 peak demand to Zone 3W to supplement the Campeau Drive Pump Station. An expansion of the facility is assumed.

### **Timing**

2019-2024: Upgrade PS

### **Action Item Funding**

Construction Cost Estimate = \$1.5M

Capital Cost Estimate\* = \$3.1M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

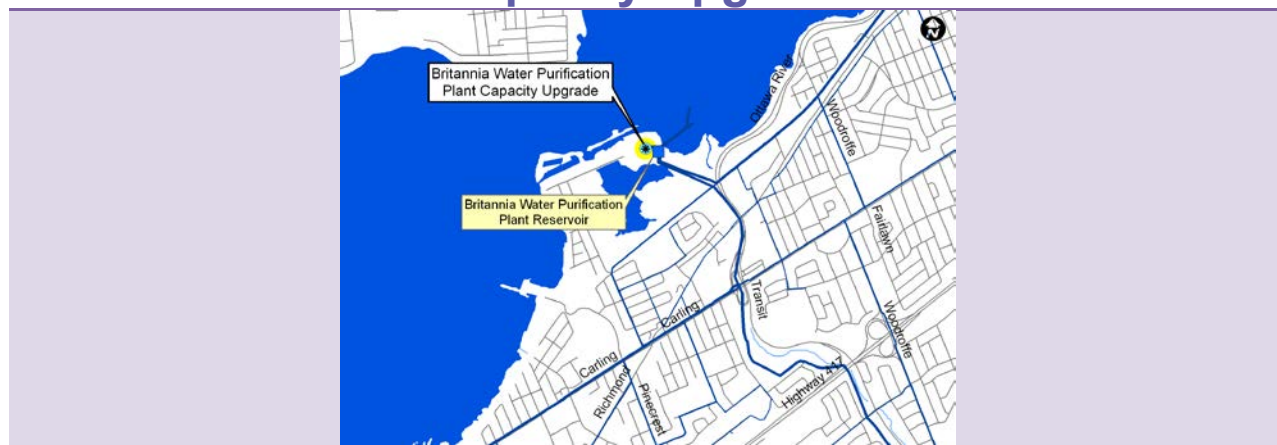
### **EA Requirements and Consultation**

Class EA Schedule 'B' project - Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

The Official Plan projections and actual development pressures will determine the exact timing for implementation. Monitor development needs to ensure infrastructure is constructed in a manner that is coincident with development. Consider Coordination of works with 2019 mechanical renewal.

## Britannia Water Purification Plant (Britannia WPP) Capacity Upgrade



### **Scope and Justification**

Increase treatment capacity and upgrade valving to meet 2031 demands and reliability requirements. The valving upgrades are intended to facilitate operation under specific emergency operating scenarios. These projects exclude the scope of renewal work as identified in the recent WPP Development Plan.

### **Timing**

2013-2018: Valving upgrades (Phase 1)

2019-2024: Increase treatment capacity (Phase 2)

### **Action Item Funding**

Phase 1 Construction Cost Estimate = \$0.2M

Phase 1 Capital Cost Estimate\* = \$0.5M (10% Development Charges, 90% Rate)

Phase 2 Construction Cost Estimate = \$54.3M

Phase 2 Capital Cost Estimate\* = \$114.1M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

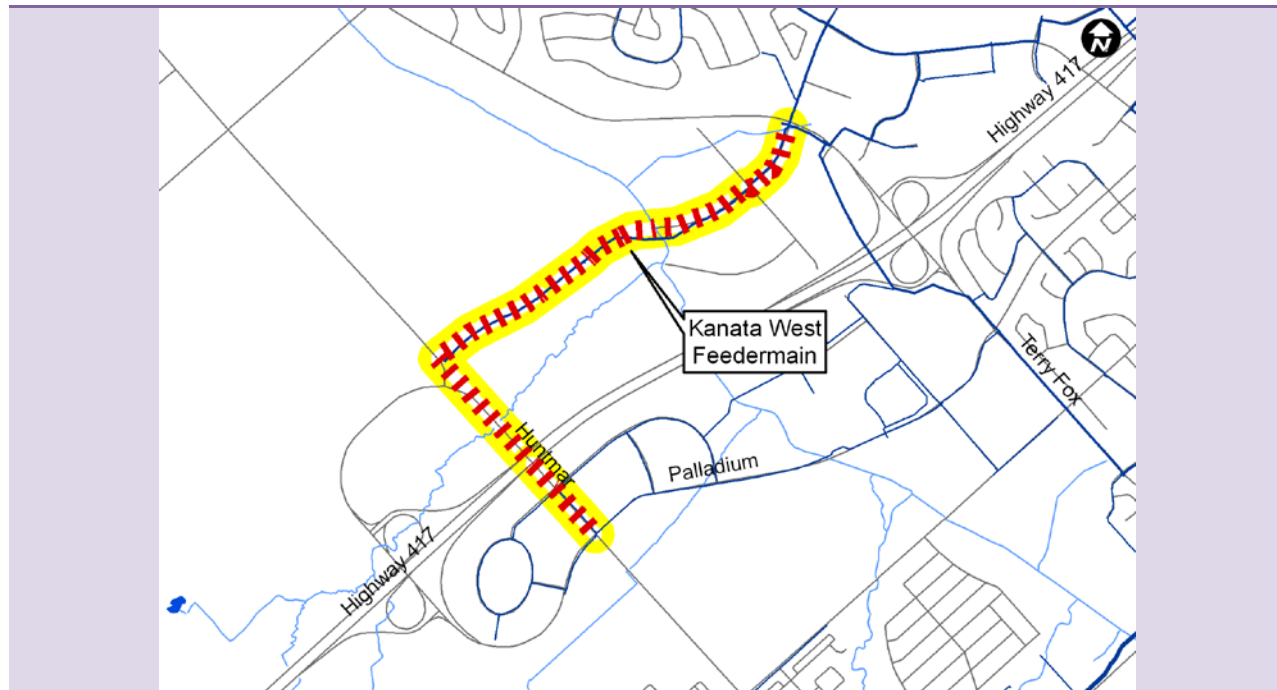
Phase 1 – Class EA Schedule ‘A’ project - No consultation required prior to implementation.

Phase 2 - Class EA Schedule ‘C’ project - Notices, consultation and filing of Environmental Project Report for public review required

### **Follow Up Actions**

Coordinate with treatment plant renewal requirements, including recommendations from the recent WPP Development Plan. Monitor actual demands over time determine the actual timing for capacity expansion.

## Kanata West Feedermain



### **Scope and Justification**

Construct 610 mm watermain along Campeau Dr. from Terry Fox Dr. to Palladium Dr. to support development in the Kanata West area, in accordance with the Master Servicing Study for the area.

### **Timing**

2013 – 2018: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$12.0M

Capital Cost Estimate\* = \$22.6M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

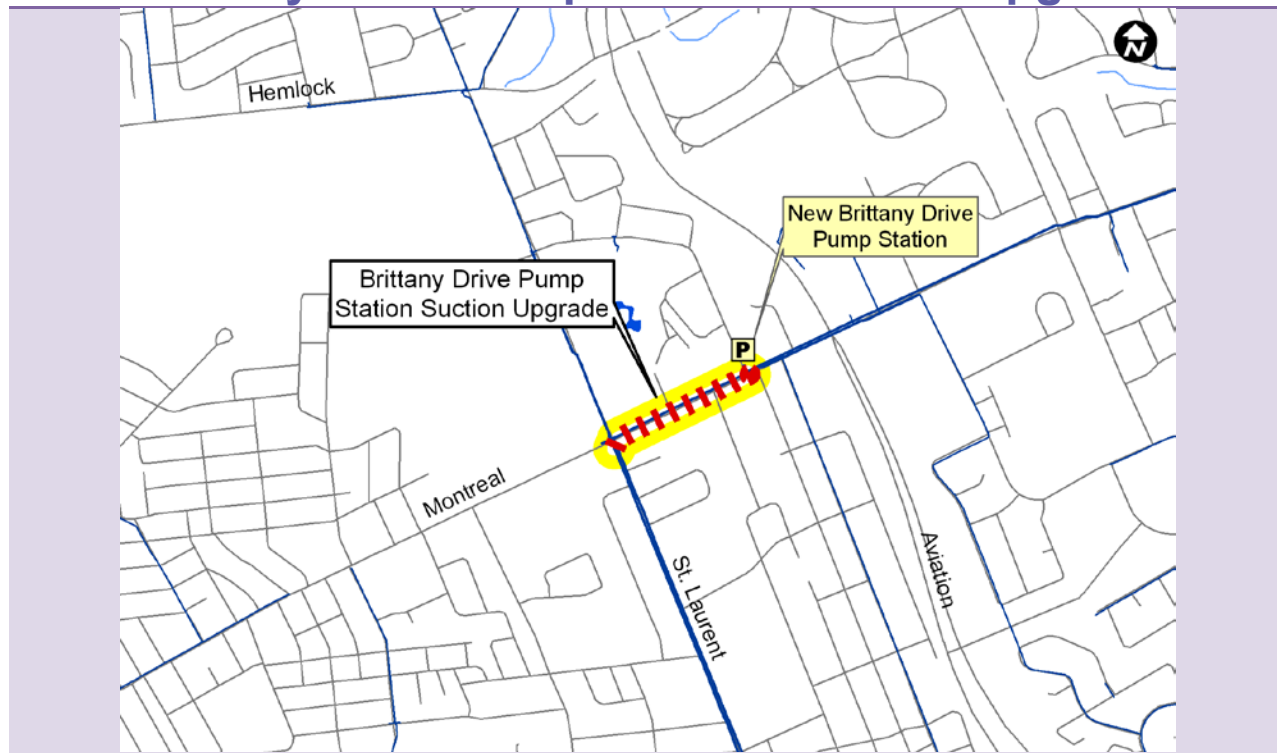
The 610 mm watermain along Campeau and Gallantry are Schedule 'A' project – No consultation required prior to implementation.

The 610 mm along Huntmar is a Schedule 'B' project as it includes a major water crossing – Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

Project to be coordinated with urban development needs.

## Brittany Drive Pump Station Suction Upgrade



### **Scope and Justification**

Construct 406 mm watermain along Montreal Rd. from St. Laurent Blvd. to Brittany Dr. pump station to increase suction capacity for BDPS upgrade. The upgrade is needed to support growth and improve the reliability of water supply to Zone MONT.

### **Timing**

2013 – 2018 Construct watermain

### **Action Item Funding**

Construction Cost Estimate = \$1.7M

Capital Cost Estimate\* = \$3.1M (50% Development Charges, 50% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

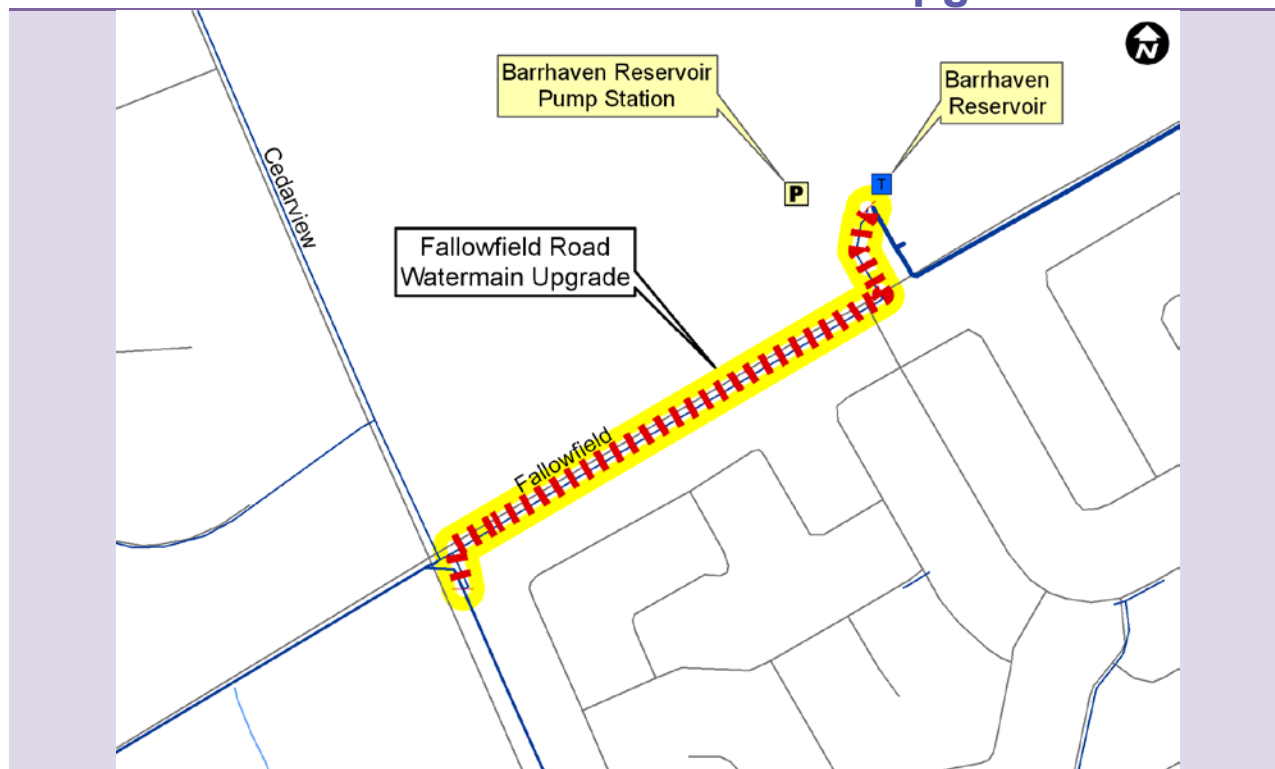
### **EA Requirements and Consultation**

This is a Schedule 'A' project– No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate project with the upgrade to the BDPS.

## Fallowfield Road Watermain Upgrade



### **Scope and Justification**

Construct 406 mm watermain along Fallowfield Rd. from Barrhaven Reservoir to Cedarview Rd. to increase effective discharge capacity available for the Barrhaven Reservoir Pump Station (BRPS). The capacity increase is needed to support growth and reliability requirements for Zone Barr.

### **Timing**

2013-2018: Construct watermain

### **Action Item Funding**

Construction Cost Estimate = \$0.7M

Capital Cost Estimate\* = \$1.3M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.  
Funding split subject to review as part of 2014 Development Charges by-law.*

### **EA Requirements and Consultation**

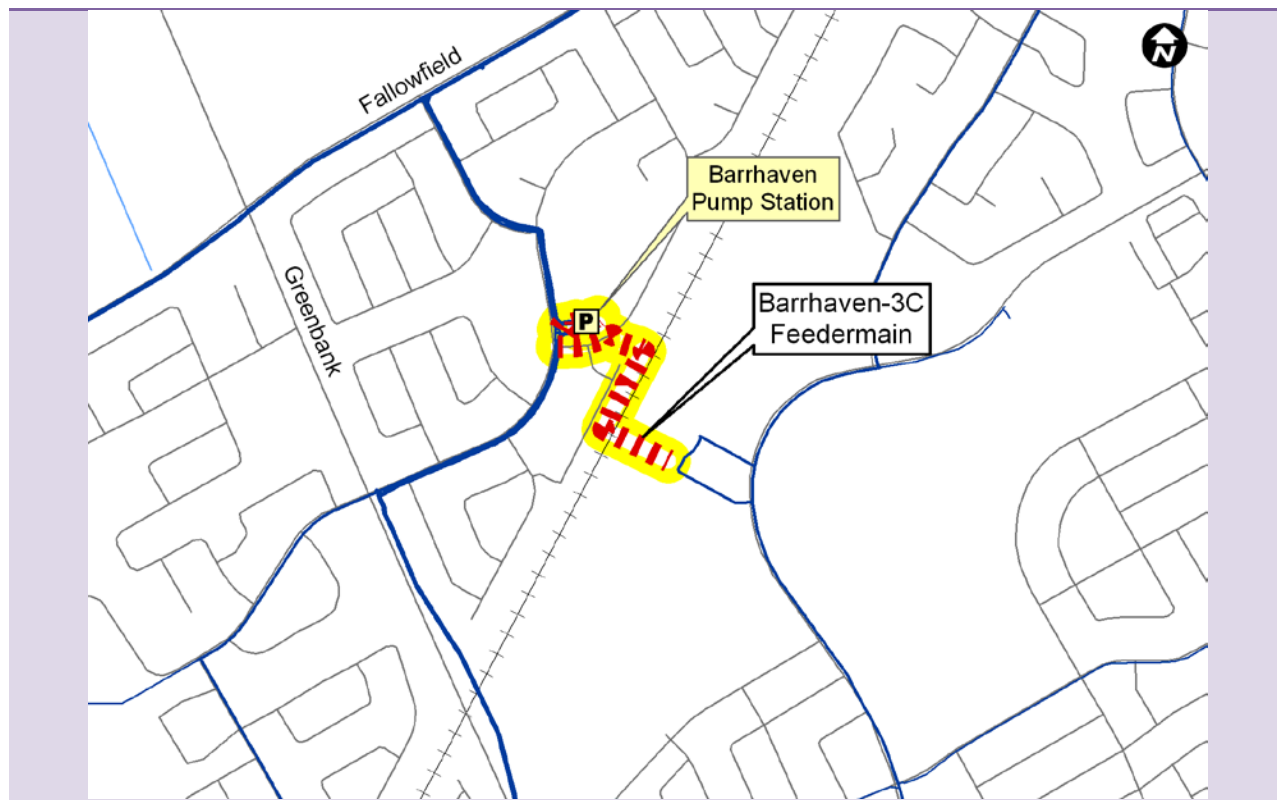
This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate with BRPS upgrade.



## Barrhaven-3C Feedermain



### **Scope and Justification**

Construct 610 mm watermain from Foxfield at Holitman, across rail line and Transitway to Via Chianti Grove. The feedermain is needed to facilitate the zone reconfiguration and to meet 2031 growth and reliability requirements.

### **Timing**

2013-2018: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$2.0M

Capital Cost Estimate\* = \$2.5M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

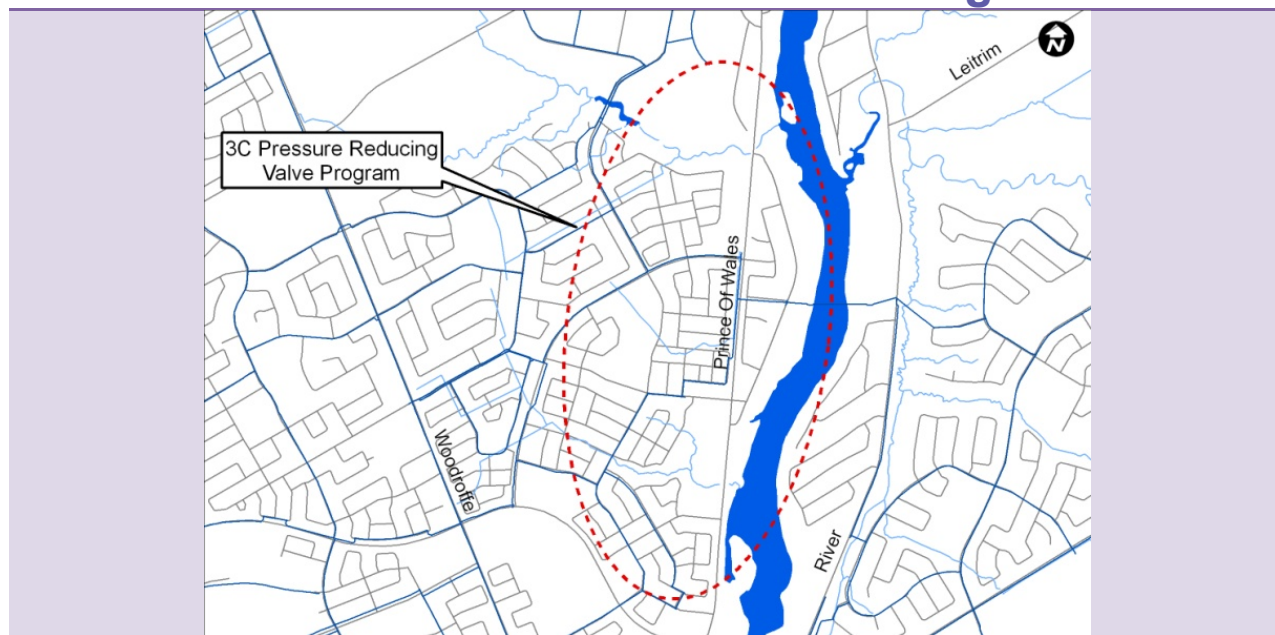
### **EA Requirements and Consultation**

This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Verify provisions needed for short term operations prior to Barrhaven Pump Station upgrade.

## Zone 3C Pressure Reduction Program



### **Scope and Justification**

Implement pressure reduction (PR) program in low elevation areas that will experience a pressure increase due to proposed South Urban Community pressure zone reconfiguration. The PR program is intended to limit pressures in Zone 3C where they may exceed the desired limit.

### **Timing**

2013-2018: Implement PR program

### **Action Item Funding**

Construction Cost Estimate = \$0.9M

Capital Cost Estimate\* = \$1.7M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance. Funding split subject to review as part of 2014 Development Charges by-law.*

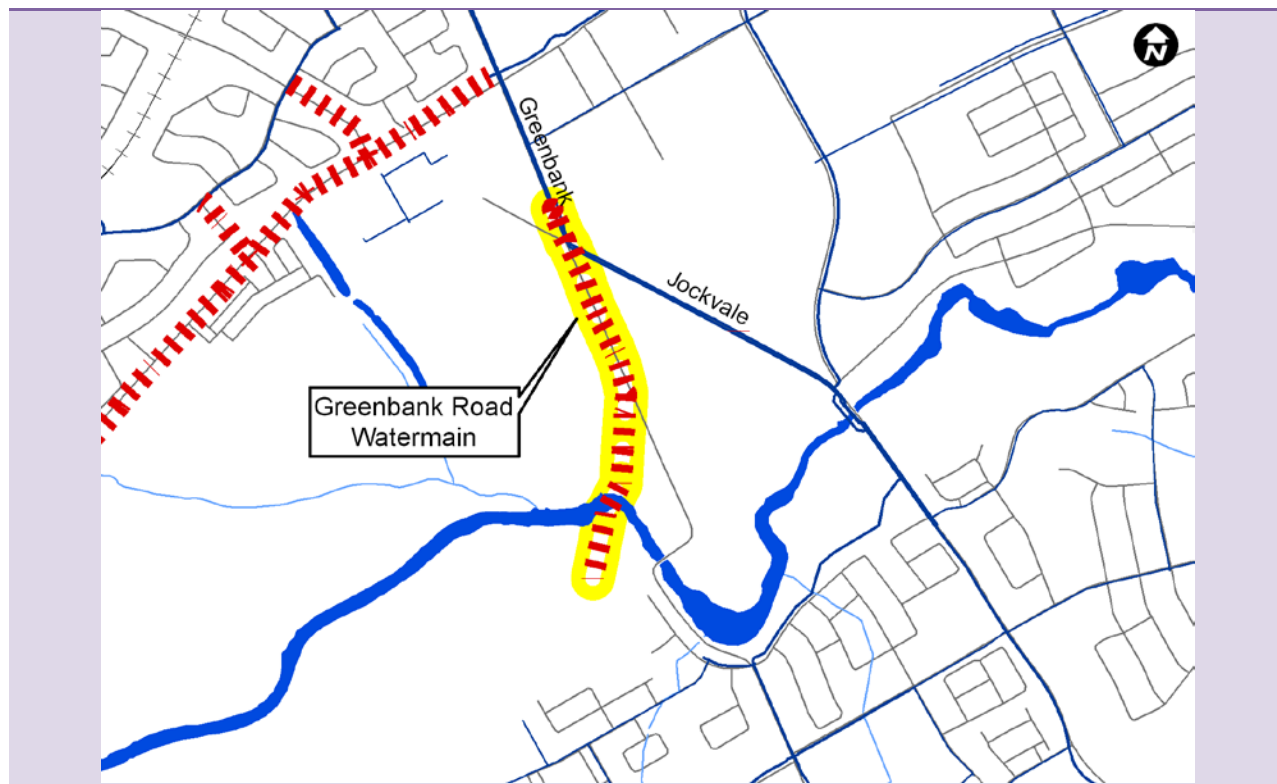
### **EA Requirements and Consultation**

This program is not subject to the Municipal Class EA process. However, the program involves construction on private property where approved by property owners. A communications plan will be developed and implemented.

### **Follow Up Actions**

Confirm affected properties; develop detailed program and communications plan.

## Greenbank Road Watermain



### **Scope and Justification**

Construct 610 mm watermain along Greenbank Rd. from North of Jockvale to South of Jock River. This project is needed to support development south of the Jock River.

### **Timing**

2013 – 2018 Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$3.9M

Capital Cost Estimate\* = \$7.4M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance. Funding split subject to review as part of 2014 Development Charges by-law.*

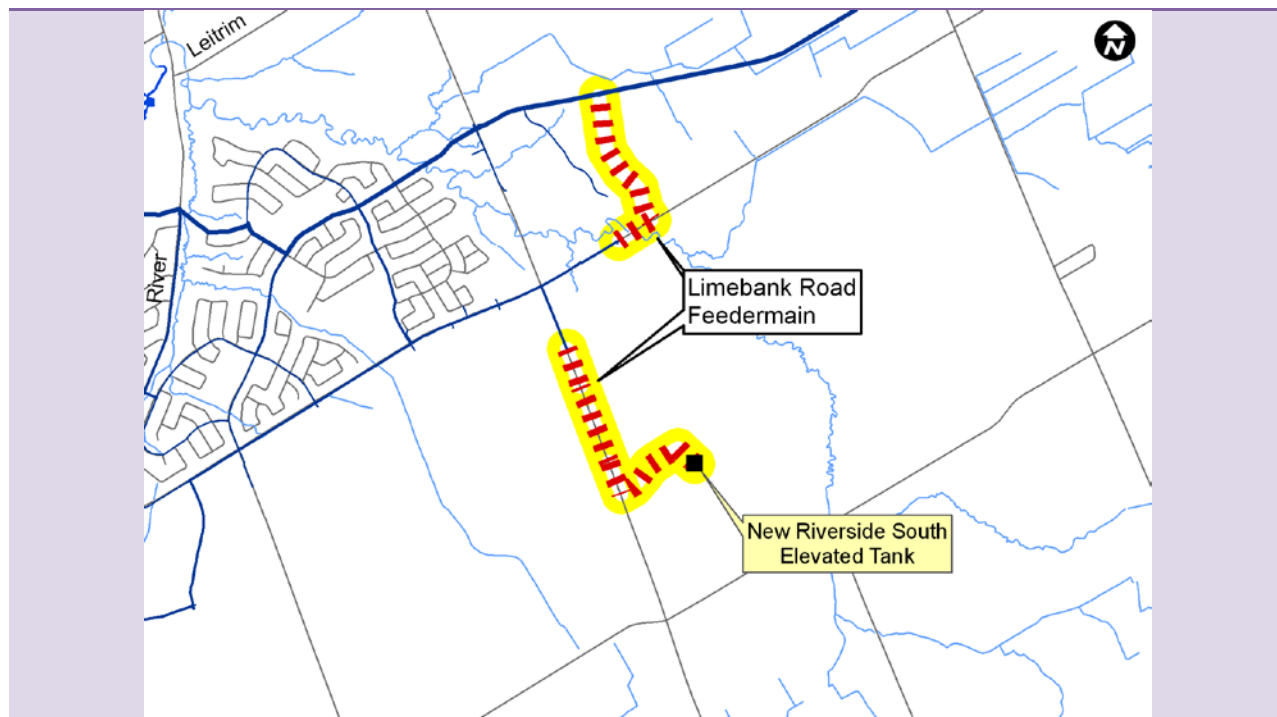
### **EA Requirements and Consultation**

This is a Schedule 'B' project as it requires a major water crossing – Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

Coordinate project with growth needs. Finalize alignment as part of detailed planning and design process.

## Limebank Road Feedermain



### **Scope and Justification**

Construct 610 mm watermain along Limebank, South of Earl Armstrong to future Riverside South Elevated Tank. Construct 610 mm watermain along future road from Spratt to Earl Armstrong. This project is needed to support development in the Riverside South community and to supply the future tank.

### **Timing**

2013 – 2018: Construct watermain in coordination with development

### **Action Item Funding**

Construction Cost Estimate = \$4.5M

Capital Cost Estimate\* = \$8.5M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

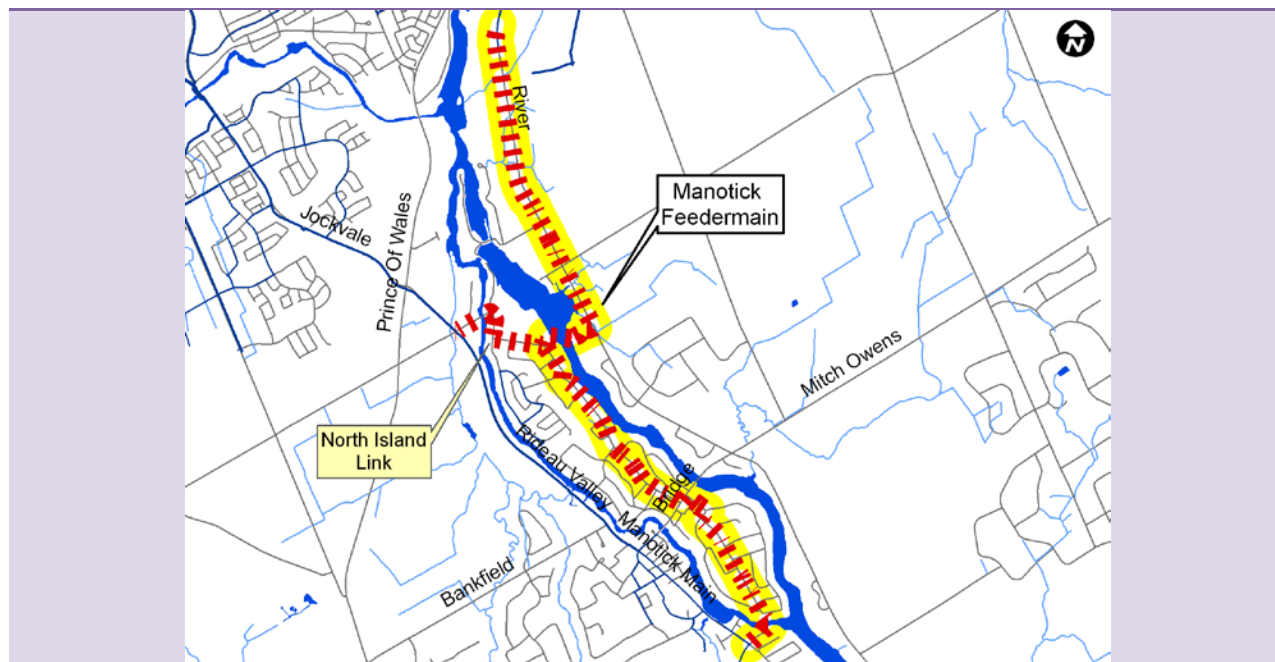
### **EA Requirements and Consultation**

This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate project with development. Confirm sizing of main at time of design, considering status of Riverside South Elevated Tank project. Finalize alignment as part of detailed planning and design process.

## Manotick Feedermain



### **Scope and Justification**

Construct 610 mm watermain along River Rd. from Nicolls Island to Rideau River Crossing. Construct 406 mm along Long Island from Rideau River Crossing to Manotick Main. This project is needed to support growth and improve reliability of supply to the Manotick area.

### **Timing**

2013 – 2018: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$10.4M

Capital Cost Estimate\* = \$20.4M (50% Development Charges, 50% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

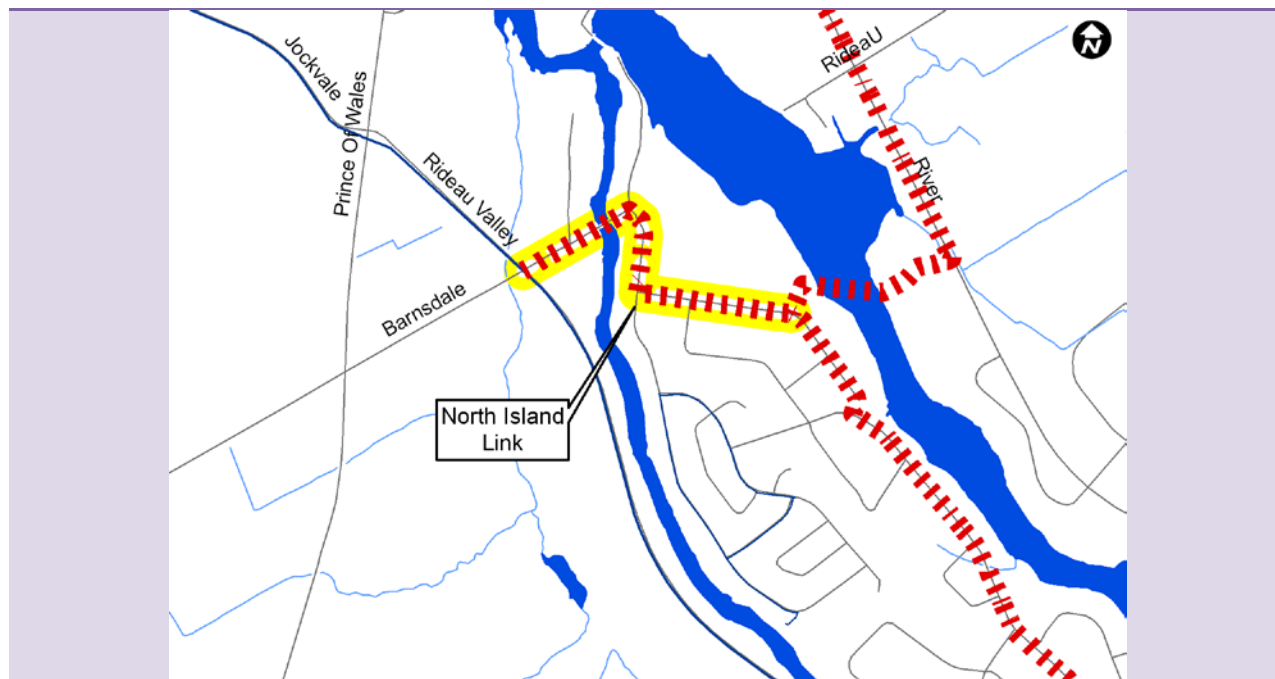
### **EA Requirements and Consultation**

This is a Schedule 'B' project as it aligned on private property and requires a major water crossing. The EA process including public consultant is expected to be completed by 2014.

### **Follow Up Actions**

Coordinate project with development needs in the Manotick area. Review status and alignment of North Island Link project at the time of design. Finalize alignment as part of detailed planning and design process.

## North Island Link



### **Scope and Justification**

Construct 610 mm along Barnsdale/Bravar from Rideau Valley to Rideau River Crossing. This project is needed to support growth and improve the reliability of supply to the urban area south of the Jock River.

### **Timing**

2013 – 2018: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$5.5M

Capital Cost Estimate\* = \$10.4M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance. Funding split subject to review as part of 2014 Development Charges by-law.*

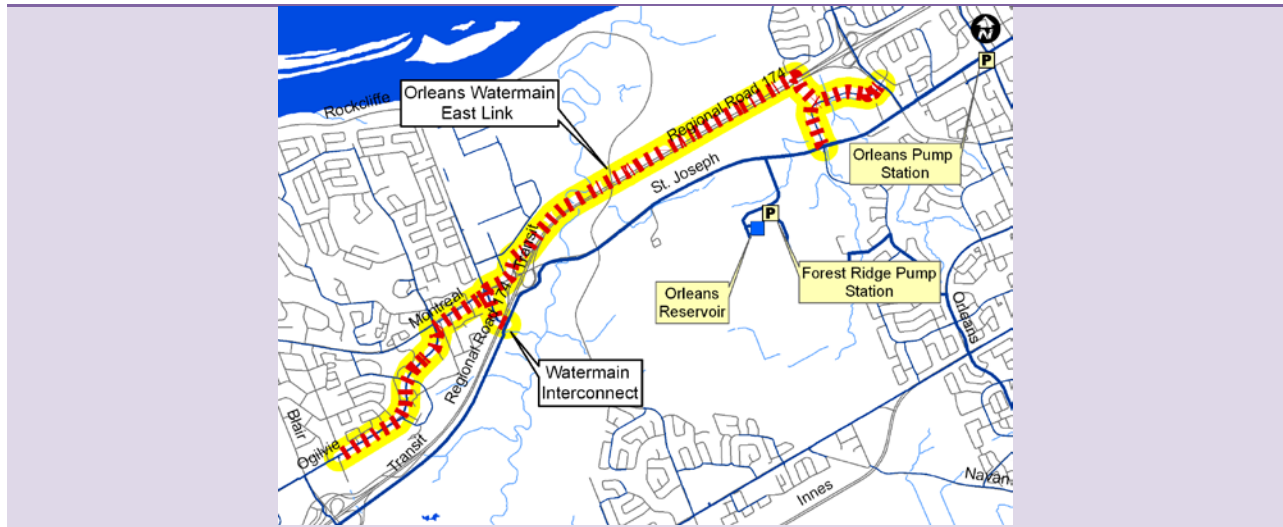
### **EA Requirements and Consultation**

This is a Schedule 'B' project as it aligned on private property and requires a major water crossing – Notices, consultation and filing of Environmental Project File for public review required.

### **Follow Up Actions**

Coordinate project with development needs in the urban area south of the Jock River. Coordinate with design of Manotick Feedermain as required. Finalize alignment as part of detailed planning and design process.

## Orleans Watermain East Link



### **Scope and Justification**

Construct 914 mm along Ogilvie, Montreal, and Highway 174 from Blair Rd. to Youville Dr.; 610 mm along Youville Dr. from Highway 174 crossing to Jeanne D'Arc Blvd; and 762 mm along Youville Dr. from Highway 174 crossing to St. Joseph Blvd. A future watermain interconnecting the East Link to the existing transmission main serving the East Urban Community (EUC). This project is needed to improve the reliability of water supply and support development in the EUC.

### **Timing**

2013-2018: Construct feedermain (Phase 1)

2019-2024: Construct interconnect (Phase 2)

### **Action Item Funding**

Phase 1 Construction Cost Estimate = \$14.4M

Phase 1 Capital Cost Estimate\* = \$31.3M (17% Development Charges, 83% Rate)

Phase 1 Construction Cost Estimate = \$4.0M

Phase 1 Capital Cost Estimate\* = \$7.6M (17% Development Charges, 83% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

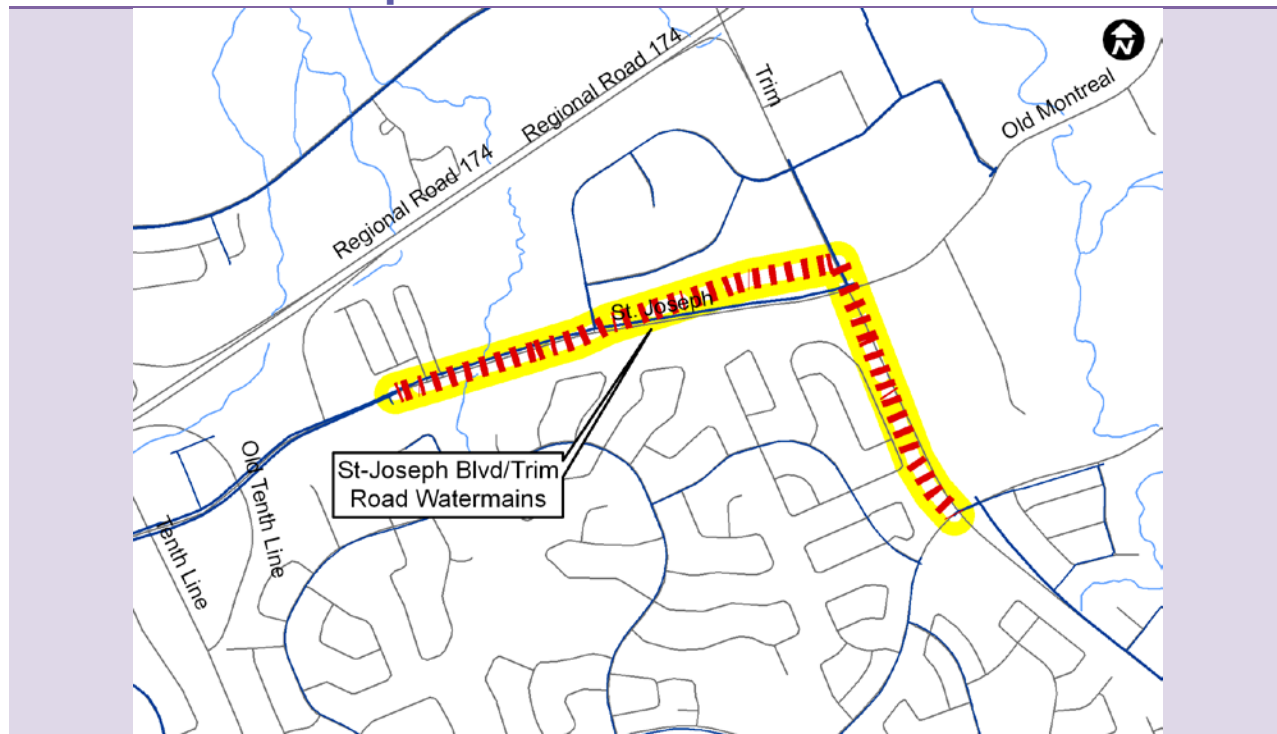
### **EA Requirements and Consultation**

This is a Schedule 'B' project as it is aligned along private property and involves major water crossing at Green's Creek. The EA requirements for this project have been satisfied. Federal Land Use Approval is also required for this project.

### **Follow Up Actions**

Finalize alignment and implementation plan as part of design process.

## St. Joseph Blvd/Trim Road Watermains



### **Scope and Justification:**

Construct 610 mm along St. Joseph Blvd./Trim Rd. from Third Ave. to Watters Rd. This project is needed to improve reliability of existing water supply and support development in the East Urban Community.

### **Timing**

2013 – 2018: Construct Feedermain.

### **Action Item Funding**

Construction Cost Estimate = \$2.4M

Capital Cost Estimate\* = \$3.0M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

### **EA Requirements and Consultation**

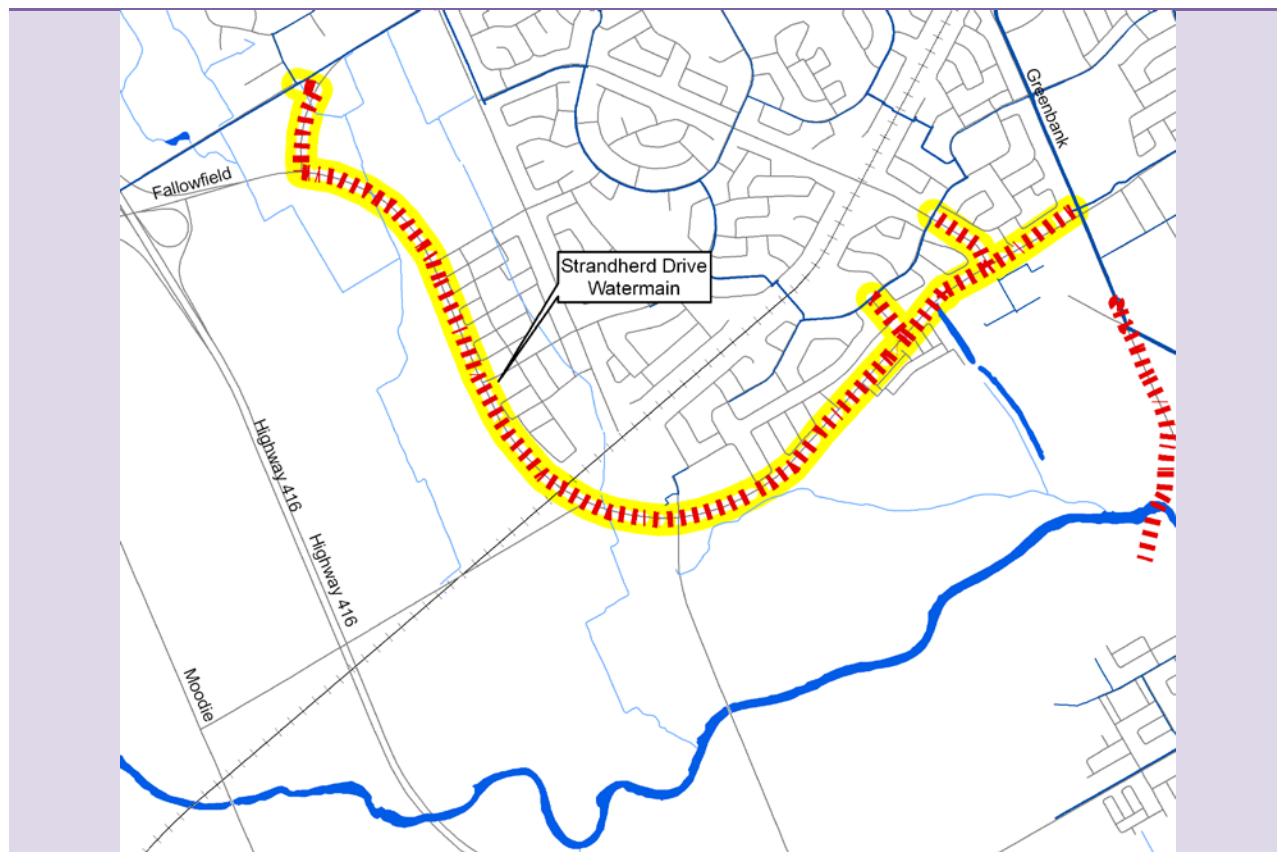
This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate project at St. Joseph and Trim with plans for new feeder mains needed to support growth in the Cardinal Village development area.



## Strandherd Drive Watermain



### **Scope and Justification**

Construct 406 mm watermain along Fallowfield/Strandherd from Fallowfield/O'Keefe to Greenbank, including various connections to existing distribution system. This project is needed to support growth in the Barrhaven area north of the Jock River.

### **Timing**

2013 – 2018: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$4.2M

Capital Cost Estimate = \$6.6M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

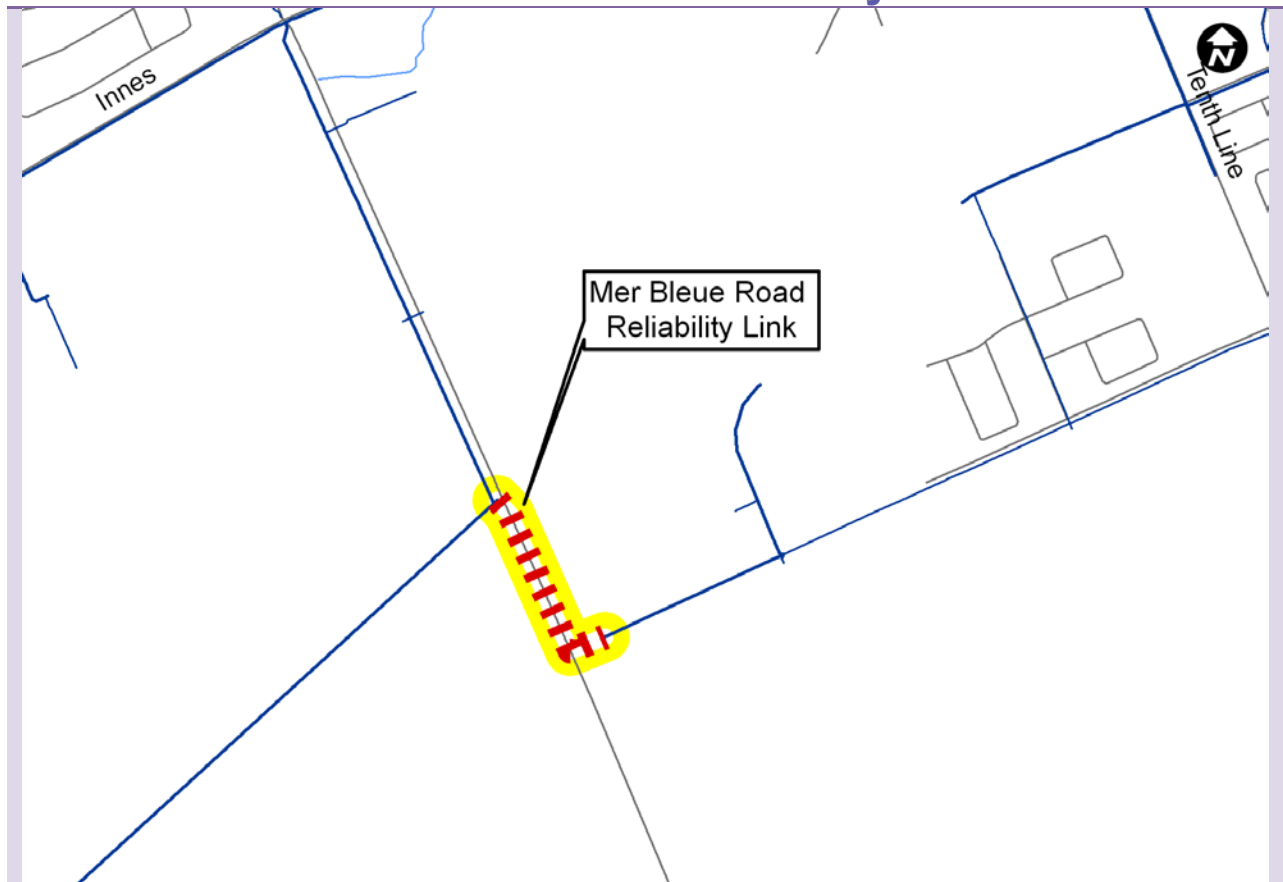
### **EA Requirements and Consultation**

This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate project with development, and South Nepean Collector Sewer where appropriate. Finalize alignment as part of detailed planning and design process.

## Mer Bleue Road Reliability Link



### **Scope and Justification**

Construct 406 mm watermain along Mer Bleue from Hydro corridor to Brian Coburn. This project is needed to support growth in the Orleans area south of the Hydro corridor.

### **Timing**

2013 – 2018: Construct watermain

### **Action Item Funding**

Construction Cost Estimate = \$0.6M

Capital Cost Estimate\* = \$1.1M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

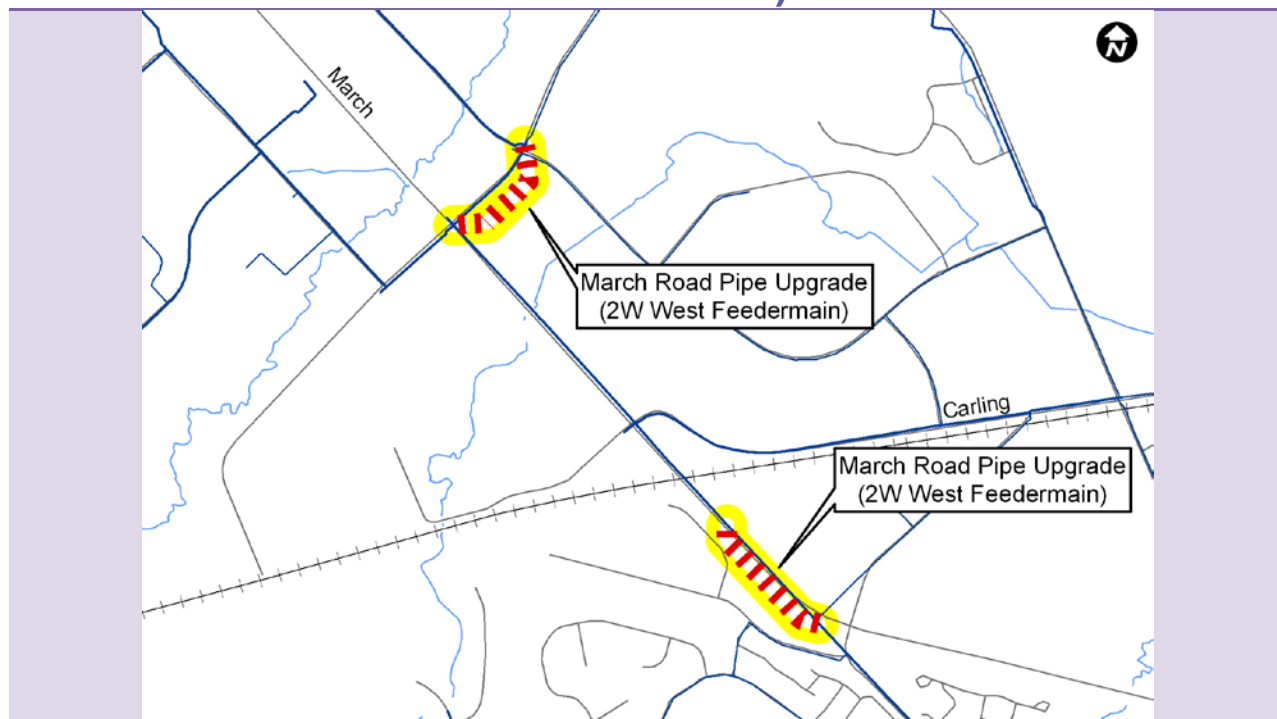
### **EA Requirements and Consultation**

This is a Schedule 'A' project – No consultation required prior to implementation.

### **Follow Up Actions**

Coordinate project with widening of Mer Bleue Road.

## March Road Pipe Upgrade (Zone 2W West Feedermain)



### **Scope and Justification**

Upgrade existing watermain segments in the North Kanata area, on March Road and Solandt Road.

### **Timing:**

2019 – 2024: Construct feedermain

### **Action Item Funding**

Construction Cost Estimate = \$1.2M

Capital Cost Estimate\* = \$2.2M (90% Development Charges, 10% Rate)

*\*including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges by-law.*

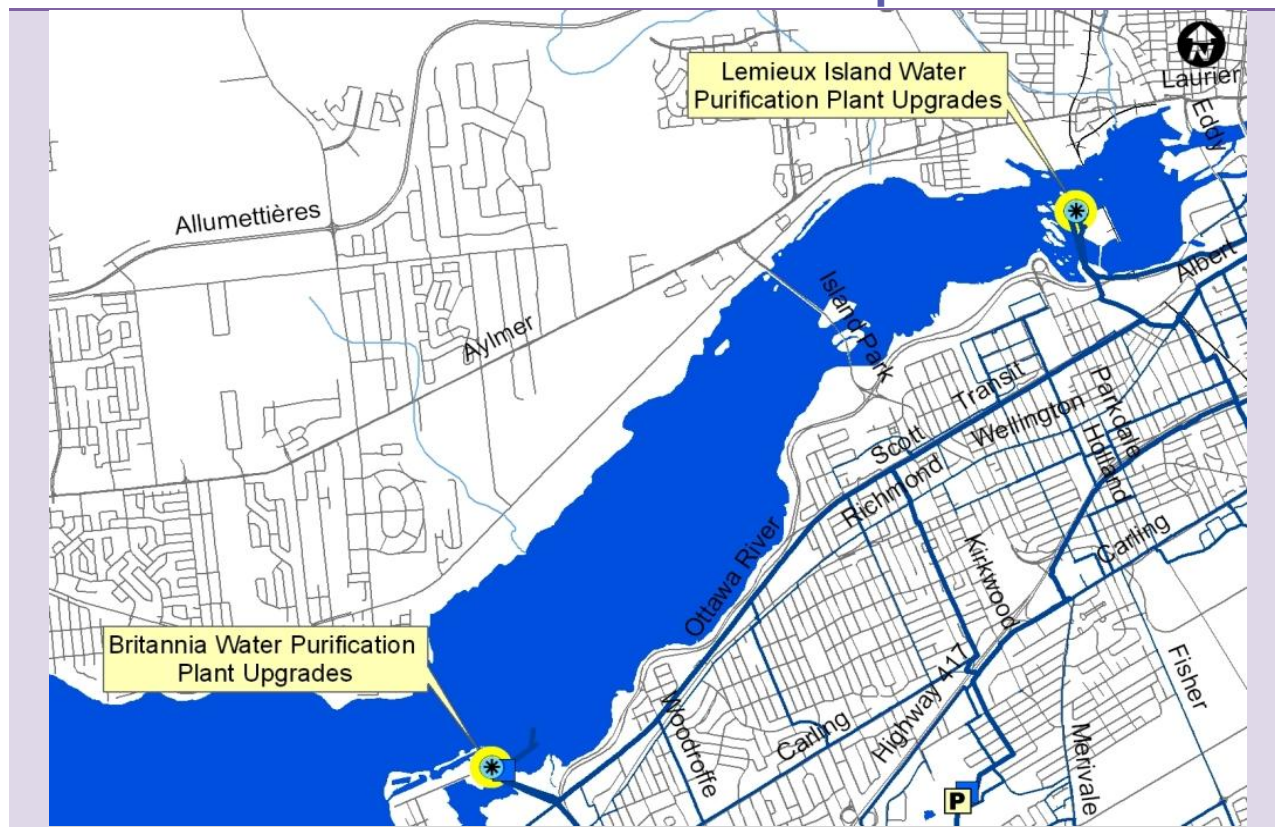
### **EA Requirements and Consultation**

The 610 mm watermain upgrades are Schedule 'A' projects – No consultation required prior to implementation.

### **Follow Up Actions**

Project timing to be confirmed based on actual increases in demand due to growth.

## Water Purification Plant Development Plan



### **Scope and Justification**

A number of projects related to the upgrade of the Water Purification Plant are proposed to be completed between 2014 and 2031. These projects are necessary for on-going plant operation and maintenance, as well as to ensure that the rated capacity of each plant is available year round. Currently, cold weather operation constraints limit winter capacities to less than the rated capacities.

### **Timing:**

2013- 2031: Complete detailed design and construct the works.

### **Action Item Funding**

Construction Cost Estimate = \$136.5 M

Capital Cost Estimate\* = \$286.5 M (10% Development Charges, 90% Rate)

*\*Including construction cost, engineering, city internal costs and contingency allowance.*

*Funding split subject to review as part of 2014 Development Charges By-Law.*

### **EA Requirements and Consultation**

These are Schedule A+ (pre-approved) Class EA projects. Public will be notified prior to construction.

### **Follow Up Actions**

Proceed with design and prepare implementation plan.