

# Your weekly source of City information

# **OPEN HOUSE NOTICE**

# York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain Class Environmental Assessment

The City of Guelph has initiated a Class Environmental Assessment study for improvements to the York Trunk Sanitary Sewer and a new drinking water feedermain for the Paisley and Clythe Reservoirs. The Guelph Water and Wastewater Servicing Master Plan (2009) identified the need for these improvements in order to service planned growth in the City.

# Open House

October 6

6-8 p.m. City Hall, 1 Carden St. Meeting Room C

The open house will provide background information on the study and the various alternatives being considered. Representatives from the City and its consultant will be present to answer questions and discuss the next steps in the study.

## About the study

The current York Trunk Sanitary Sewer extends from the former Guelph Reformatory Lands to the Wastewater Treatment Plant west of the Hanlon Expressway along the Eramosa and Speed Rivers. This sewer is reaching the end of its useful life and capacity due to a combination of planned population and employment growth in the City and reports of poor condition in sections. A solution is required to replace and/or rehabilitate this main trunk sewer.

The Paisley-Clythe Drinking Water Feedermain is a new watermain required to increase the reliability of the supply between the City's F.M. Woods Reservoir and Pumping Station and the Paisley and Clythe Reservoirs at the west and east ends of the City.

The York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain Class Environmental Assessment will:

- assess existing infrastructure and the environment
- identify the problem and alternative solutions
- determine needs for future growth
- evaluate alternatives for routing, construction methods and mitigation measures
- develop a preferred alternative to meet the project objectives for both the sewer and feedermain

#### The process

This study is being planned under Schedule B of the Municipal Class Environmental Assessment process (Municipal Engineers Association, June 2000 as amended in 2007) under Ontario's Environmental Assessment Act. The Class Environmental Assessment process includes public and review agency consultation, an evaluation of alternatives, an assessment of the potential environmental effects of the proposed improvements, and identification of reasonable measures to mitigate any adverse impacts that may result.

### **Provide your comments**

You are encouraged to attend the open house and provide your comments. Those comments will be considered in finalizing the preferred solutions. Comments and information regarding this project will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act for the purpose of meeting environmental assessment requirements. With the exception of personal information, all comments will become part of the public record.

#### Other opportunities for input

Opportunities for public input will continue throughout the Class Environmental Assessment process to seek community and stakeholder feedback. Future consultation opportunities will be publicized in this newspaper and posted on the City's website at **guelph.ca**.

#### For more information

Please contact either one of the following project team members if you have any questions or comments, wish to obtain more information on the project, or if you would like to be added to the project mailing list.

**Colin Baker,** P. Eng. Environmental Engineer City of Guelph 1 Carden St.

1 Carden St. Guelph, ON N1H 3A1 T **519-822-1260 x 2282** 

E colin.baker@guelph.ca

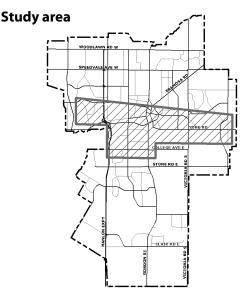
James Witherspoon, P.Eng.

Project Manager GENIVAR Consultants 1-367 Woodlawn Rd. W. Guelph, ON N1H 7K9

**⊤519-827-1453** 

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This notice first issued September 23, 2010





# Your property and your neighbourhood

# Messy yards or run-down buildings - 519-837-5615 x 3

Take pride in your property, your neighbourhood and your community. Please contact us if you notice any of the following violations of the City's Property Standards or Yard Maintenance By-laws in your neighbourhood:

- grass or weeds longer than 20 centimetres (8 inches)
- · litter, debris or pet waste in yard
- dead or decaying trees posing a safety hazard
- dismantled, unlicensed or inoperable vehicles
- fence, porch, roof or other structures in disrepair

#### Parking enforcement - 519-836-7275

- vehicles should be parked on the driveway, not on grassed areas
- large commercial vehicles should not be parked in residential areas
- recreational vehicles, boats or trailers should be parked behind the front wall of a house, but can be parked in a driveway for short-term purposes such as maintenance or washing

For more information
Building Services
T 519-837-5615
E building@guelph.ca
quelph.ca



**Municipal Class Environmental Assessment** 



# Welcome to Public Information Centre (PIC) No. 1 for the

# York Trunk Sewer & Paisley-Clythe Feedermain Class Environmental Assessment

# **Open House**

Please complete the sign-in sheet and review the display materials.

One of our representatives will be pleased to answer your questions and address any concerns.

Your input is much appreciated!



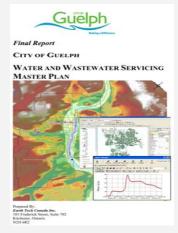
**Municipal Class Environmental Assessment** 





# **Background**

In 2009, the City of Guelph completed a Water and Wastewater Servicing Master Plan to identify a preferred water distribution and wastewater conveyance strategy to satisfy existing and future water use needs. Among the list of recommended projects, the York Trunk Sewer and the Paisley-Clythe Feedermain were identified by the City as projects set for implementation within the 2011-2016 timeframe.



#### The Need for New Infrastructure

#### The York Trunk Sewer

Inflow and infiltration studies and a visual inspection of the York Trunk Sewer have indicated that several sections of the sewer lack capacity and are in poor condition.

An expansion of the existing York Trunk Sewer will be required to convey sewage flows within the existing sewer's catchment area to the City's Wastewater Treatment Plant to accommodate planned population and employment growth.

### Paisley-Clythe Feedermain

The Paisley-Clythe Feedermain was identified in the 2009 Water and Wastewater Servicing Master Plan as a priority project. It will be required to improve the east to west water transmission within the City and to eventually service future areas of growth.

## **Project Objectives**

The City of Guelph has initiated the Class EA for the York Trunk Sewer and the Paisley-Clythe Feedermain to determine the preferred servicing alternatives for both pieces of infrastructure

The objectives of York Trunk Sewer and Paisley-Clythe Feedermain Class EA are to:

- Establish the York Trunk Sewer and the Paisley-Clythe Feedermain servicing requirements
- Establish the feasibility for establishing a future urban water reuse distribution system (purple pipe)
- Investigate the potential for energy capture from the City's sanitary sewer system
- Evaluate and document alternatives for infrastructure implementation to mitigate their impact on the natural, social, cultural, and economic environment
- Satisfy the requirements of the Municipal Engineers Association (**MEA**) Class EA process





**Municipal Class Environmental Assessment** 



# **Class EA Planning Process**

The Ontario Environmental Assessment Act, R.S.O., 1990 (the EA Act) requires that projects corresponding to a given class of undertakings (e.g. municipal road, transit, water and wastewater projects) follow an approved Class Environmental Assessment (Class EA) process. The Class EA planning process as documented in the MEA Municipal Class EA document (October 2000, amended in 2007) includes the following five phases:

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
Problem or Opportunity	Alternative Solutions	Alternative Design Concepts for Preferred Solution	Environmental Study Report	Implementation

The water and wastewater infrastructure needs identified in the City's Master Plan fall within the Municipal Class EA process.

## **Class EA Schedules for this Study**

Depending on their environmental impact, municipal projects are classified in the Municipal Class EA in terms of schedules:

- Schedule A or A+
- Schedule B
- Schedule C

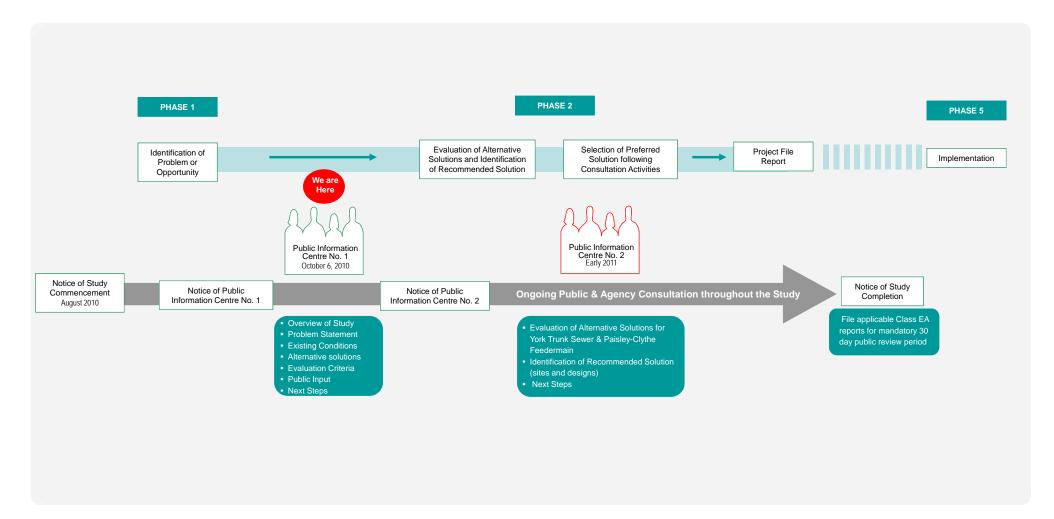
The York Trunk Sewer & Paisley-Clythe Feedermain EA will be conducted as a Schedule B Class EA which requires completion of Phase 1 and 2 of the MEA Municipal Class EA process.



**Municipal Class Environmental Assessment** 







**Project Overview** 



**Municipal Class Environmental Assessment** 





#### **Public Consultation**

- Two Public Information Centres will be held during this Class EA study to obtain public feedback.
- We encourage the public to make comments and provide input to this Class EA study.
- Stakeholders can get involved with this Class EA study in the following ways:
  - Add your name to our stakeholder contact list
  - Submit your written comments to the Project Team
  - Submit written comments to the Ministry of Environment and Project Team following issuance of the Notice of Completion



#### **Additional Stakeholder Consultation**

- Community organizations are being consulted through a parallel process to the Public Consultation, in addition to, First Nations, Aboriginal, and Métis groups.
- Review and Approval Agencies (Grand River Conservation Authority, Ministry of Transportation, and Ministry of Environment, and others) will be consulted, as needed, throughout the course of the Study's undertaking.
- An Internal Steering Committee (ISC), comprised of City staff from various departments, including: Operations and Transit,
   Planning, Engineering, and Environmental Services, Community Design and Development, and Human Resources and Legal
   Services has been formed and will be met with at key project milestones during the course of the Class EA Study.



# Stakeholder Consultation



**Municipal Class Environmental Assessment** 





## NATURAL ENVIRONMENT CONSIDERATIONS

- Crossing Natural Features (rivers, wetlands, woodlots)
- Proximity to Natural Heritage Features/Vegetation
- Groundwater/Subsurface Conditions
- Surface Water (Quality/Quantity)
- Proximity to Valley Lands and Floodplains
  - Watercourse Crossings and Fisheries

#### **SOCIAL & CULTURAL ENVIRONMENT CONSIDERATIONS**

- Proximity to Built-up Areas
- Traffic Impacts during Construction
- Known Archaeological Features
- Private Properties Affected
- Impact on Recreation Areas

- Capital Costs
- Operation and Maintenance (including energy) Costs
- Rehabilitation/Replacement Costs
- Land Acquisition Costs

#### **TECHNICAL CONSIDERATIONS**

- Ability to Service Future Development
- Constructability and Site Access
- Soil / Ground Conditions
- Location and Impacts of other Utilities
- Road/Railway Crossings
- Site size & compatibility
- Ability to Connect with Existing Infrastructure
- Water Undercrossings
- Presence of Historical Landfill Site

**ECONOMIC CONSIDERATIONS** 

**Evaluation Criteria** 



**Municipal Class Environmental Assessment** 





# **Problem/Opportunity Statement**

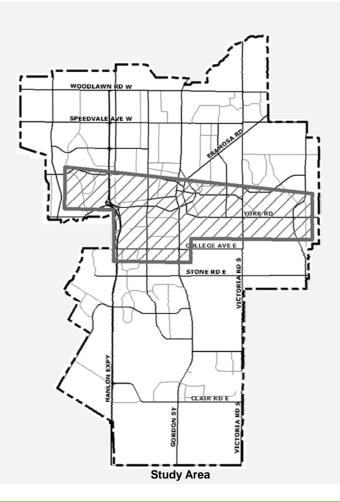
How to provide water and wastewater servicing to existing and future developments in Guelph while minimizing impacts on the natural, cultural, social, and agricultural features in the study area.





# **Study Area**

The Study Area extends along a key area within Guelph from the existing Wastewater Treatment Plant, west of the Hanlon Expressway along the shoreline of the Speed River to east of the Royal City Jaycees Park near Watson Road



Problem Definition and Service Area



**Municipal Class Environmental Assessment** 



# **Do Nothing**

- Maintain Existing Sanitary Trunk Sewer
- Existing system does not provide for future growth and some pipes are deteriorating or undersized for current sanitary sewage flows.

# Rehabilitation of Existing York Trunk Sewer

- Sections of the existing sewer which are adequately sized but in need of repair may be rehabilitated as opposed to requiring replacement.
- Does not provide for an increase in capacity and may not meet current or future flow demands.

# Twinning of Existing Sewer and Rehabilitation of Existing Sewer

- Sections of the existing sewer which are adequately sized but are deteriorating may be rehabilitated as opposed to requiring replacement
- A new sewer may be installed alongside the existing sewer, where the sewer is undersized to accommodate future increases in capacity.

# Partial Replacement of Existing Sewer and Twinning

- Sections of the existing sewer in poor condition may be replaced and resized as required.
- Existing sections of the sewer in good condition, but undersized, can be twinned with a new sewer to provide capacity for current and future flow demands.

# **Other Opportunities**

- Sizing of upgrades to the York Trunk Sewer to accommodate future flow from other Trunk Sewers (Speed/Arthur) and to alleviate flow pending upgrades within the sanitary distribution system.
- Overflow interconnections with existing sewers to increase the capacity of the entire system.
- Reduction in inflow and infiltration through pipe upgrades will reduce operational costs, increase lifespan of sewage treatment facility, and reduce the cost of future infrastructure.
- Servicing Guelph Innovation District

Potential Alternatives & Opportunities – York Trunk Sewer



**Municipal Class Environmental Assessment** 



# **Do Nothing**

- Maintain existing water distribution system.
- May not meet future demands and operational requirements

Provide New Water
Feedermain to Connect
Clythe Pumping Station to
Paisley Pumping Station
Reservoir

- · Will provide improved east-west water transmission in Zone 1 of water distribution system.
- Will provide a backup water supply if repairs are required at other points in the distribution system.
- · Will provide backup in the event of unexpected service interruptions.
- Opportunity of cost savings by performing work in conjunction with upgrades to the York Sanitary Trunk Sewer.

**Upgrade Existing Water Distribution Network** 

- Upgrade existing pipes to accommodate future growth and demand.
- Can be performed in conjunction with road works upgrades to other services.
- Does not provide effective system redundancy.
- May not provide for future demand or operations requirements (pressure, etc.).

Potential Alternatives & Opportunities – Paisley-Clythe Feedermain



**Municipal Class Environmental Assessment** 



# Guelph

#### **Wastewater Reuse**

The 2008 Wastewater Treatment Plant Master Plan identified the opportunity of wastewater reuse for non-potable uses (irrigation, industrial use) to reduce potable water demand. This system is known as the "Purple Pipe" system due to the colour used to identify the pipes in a wastewater treatment facility.





# Impact on this Study

This project will include a review of the opportunities to reuse effluent within City Parks, Golf Courses, University and Industrial facilities within the project study area. The feasibility of the inclusion of this component of the preferred alternative will be assessed in terms of social, natural and economic environmental impacts.

# **Energy Capture**

The 2008 Wastewater Treatment Plant Master Plan identified the potential opportunity to capture heat from the wastewater in the trunk sewers, using heat exchangers, which is consistent with the goals of the City's Community Energy Initiative. This innovative approach would be one of the first in North America.





Impact on this Study

This project will include a review of the feasibility of developing an energy capture system to collect heat from the wastewater. The energy could be used to heat portions of the wastewater treatment plant or other buildings. This will include evaluation of the seasonal temperature variation in the wastewater, opportunities for installation of the necessary equipment and the cost/benefit analysis.

Additional Issues – Wastewater Reuse & Energy Capture



**Municipal Class Environmental Assessment** 





# Comment Sheets from Public Information Centre No.1 (due to Project Team by October 27)

Review and Incorporate comments received from Public and Review Agencies

#### **Sewer and Feedermain Alignments**

Undertake Evaluation of Alternative Solutions Identification of Recommended Solution

#### **Terrestrial and Archeological Assessment**

#### **Wastewater Reuse**

Undertake Feasibility Evaluation
Identification of Recommended Solution

#### **Energy Capture**

Undertake Feasibility Evaluation Identification of Recommended Solution

#### **Public Information Centre No. 2 Early 2011**

Development of Project File Notice of Completion - Spring 2011

Implementation

Construction – Summer 2012

#### Social Environment

Land Use
Construction Impacts
Cultural Heritage
Archaeology
Quality of Life – Health and Safety
Aesthetic
Property Requirement Impacts

#### **Natural Environment**

Water Quality – Surface Water and Groundwater Environmentally Sensitive Areas (ESAs) Areas of Natural and Scientific Interest (ANSIs) Woodlots and Trees Hedgerows Wildlife (Species at Risk) Flora and Fauna Natural Heritage Aquatic and Terrestrial Resources

#### Technical

Level of Service
Regulatory Requirements/Approvals
Difficulty of Construction
Reliability
Service Life Expectancy
Utilities
Operation and Maintenance

#### Cost

Capital Cost (Engineering, Land, and Construction)
Annual Operating and Maintenance Cost
Life Cycle Cost





**Municipal Class Environmental Assessment** 







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Project Manager GENIVAR Consultants Limited Partnership 1-367 Woodlawn Road West Guelph, ON N1H 7K9

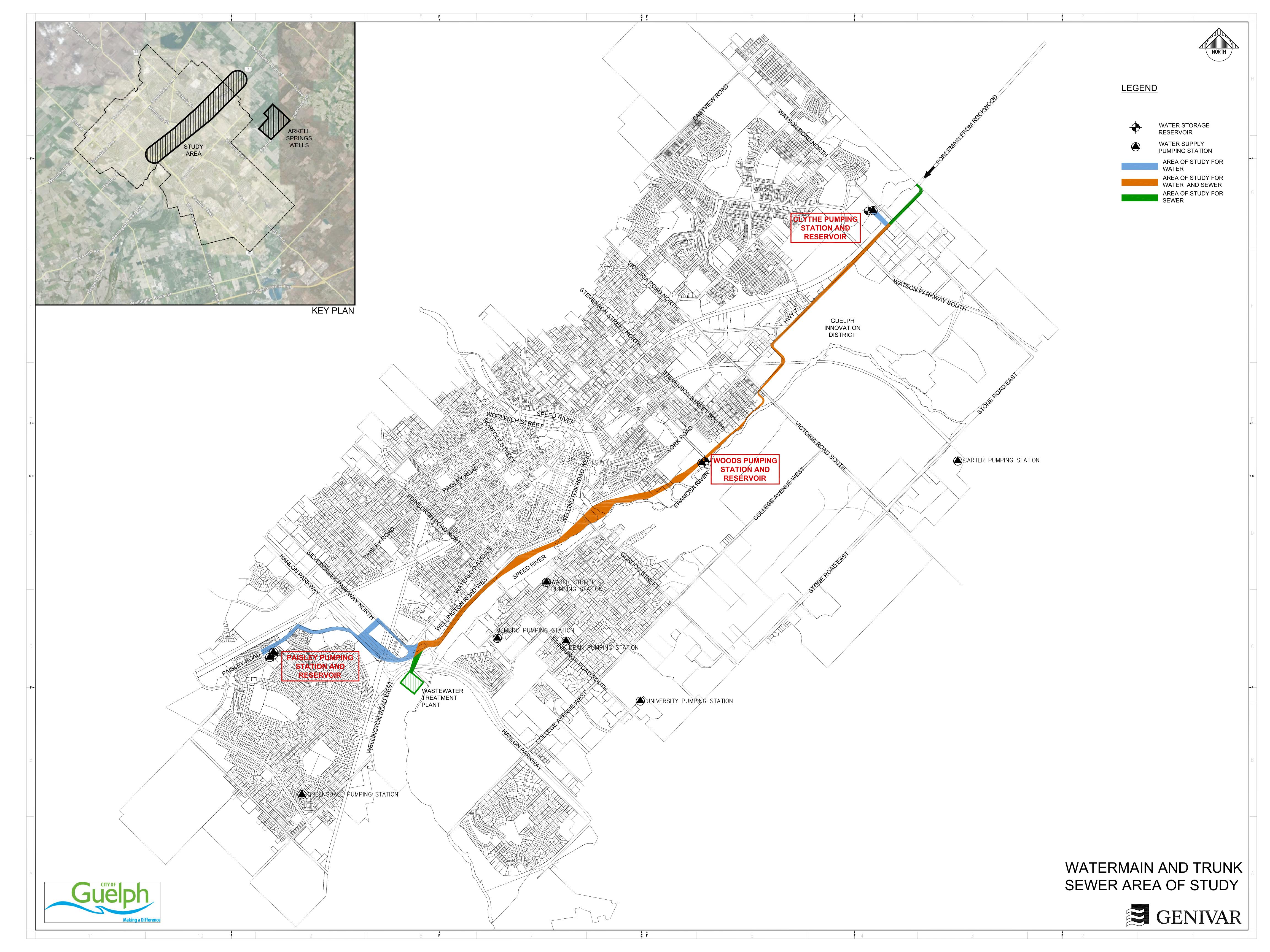
Phone: 519-827-1453 ext. 221

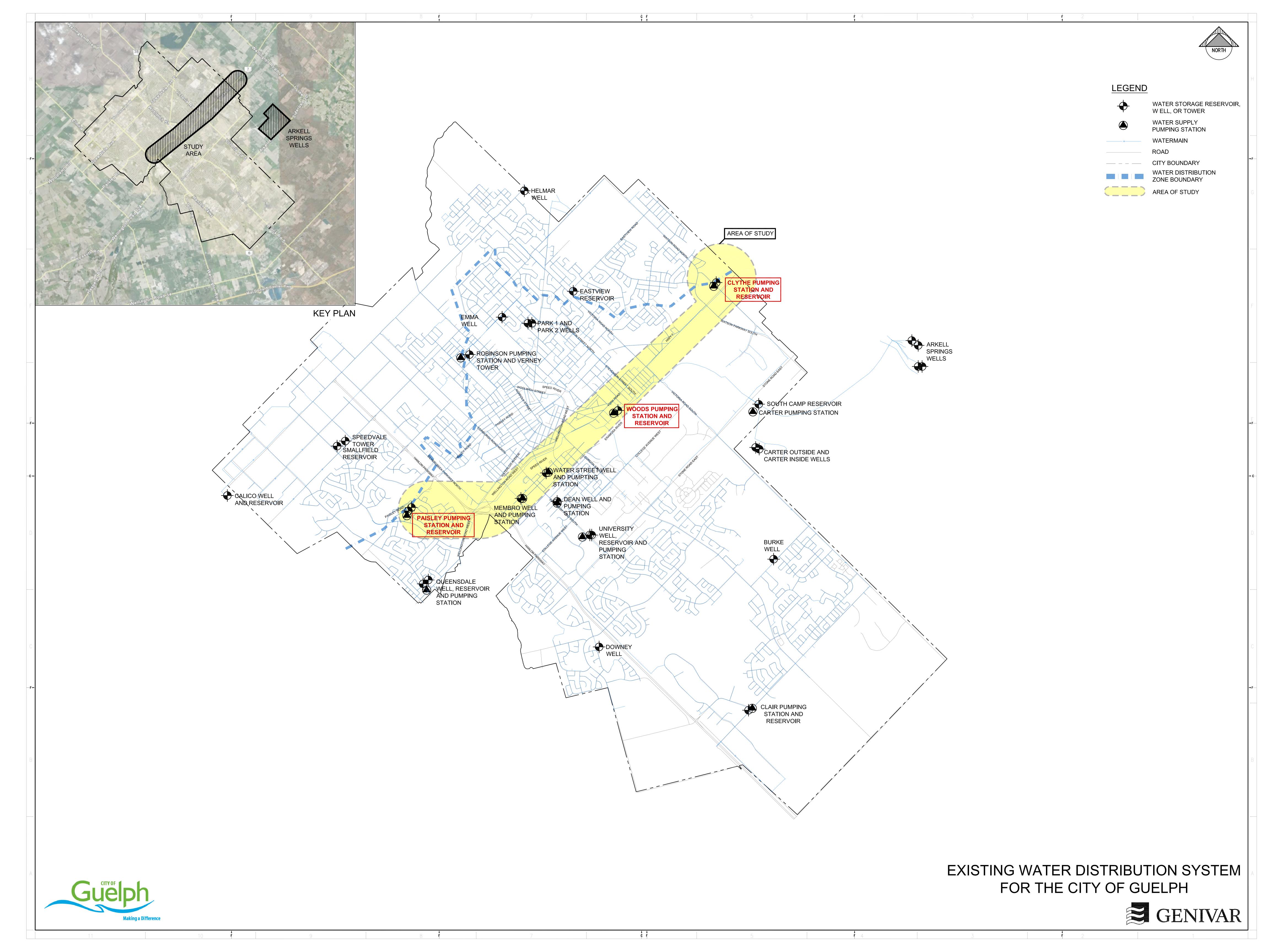
Fax: 519-827-1483

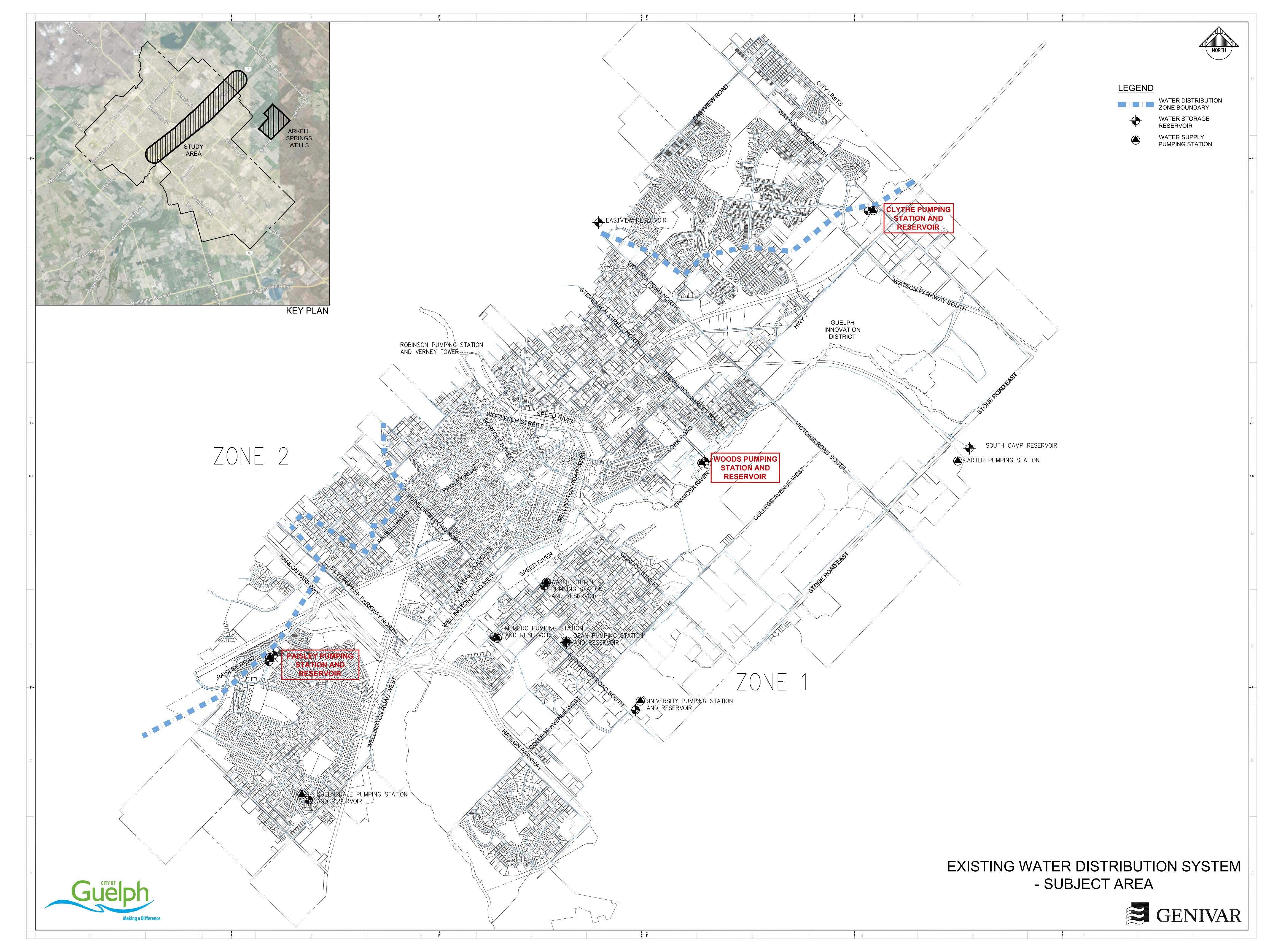
Email: jamie.witherspoon@genivar.com

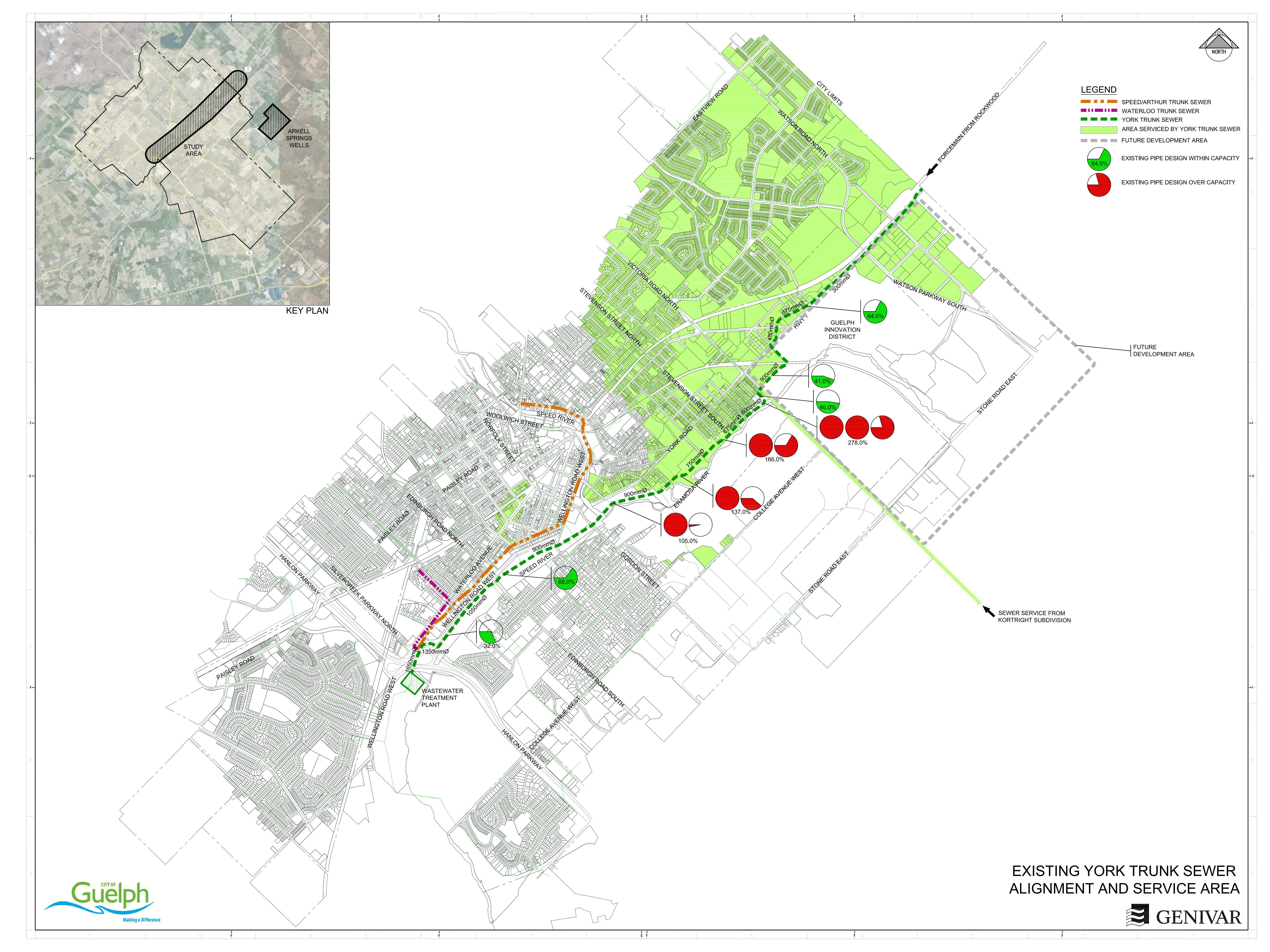
**Project Team Contacts** 











YORK TRUNK SEWER
- KEY FEATURES
GENIVAR

EXISTING YORK TRUNK SEWER ALIGNMENT IN

STREET

SILVERCREEK PARK LOOKING SOUTH TOWARDS WATER



EXISTING YORK TRUNK SEWER ALIGNMENT AT MCCRAE BOULEVARD



# York Trunk Sewer & Paisley-Clythe Feedermain Municipal Class Environmental Assessment

The City of Guelph is interested in hearing the community's comments, questions, concerns and suggestions regarding the York Trunk Sewer & Paisley-Clythe Feedermain Class Environmental Assessment. Please take a few minutes to complete this brief comment sheet. All comments will be carefully considered in the Environmental Assessment Process.

study area?
2. Do you have any comments, concerns, questions or suggestions regarding the Environmental Assessment Process or the overall approach to the Study?
3. Do you have any comments, concerns, questions or suggestions regarding the <b>alternative solutions</b> presented for the servicing alignments (e.g. water or sewer alignments)?
4. Do you have any comments, concerns, questions or suggestions regarding the <b>evaluation criteria</b> for the projects?
5. What do you see as the <b>project features of highest interest of the proposed project</b> from the perspective of your organization or as a resident of the area?

**COMMENT SHEET - PIC #1** 6. Additional comments related to the project. 7. Was the PIC held at a conveniently located venue? YES / NO If not, please provide recommendations as to where the next PIC should be held. 8. Did you have the opportunity to ask questions, and provide your comments and concerns to the project team? YES / NO If not, please provide comments as to what issues you would like to further discuss with the project team 9. Were you able to gain a better understanding of the Study? YES / NO If not, please provide comments as to what elements of the Study are unclear to you. 10. Please provide any other comments regarding the Public Information Centre 8. How would you describe the nature of your interest in this study? \_\_\_\_\_ Member of the General Public (including residents and landowners) \_\_\_\_\_ Member of an Interest Group (Please specify: \_\_\_\_\_\_) \_\_\_\_ Consultant \_\_\_\_\_ Agency Representative (Please specify: \_\_\_\_\_\_)

# **Contact Details**

Name:\_\_\_\_\_Address:\_\_\_\_\_\_Phone Number:\_\_\_\_\_\_

\_\_\_\_\_ Other (Please specify: \_\_\_\_\_\_ )

#### **COMMENT SHEET - PIC #1**

**NOTE**: Personal information requested on this form is collected in accordance with the Freedom of Information and Privacy Act. All comments will become part of the public record. If you do not wish to have personal information (Name, Address, Telephone, Email) on this comment form in the final report, please check the box below:

( ) Please withhold personal information

Please return this completed Comment Sheet to the project team at the Registration Table or you can fax, email or mail it <u>by October 27<sup>th</sup></u>, 2010 to one of the following project contacts:

Colin Baker, P. Eng. Environmental Engineer The City of Guelph City Hall, 1 Carden Street Guelph, ON N1H 3A1 Phone: 519-822-1260 ext. 2282

Fax:519-837-5640

Email: colin.baker@guelph.ca

James Witherspoon, P.Eng., LEED AP Project Manager GENIVAR Consultants Limited Partnership 1-367 Woodlawn Road West Guelph, ON N1H 7K9 Phone: 519-827-1453 ext. 221

Fax: 519-827-1483

Email: jamie.witherspoon@genivar.com



# Your weekly source of City information

# NOTICE OF COMMENCEMENT AND INVITATION TO PARTICIPATE

York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain Class Environmental Assessment

#### The projects

The City of Guelph is initiating a Class Environmental Assessment study for improvements to the York Trunk Sanitary Sewer and a new drinking water feedermain for the Paisley and Clythe Reservoirs. The 2009 Water and Wastewater Servicing Master Plan (WWSMP) identified the need for these improvements in order to service planned growth in the city.

The current York Trunk Sanitary Sewer extends from the former Guelph Reformatory Lands to the Wastewater Treatment Plant west of the Hanlon Expressway along the Eramosa and Speed Rivers. According to the findings of the WWSMP, this sewer is reaching the end of its useful life and capacity due a combination of planned population and employment growth in the city and reports of poor condition in sections. A solution is required to replace and/or rehabilitate this main trunk sewer.

The Paisley-Clythe Drinking Water Feedermain is a new watermain recommended in the WWSMP to increase the reliability of the supply between the F.M. Woods Reservoir and Pumping Station and the Paisley and Clythe Reservoirs at the west and east ends of the city.

The York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain Class Environmental Assessment will:

- · assess existing infrastructure and the environment;
- · identify the problem and alternative solutions;
- · determine needs for future growth;
- evaluate alternatives for routing, construction methods and mitigation measures;
   and
- develop a preferred alternative to meet the project objectives for both the sewer and feedermain.

#### The process

The York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain

Project will be conducted as a Schedule B project in accordance with the "Municipal Class Environmental Assessment" (Municipal Engineers Association, June 2000 as amended in 2007) which is an approved process under the Ontario Environmental Assessment Act. The Class Environmental Assessment process includes public and review agency consultation, an evaluation of alternatives, an assessment of potential environmental effects of the proposed projects, and identification of reasonable measures to mitigate any adverse impacts that may result.

#### How to participate

This fall, community members and interested parties are invited to attend the first of two open house events to review and discuss issues related to the York Trunk Sanitary Sewer and Paisley-Clythe Drinking Water Feedermain. Meeting dates and details will be advertized and posted in the meeting and event calendar at **guelph.ca/events.** 

#### For more information

Please contact either one of our project team members if you have questions, comments or would like to be added to the project mailing list:

**Colin Baker,** P. Eng. Environmental Engineer City of Guelph

T 519-822-1260 x 2282

E colin.baker@guelph.ca

James Witherspoon, P. Eng.

Project Manager

**GENIVAR** Consultants

**⊤519-827-1453** 

 $\ \ \, \textbf{E} \ jamie.witherspoon@genivar.com}$ 

This notice first issued on September 2, 2010.

# Study area



# GET THE LEAD OUT!

# Are you pregnant or do you have young children and live in an older home?

#### Drinking water and lead

Guelph's municipal drinking water undergoes more than 20,000 tests each year to ensure it meets or exceeds the provincial drinking water quality standards. Guelph's groundwater supply contains little (well below the provincial standard of 10 micrograms per litre) or no naturally-occurring lead.

However, if your home was built before the mid-1950s, it may have a lead water service.

#### Who is most at risk?

Children six years of age and under, pregnant women or women planning a pregnancy are most likely to be affected by lead. For more information about lead and your health, contact Wellington-Dufferin-Guelph Public Health at 1-800-265-7293 or visit **wdghu.org.** 

# Is your water service made of lead?

Water service lines are the pipes which bring water from the watermain in the street into a home. Lead piping was used for water service lines in older homes, usually built before the mid-1950s. A lead pipe is easy to identify, it is dullish grey in colour, leaves a silver mark when scratched, is easily pliable, and is not magnetic. Often, interior plumbing has been replaced with copper pipes; however it's still possible that the water service (the piping underground) is made of lead.

See the map of the potential lead service areas.

# Private Lead Service Line Replacement Grant Program

The City of Guelph is offering a limited number of grants of up to \$1,500 (to cover eligible replacement costs) to residents replacing a lead service line on their private property.

## **Water Service Verification Program**

Waterworks is conducting home visits where licensed City Operators will inspect the visible portion of the water service. A water sample will also be collected from the drinking water tap and analyzed for lead to determine if lead is present in your water. There is no cost for this visit and it will only take a few minutes of your time.



Book your free water service verification visit today.
Contact Guelph Waterworks at 519-837-5627 or email leadtesting@guelph.ca.