
Appendix D

Public Information Centre Materials

**Appendix D1 –
Notice of Project**



November 7th, 2018

Notice of Project
NORTH EAST END FLOOD REMEDIATION STUDY

Dear All Area Residents / Business Owners / Tenants / Agencies:

The northern end of the City of Brantford has experienced basement and surface flooding during the heavy rainfall event in August 2017. As a result, the City has initiated the Northeast End Flood Remediation Study to investigate the causes of flooding, identify any deficiencies in the infrastructure, and recommend solutions to reduce risk of future flooding in the area.

We Want to Hear from You!

To help us improve the understanding of existing conditions, develop feasible solutions to mitigate flooding issues and create a comprehensive plan that can be implemented in partnership with the community, we kindly request you to fill out the accompanying questionnaire and return it to the City by **December 15th, 2018** through:

Email: nghbn@brantford.ca; or
Mail: P.O. Box 818, Brantford, ON N3T 5R7,
Attention: Nahed Ghbn

On **December 6th, 2019**, the City will also host a Public Information Centre to provide an opportunity for Residents / Owners / Tenants / Agencies in the North-East End area to meet with City staff and the consultant from the Remediation Study project team. The purpose of the meeting is to introduce the project to the community, learn about flooding, present existing stormwater infrastructure and environmental conditions, identify existing issues and opportunities and outline subsequent steps in the study process.

We invite you to the upcoming Public Information Centre:

Time: Thursday, December 6th, 2018
6:00 p.m. – 8:00 p.m.

Location:

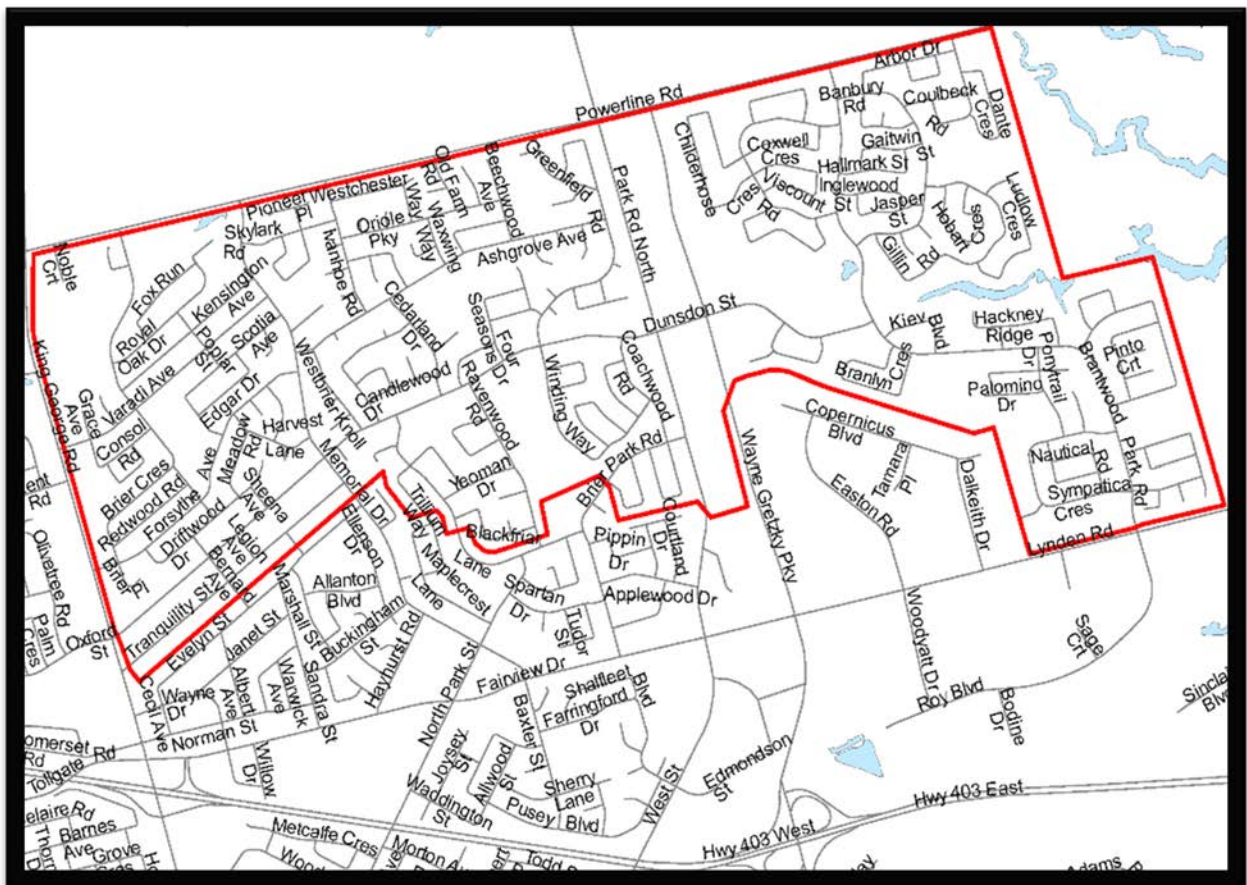
If you are a tenant, we kindly ask that you to forward this information onto the property owner.

Should you have any questions and / or comments about the North East End Flood Remediation Study, please contact:

Nahed Ghbn, P.Eng
Senior Project Manager
City of Brantford
City Hall, 100 Wellington Square,
Brantford, Ontario N3T 2M2
Tel: 519-759-4150 ext. 5262
Email: nghbn@brantford.ca

Dave Maunder, M.Sc., P.Eng
Project Manager
Aquafor Beech Limited
Bldg 6, Suite 202, 2600 Skymark Avenue,
Mississauga, Ontario L4W 5B2
Tel: 905-629-0099 ext.290
Email: maunder.d@aquaforbeech.com

Study Area Map



All comments and information received from individuals, stakeholder groups and agencies regarding this study are being collected to assist the City of Brantford in completing the North-East End Flood Remediation Study. Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act and with the exception of personal information, all information provided will become part of the public record.

Appendix D2 –
Public Information Centre 1



WELCOME



North-East End Flood Remediation Study
PUBLIC INFORMATION CENTRE
December 6th, 2018



This Public Information Centre (PIC) is designed to:

- Introduce the project to the community
- Learn about the nature and types of flooding
- Present information on existing conditions
- Present study process and timelines
- Seek community input on:
 - Existing conditions information
 - Identification of opportunities

The north-east end of the City of Brantford has experienced basement and surface flooding during the heavy rainfall event in August 2017.

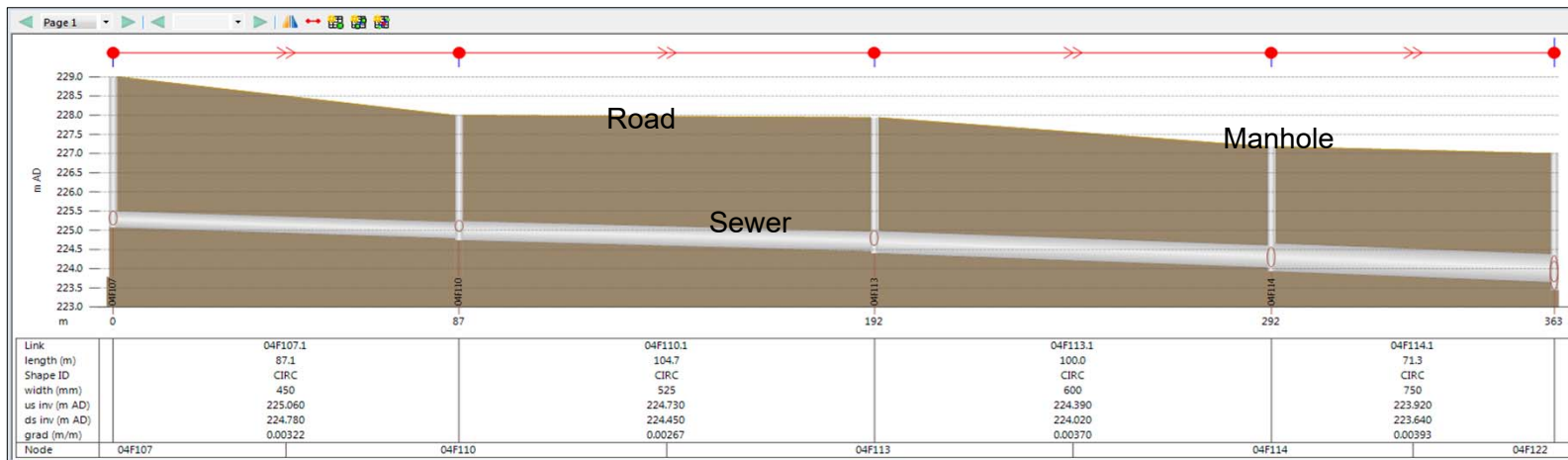
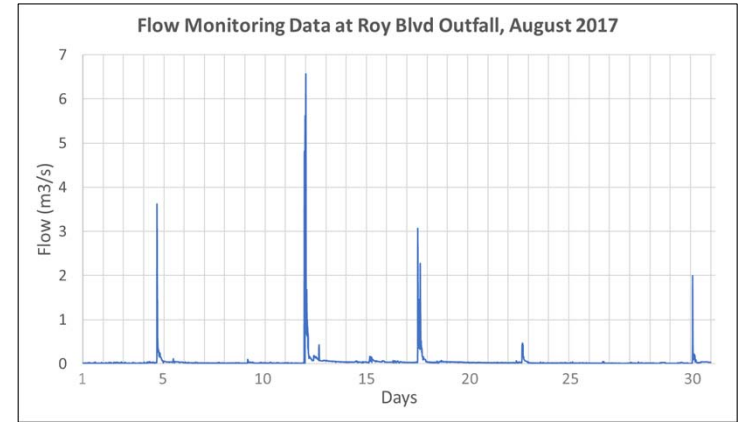
As a result, the City has initiated the North-East End Flood Remediation Study to investigate the causes of flooding, identify any deficiencies in the infrastructure, and recommend solutions to reduce risk of future flooding in the area.



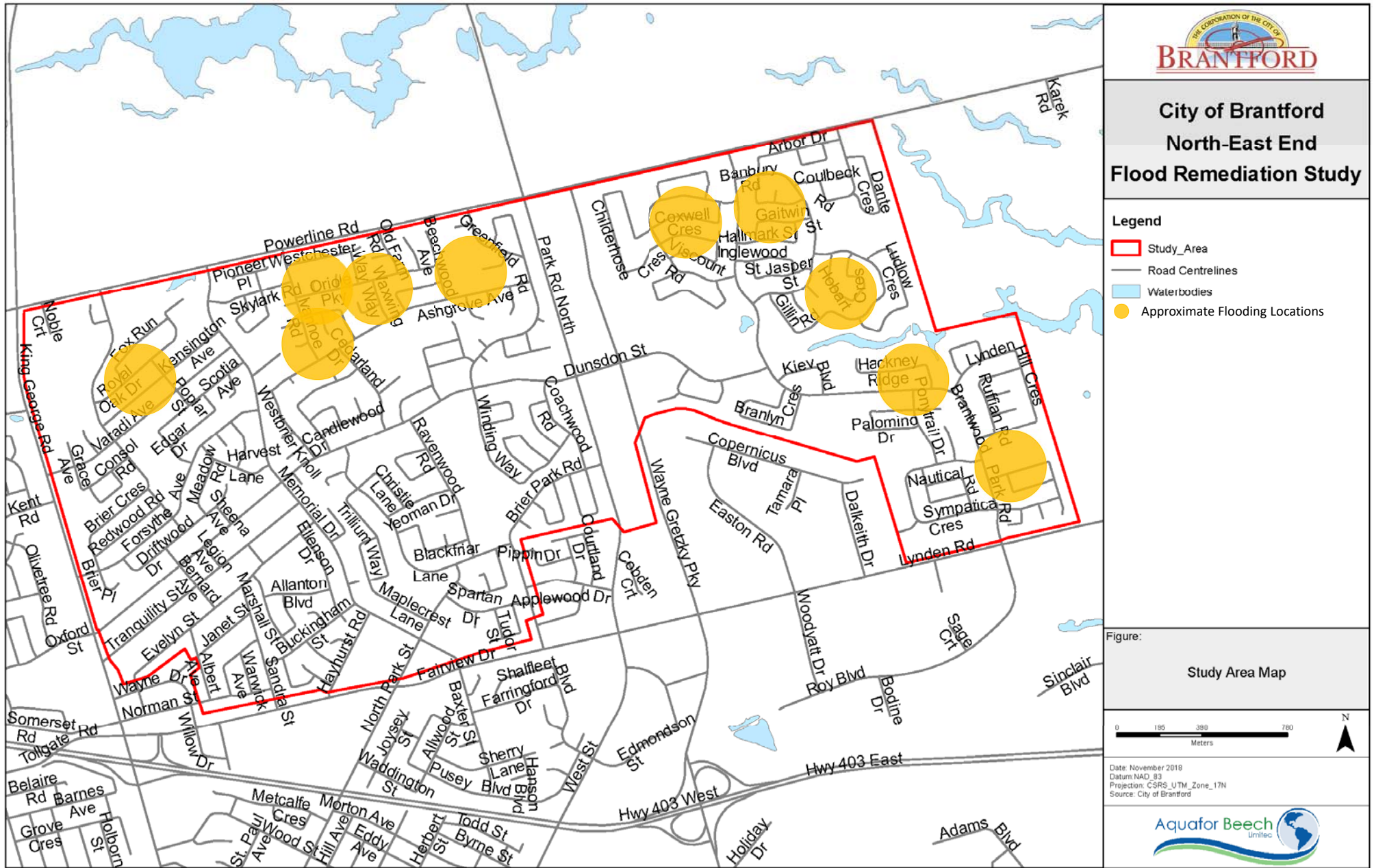
BACKGROUND DATA

Some of the information collected for this study includes:

- Closed Conduit Televisions (CCTV) records
- Available as-built drawings
- Flow monitoring data
- Precipitation data
- Storm sewer and sanitary sewer network information (sewer size, location, type, depth, etc.)
- Smoke and Dye tests (to be undertaken)



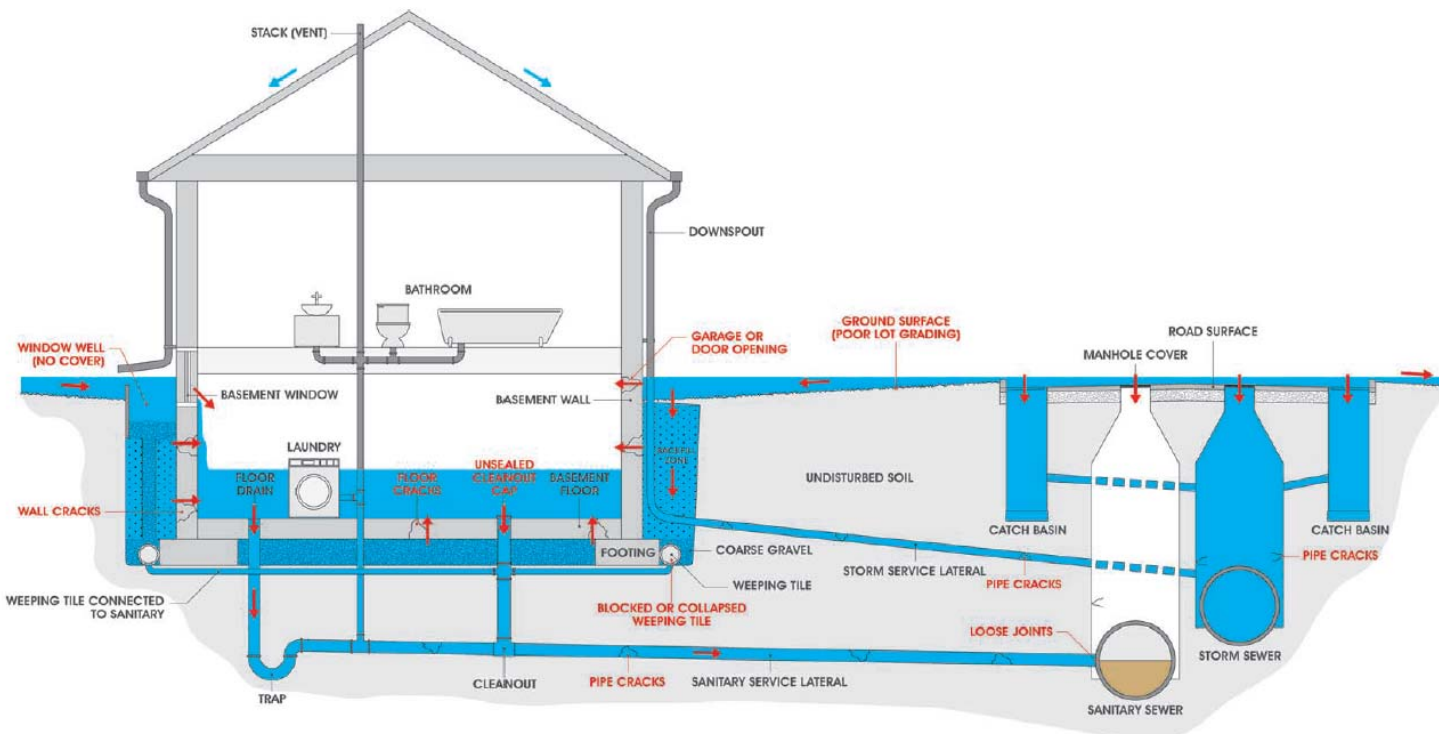
STUDY AREA AND FLOODING MAP



There are 3 major conditions that can lead to basement flooding:

1. Overland flooding

- Intense rainfall events overwhelm the sewers;
- Sewer surcharges and leads to excess surface water;
- Improper lot grading directs water towards the house;
- Water enters the house through uncovered window wells, doors, etc.

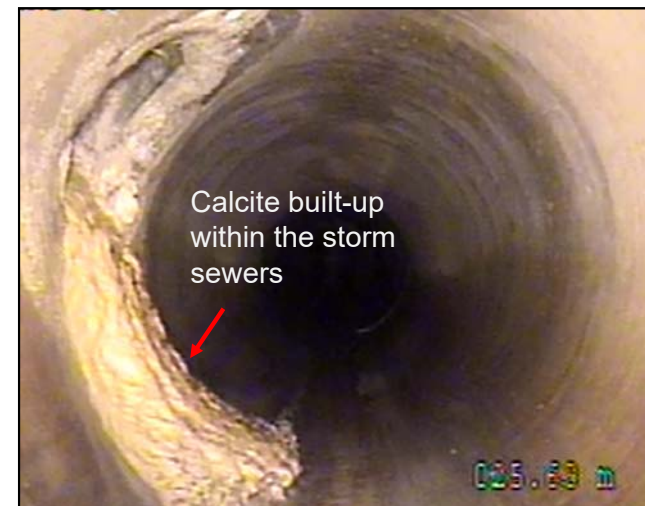


Basement flooding caused by overland flooding and infiltration flooding

Image source: Handbook for reducing Basement flooding, (Institute for Catastrophic Loss Reduction, 2009)

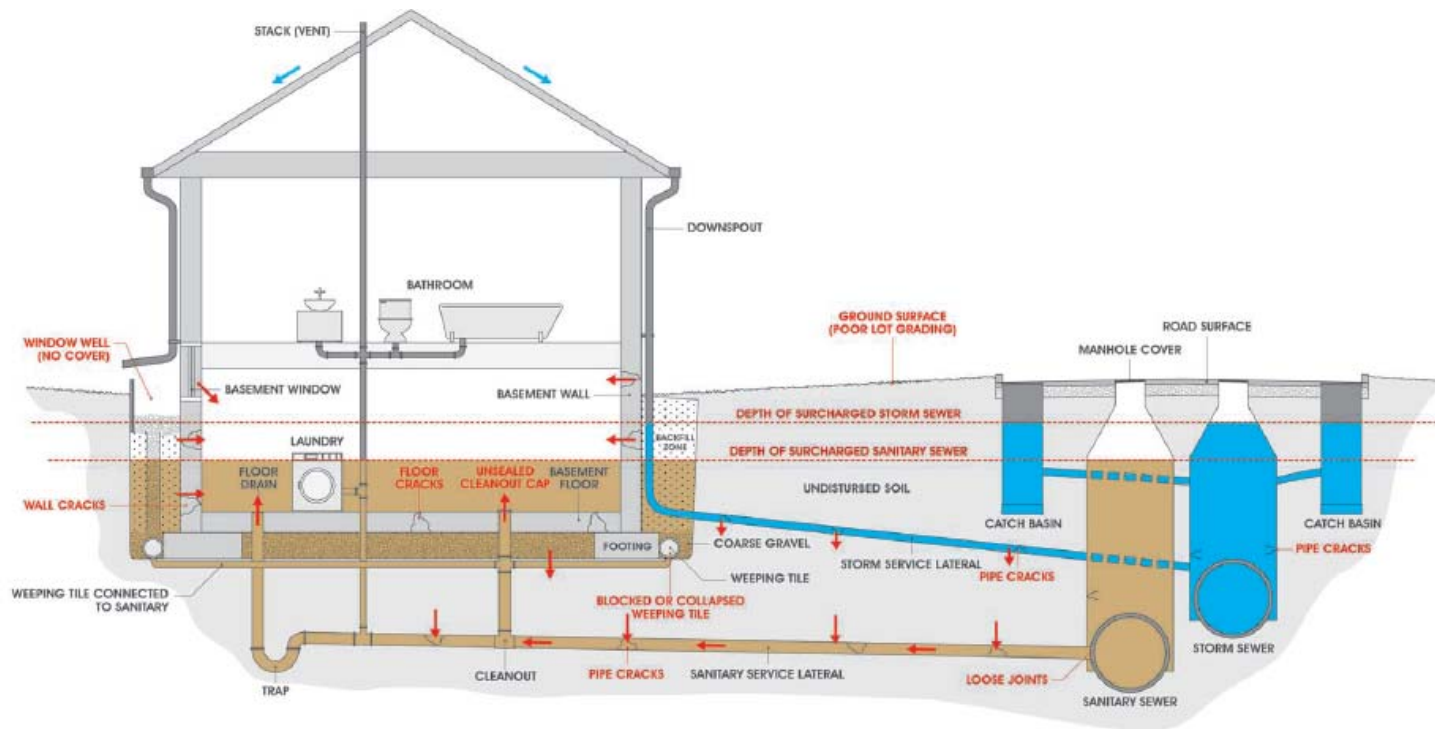
2. Groundwater Infiltration

- Groundwater level is higher than the basement floor;
- Groundwater enters the house through cracks in the basement floor and walls;
- Weeping tiles / foundations drains are in disrepair and are unable to remove water from foundation.



3. Sewer Backup

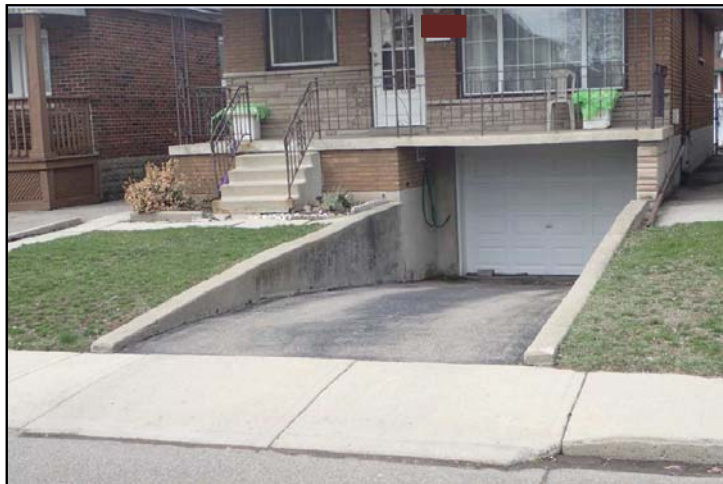
- Excess flows, infiltration and improper connections causes the flow to exceed what the sanitary sewer is designed for;
- Sewer surcharges and pushes water into the house through sanitary plumbing fixtures, including floor drain, unsealed sewer cleanout, etc.
- Weeping tiles (connected to sanitary sewer laterals) backs up and water infiltrates into the basement through cracks.



Basement flooding caused by Sanitary Sewer Backup

Image source: Handbook for reducing Basement flooding, (Institute for Catastrophic Loss Reduction, 2009)

Reverse grade driveways, with / without trench drainage in front of the garage, could be susceptible to surface flooding.



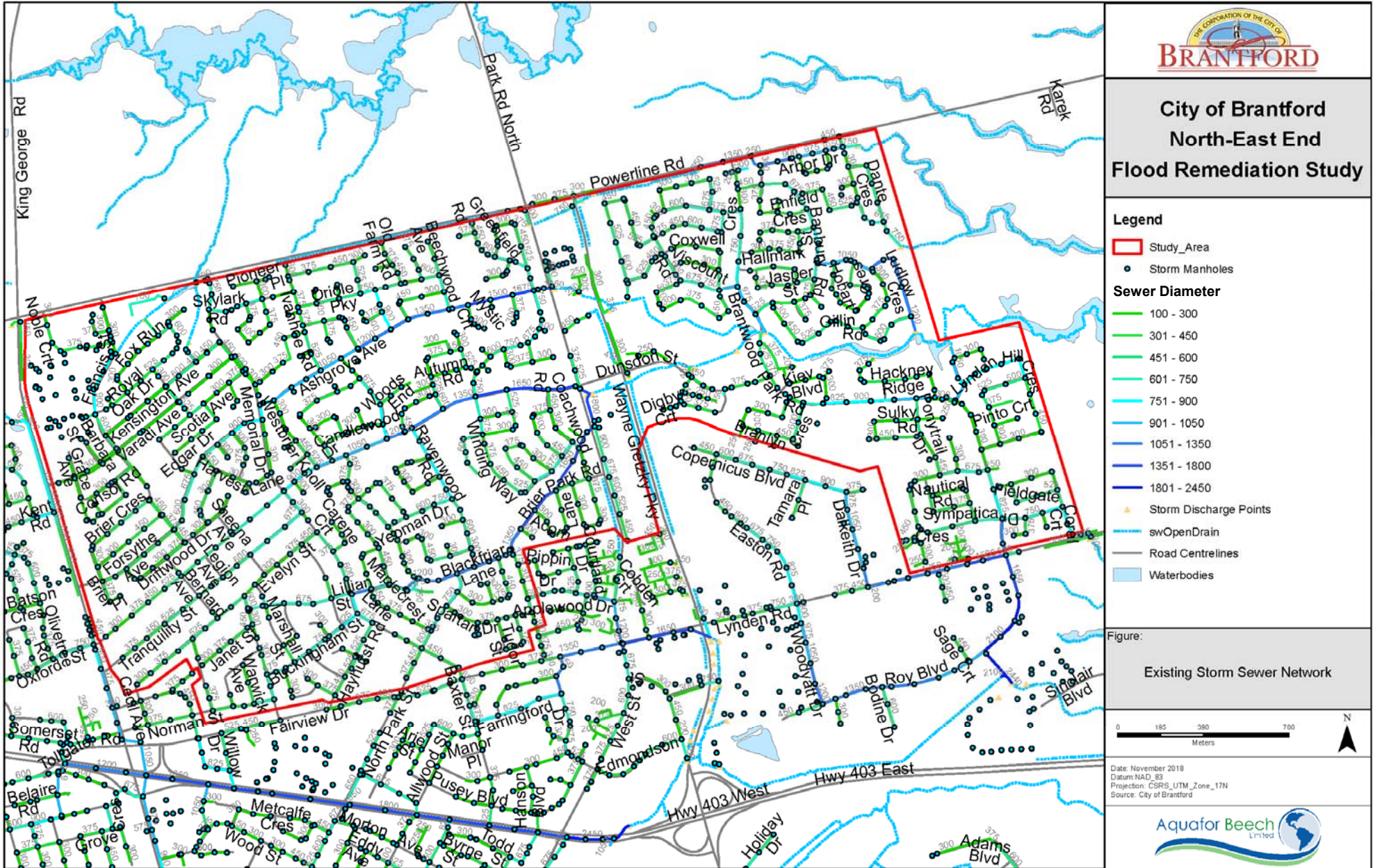
Connected downspouts (eavestroughs) would add direct flows into the underground sewer system and increase the potential of overwhelming the sewer system during heavy rainfall events.

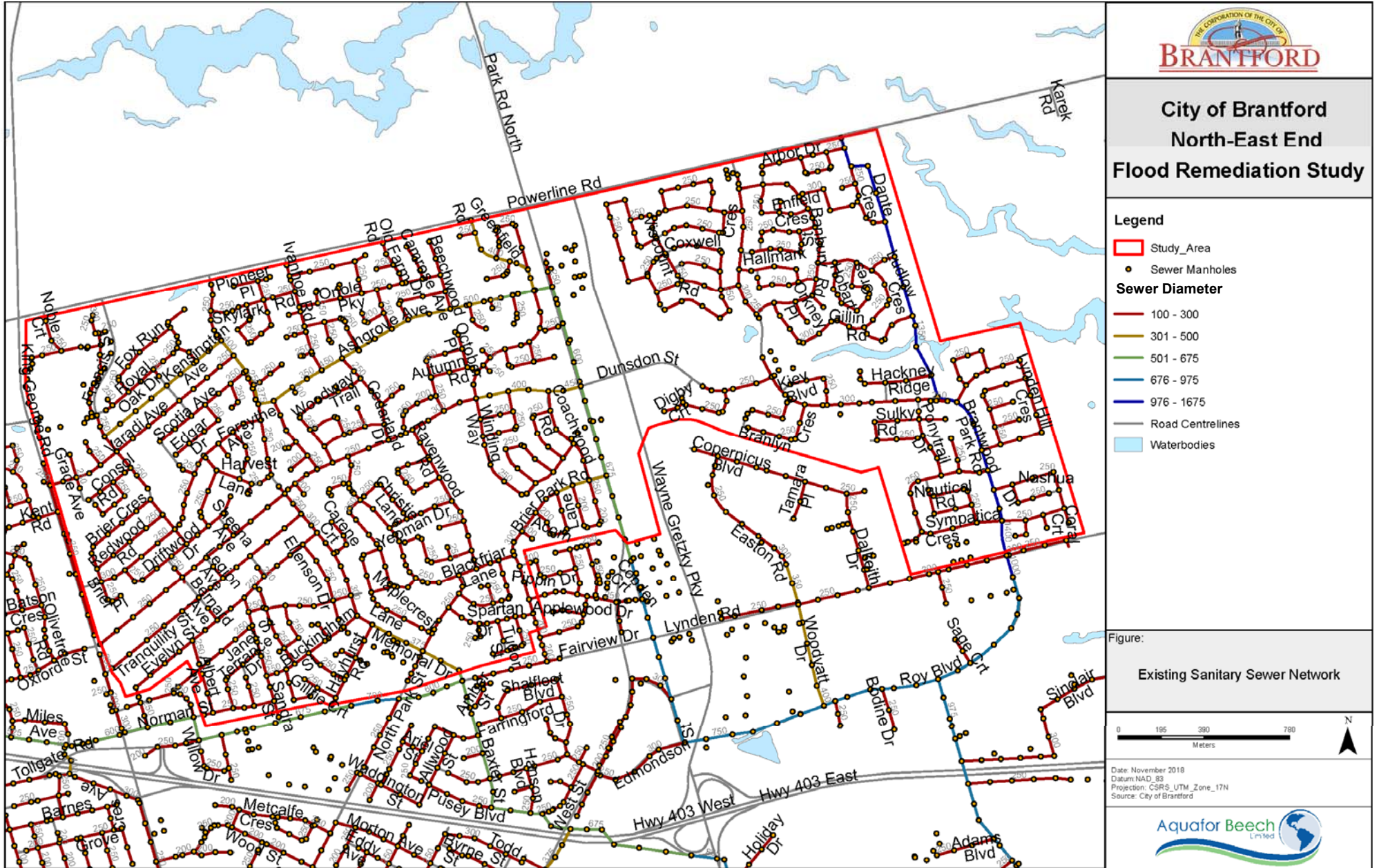


Disconnected downspouts (eavestroughs) direct flows to garden or lawn, which helps promote infiltration, reduce the amount of water entering the sewer system, and delays the time of water entering the sewer system.



EXISTING STORM SEWER NETWORK





Please fill out the questionnaires and comment sheets.

The questionnaire consists of 15 questions regarding your experience with flooding and possible flood mitigation measures you may or may not have on your property.

All information collected will be used for this study only, and will not be shared with other parties. Your input will help us better understand the existing conditions, improve the results and help us create a comprehensive plan that can be implemented in partnership with the community.

Your comments are encouraged and appreciated, as this will provide us an opportunity to address project issues and concerns.



Anyone that has further information or questions should send their comments to:

Nahed Ghbn, P.Eng

City of Brantford

City Hall, 100 Wellington Square,

Brantford, Ontario N3T 2M2

Tel: 519-759-4150 ext. 5262

Email: nghbn@brantford.ca

Dave Maunder, M.Sc., P.Eng

Aquafor Beech Limited

Bldg 6, Suite 202, 2600 Skymark Avenue,

Mississauga, Ontario L4W 5B2

Tel: 905-629-0099 ext.290

Email: maunder.d@aquaforbeech.com

Your comments are encouraged and appreciated, as this will provide us an opportunity to address project issues and concerns.

NEXT STEPS

PUBLIC CONSULTATION – December, 2018

- Comment forms available for input.
- Compile and review feedback.

MODEL DEVELOPMENT– Fall 2018 to Spring 2019

- Background data review.
- Develop, refine, and calibrate the storm drainage model.

DEVELOPMENT OF SOLUTIONS – Spring to Summer 2019

- Assessment and review of long-term solutions.

STUDY REPORT AND DRAWINGS – Summer to Fall 2019

- Preparation of study report and drawings.

DETAILED DESIGN & IMPLEMENTATION

- Construction timing dependant on City of Brantford Capital Planning.

THANK YOU

FOR PARTICIPATING IN THE NORTH-EAST END FLOOD REMEDIATION STUDY

CITY OF BRANTFORD

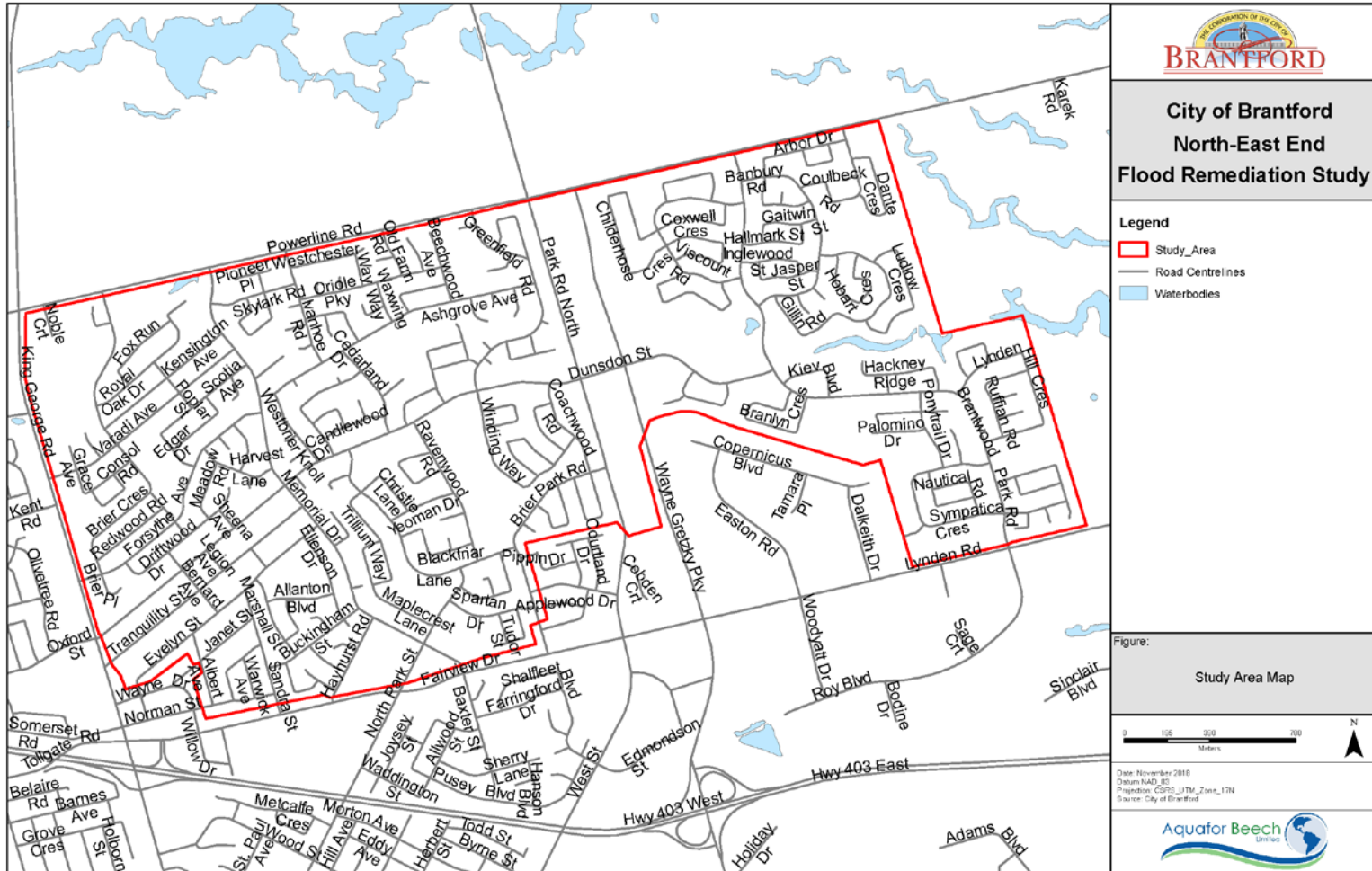
North-East End Flood Remediation Study

First Public Information Centre

December 6, 2018



Study Area



Study Overview – Problem Definition

- Flooding occurred in the north-east end of the City in August 2017.
- City has initialed this study to investigate the causes of flooding, identify any deficiencies in the infrastructure and recommend solutions to reduce the risk of future flooding.

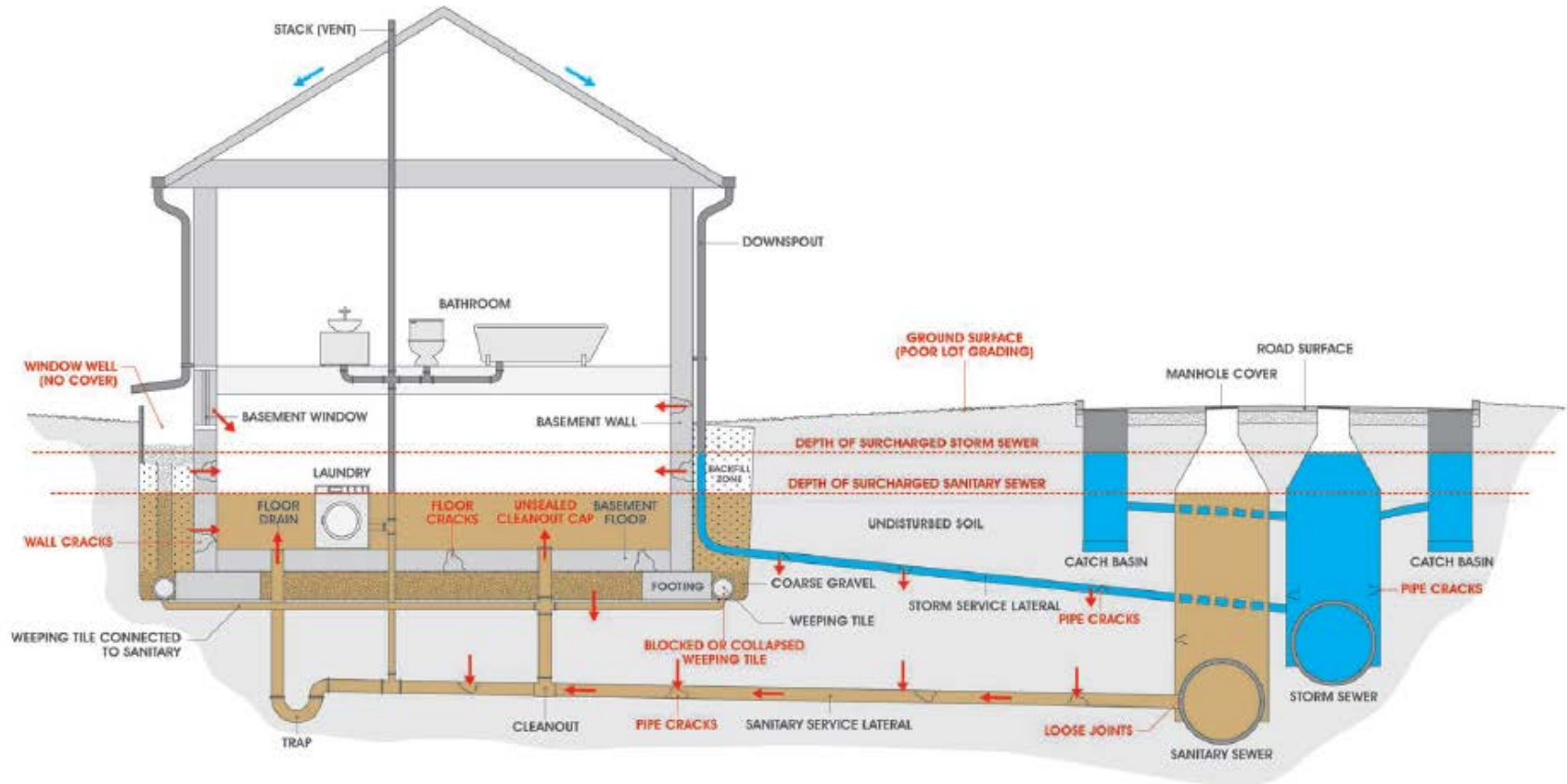


Objective of Today's Meeting

- Introduce the project to the community
- Learn about flooding
- Present information on existing conditions
- Present study process and timelines
- Collect input / insight from the community



Why Does Flooding Occur?



Questionnaire

- Has your home been impacted by flooding?
- What type of flooding occurred?
- Have you undertaken any preventative measures?

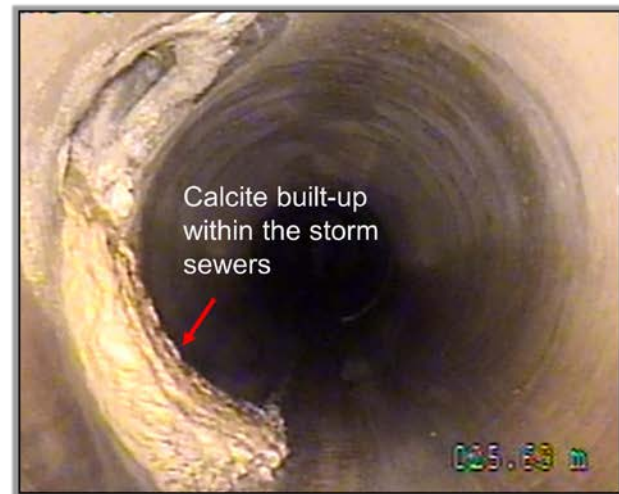


Backflow Valve

Background Data

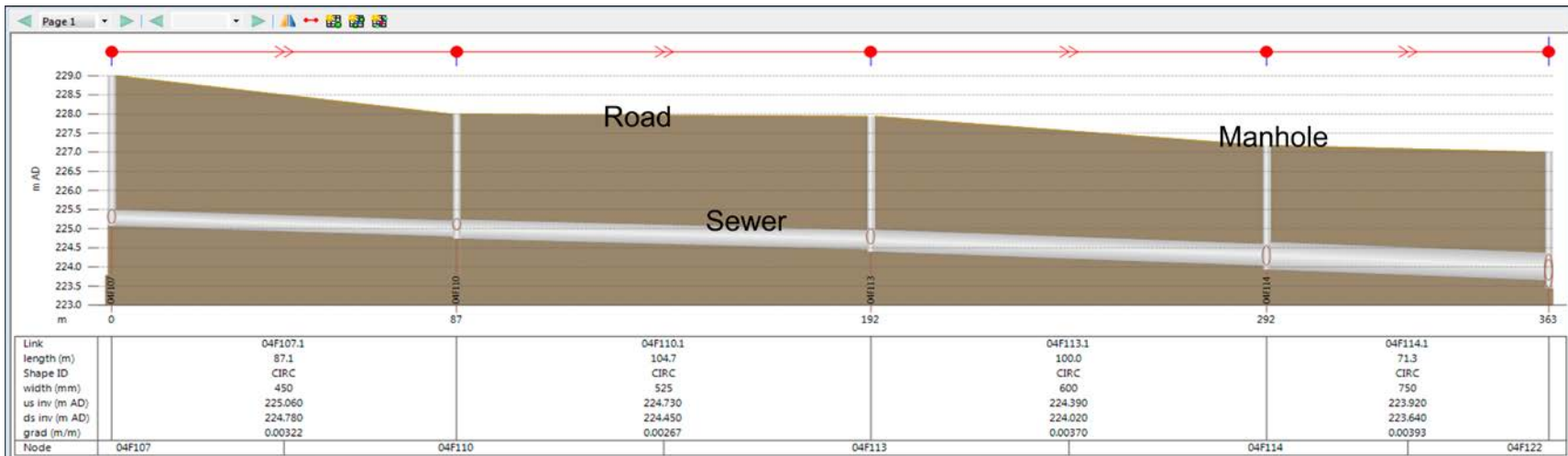
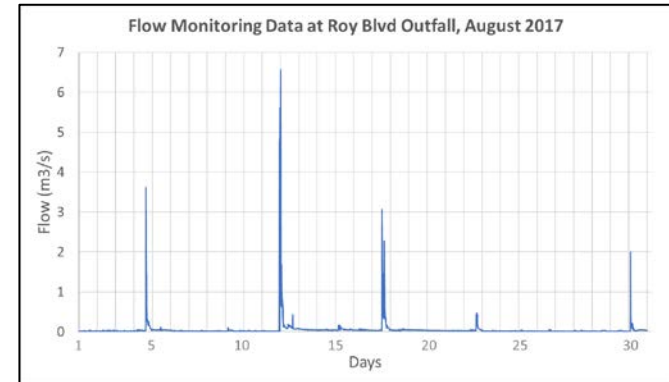
Information collected to date includes:

- Closed Conduit Televisions (CCTV) records
- Available as-built drawings



Background Data

- Flow monitoring data
- Network information
- Smoke and Dye tests (to be undertaken)



Existing Conditions

- Reverse Grade Driveways



Existing Conditions

- Connected Downspouts



Existing Conditions

- Disconnected Downspouts

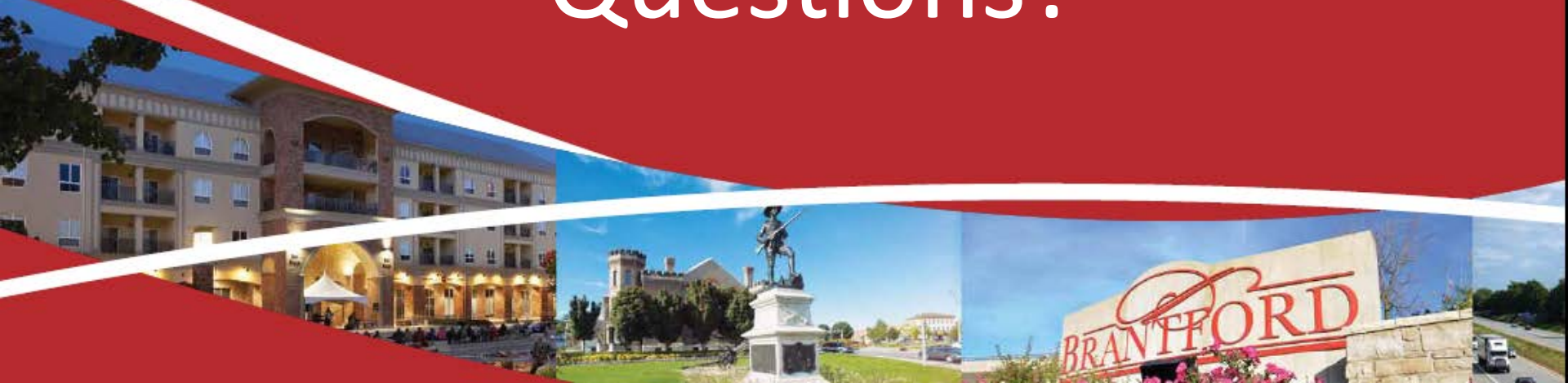


Next Steps

- Public Consultation – December, 2018
- Model Development – Fall 2018 to Spring 2019
- Development of Solutions – Spring to Summer 2019
- Study Report and Drawings – Summer to Fall 2019
- Detailed Design & Implementation – To be Determined based on City's Capital Planning



Thank You!
Questions?





NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018
6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	CORAL CT	[REDACTED] 720	—
[REDACTED]	Ashgrove Ave.	[REDACTED] 236	[REDACTED]@ychoos.ca
[REDACTED]	LYNDEN Rd	[REDACTED] 86	[REDACTED]@gmail.com
[REDACTED]	Bell Manor Court	[REDACTED] 2	—
[REDACTED]	HACKNEY RIDGE	[REDACTED] 3	
[REDACTED]	Sandhurst crt	[REDACTED] 378	
[REDACTED]	Hackney Ridge	[REDACTED] 699	—
[REDACTED]	Washue Dr.	[REDACTED] 3	
[REDACTED]	WOODWAY TRAIL	[REDACTED] 6.	



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] Hobart	[REDACTED]	[REDACTED] @EXECUTIVE.COM
[REDACTED]	[REDACTED] COLONIAL 4325	[REDACTED]	[REDACTED] gmail.com
[REDACTED]	[REDACTED] Banbury Rd	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] Childerhose Cres	[REDACTED]	[REDACTED] @gmail.com
[REDACTED]	[REDACTED] Bell Manor	[REDACTED]	[REDACTED] rogers.com
[REDACTED]	[REDACTED] NASHUA DR	[REDACTED]	[REDACTED] @ rogers.com
[REDACTED]	[REDACTED] HARVEST LANE	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] Brooklyn Cres	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] Palomino Drive	[REDACTED]	[REDACTED] @gmail.com

NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	COLBECK ROAD	[REDACTED]	[REDACTED]
[REDACTED]	Pacer Court	[REDACTED]	[REDACTED]@hotmail.com
[REDACTED]	FIELDGATE DR	[REDACTED]	[REDACTED]
[REDACTED]	onide Pky	[REDACTED]	[REDACTED]@yahoo.com
[REDACTED]	onide Pky	[REDACTED]	—
[REDACTED]	Thicketwood Ct	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	Tanglewood	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	8 Hackney Ridge	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	ASHGROVE AVE	[REDACTED]	[REDACTED]@YAHOO.CA



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	TANGLEWOOD TERR.	[REDACTED]	[REDACTED]@live.ca
[REDACTED]	Pioneer Place	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	ORIOLE PKWY	[REDACTED]	[REDACTED]
[REDACTED]	FIELDGATE DR.	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] Marlborough Rd	[REDACTED]	[REDACTED]@sympatico.ca
[REDACTED]	[REDACTED] VISCOUNT RD [REDACTED] Btfd	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] Coxwell Crest	[REDACTED]	[REDACTED]@Hotmail.com
[REDACTED]	[REDACTED] Wilky Rd [REDACTED] Brantford	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] VARADI AVE	[REDACTED]	[REDACTED]@ROGERS.COM
[REDACTED]	[REDACTED] Westchester WAY	[REDACTED]	[REDACTED]@Rogers.COM
[REDACTED]	[REDACTED] Pinto crt	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] Colonial Cr.	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	[REDACTED] Cedar / and Dr.	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] anastasia crescent	[REDACTED]	[REDACTED]@hotmail.com
[REDACTED]	[REDACTED] FIELDGATE DRIVE	[REDACTED]	[REDACTED]@yahoo.ca
[REDACTED]	[REDACTED] Old Farm Rd	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] Tanglewood Terr	[REDACTED]	[REDACTED]@Financialnavigators.ca



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] Hobart cres		
[REDACTED]	[REDACTED] WINDING WAY		
[REDACTED]	[REDACTED] road/avenue st		
[REDACTED]	[REDACTED] Palomino Dr.		[REDACTED] @rogers.com
[REDACTED]	[REDACTED] Golden Pk.		[REDACTED] @gmail.com
[REDACTED]	[REDACTED] Royal oak Drive	[REDACTED]	[REDACTED] @century 21. ca.
[REDACTED]	[REDACTED] Fieldgate Dr.		
[REDACTED]	[REDACTED] Nautical		
[REDACTED]	[REDACTED] MEMORIAL	[REDACTED]	



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

December 6th, 2018
6:00 p.m. – 8:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] Pony trail Dr. Brantford.	[REDACTED]	[REDACTED] @gmail.com
[REDACTED]	[REDACTED] KENSINGTON AVE	[REDACTED]	[REDACTED] @yahoo.ca

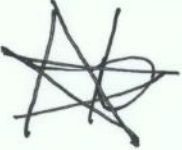
NORTH-EAST END FLOOD REMEDIATION STUDY

VISIT TO HOME

Public Meeting

December 6th, 2018

6:00 p.m. – 8:00 p.m.



SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[Redacted]	[Redacted] Ashgrove Ave	[Redacted]	[Redacted]@yahoo.ca.
[Redacted]	[Redacted] Fieldgate Dr	[Redacted]	[Redacted]@gmail.com.
[Redacted]	[Redacted] Tanglewood	[Redacted]	[Redacted]@gmail.com.

NORTH-EAST END FLOOD REMEDIATION STUDY

Public Meeting

Visit to HOME

December 6th, 2018

6:00 p.m. – 8:00 p.m.



SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	Nautical Rd	[REDACTED]	[REDACTED] @gmail.com
[REDACTED]	anastasiq crescent	20	[REDACTED]@ hotmail.com
[REDACTED]	Royal Oak Dr.	51 51	[REDACTED]@gmail.com [REDACTED]@hotmail.com
[REDACTED]	Sulky Rd	5	[REDACTED]@gmail.com gmail.com
[REDACTED]	Bell Manor Ct	5	[REDACTED] 171 @gmail.com
[REDACTED]	Brookhaven Ct	6	[REDACTED] [REDACTED]@rogers.com
[REDACTED]			
[REDACTED]			
[REDACTED]			



NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED] @Sympatico
 Address: [REDACTED] Powerline Rd N3T5L8 [REDACTED] .ca

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

- Water Issues need to be addressed where it exits from the developed areas crossing my road my mothers farms and emptying into Fairchild creek.

2. Do you have any comments regarding the study?

- because of this water I have no access to the back of my farm except through my mothers property. And there is alot of Damage done by this water

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

All comments and information received from individuals, stakeholder groups and agencies regarding this study are being collected to assist the City of Brantford in completing the North-East End Flood Remediation Study. Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act and with the exception of personal information, all information provided will become part of the public record.



NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: _____
 Address: [REDACTED] FIELD GATE DR _____

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

Storm drain in front needs more work done so water can drain properly.

2. Do you have any comments regarding the study?

No

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
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NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [Redacted] Email: [Redacted] @EXECUTIVE.COM

Address: [Redacted] Hobart

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

2. Do you have any comments regarding the study?

My house is in an area marked as an "impact" zone. I had no water problem. Is it possible to speak with neighbours who had issues?

send pictures of presentation to resident
 Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

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NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED]@financialnavigators.ca
 Address: [REDACTED] Tanglewood Terrace

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

Our problem is more of a groundwater problem. The level seems to be higher than it has been in the past. Notice that swails are being filled in by driveways, trees and sheds, trapping water runoff.

2. Do you have any comments regarding the study?

Good idea to review & make suggestions for improvements.

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

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NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED] @gmail.com
 Address: [REDACTED] C

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

THE SILVER BRIDGE PARK LOCATED ON GLEN RD. ? HOUSING
 SUSTAINS HIGH LEVELS OF WATER DURING SPRING ? FALL SEASONS.
 HOW WILL THIS RESOL.
 I BELIEVE THIS IS THE MAIN CAUSE FOR WATER ENTERING
 THE RESIDENCES.

2. Do you have any comments regarding the study?

WILL THE STUDY PROVIDE ASSISTANCE TO HOME
 OWNERS WHO SUFFERED WATER ISSUES DURING THE
 FLOOD?
 THANK YOU

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

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NORTH-EAST END FLOOD REMEDIATION STUDY



Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED] @rangers.com
 Address: [REDACTED] PINTO COURT

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

2. Do you have any comments regarding the study?

CURRENTLY, WE DO NOT HAVE AN ISSUE WITH FLOODING. OUR CONCERN IS ENSURING FUTURE DEVELOPMENT NORTH AND WEST OF THE CITY DOES NOT IMPACT OUR HOME.

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **January 11th, 2019**
 Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

All comments and information received from individuals, stakeholder groups and agencies regarding this study are being collected to assist the City of Brantford in completing the North-East End Flood Remediation Study. Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act and with the exception of personal information, all information provided will become part of the public record.

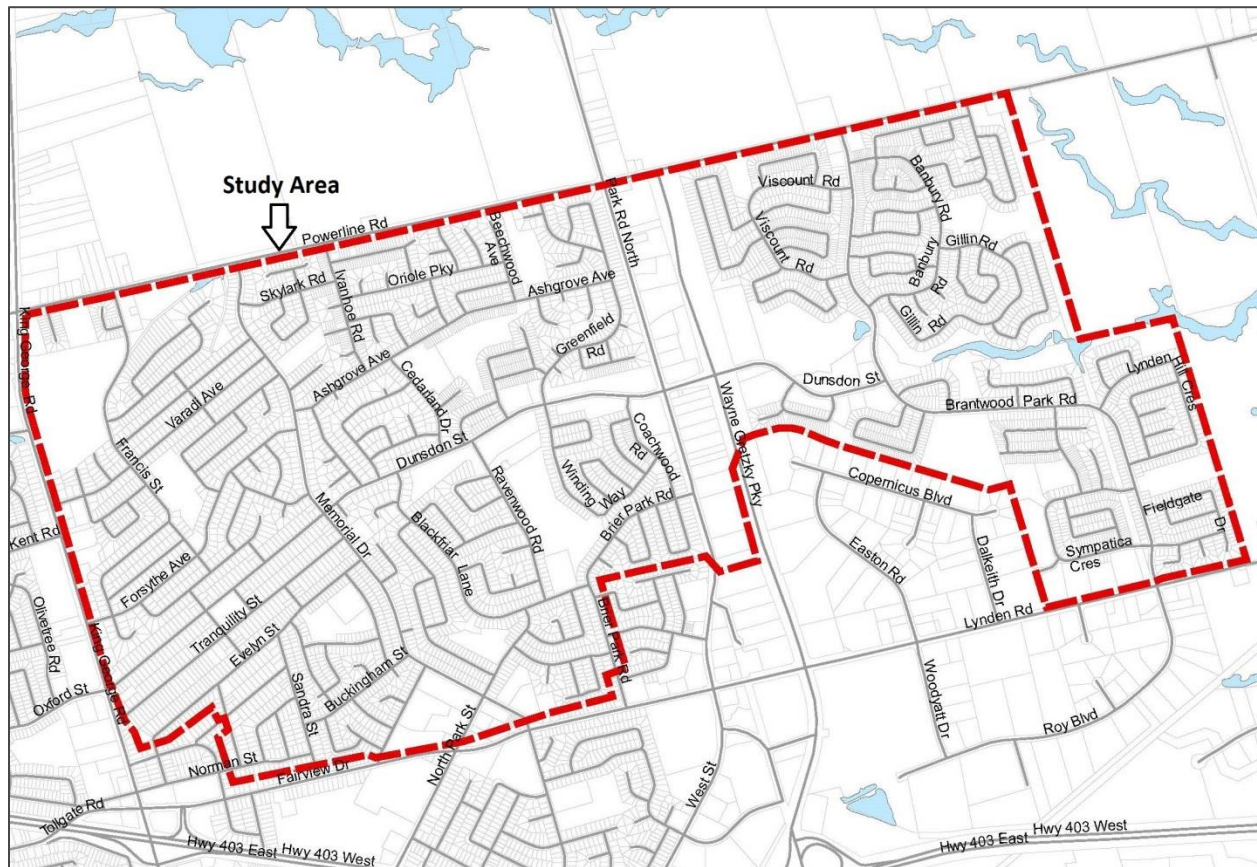
Appendix D3 –
Public Information Centre 2

**NOTICE OF PUBLIC INFORMATION CENTRE
North East End Flood Remediation Study**

Dear All Area Residents/Business Owners/Tenants/Agencies:

The Study

The northern end of the City of Brantford has experienced basement and surface flooding during the heavy rainfall event in 2017 and 2018. As a result, the City has initiated the Northeast End Flood Remediation Study to investigate the causes of flooding, identify any deficiencies in the infrastructure, and recommend solutions to reduce risk of future flooding in the area.



Public Information Centre

As part of the study, the City is hosting a Public Information Centre to provide an opportunity for Residents / Owners / Tenants / Agencies in the North-East End area to meet with City staff and the consultant from the Remediation Study project team. The



purpose of the meeting is to introduce the project to the community, learn about flooding, present existing stormwater infrastructure and environmental conditions, identify existing issues and opportunities and potential solutions for the identified issues.

The PIC will be held:

Date: Thursday, October 17th, 2019
Time: 5:00 p.m. – 7:00 p.m.
Location: Branlyn Community Centre,
238 Brantwood Park Road, Brantford

The purpose of the PIC is to share information with interested community members, to inform and identify priorities and interests that should be considered in project planning and execution.

Representatives from the City and its consultant team will be present at the PIC to answer questions and discuss next steps. The meeting will be an open house format with no formal presentation.

Your input is important!
Comment sheets will be available at the PIC and on the City's website.
Please provide your comments by October 31, 2019.

Should you have any questions and / or comments about the North East End Flood Remediation Study, please contact:

Nahed Ghbn P.Eng.
Senior Project Manager
City of Brantford
Tel: 519-759-4150 ext. 5262
Email: NGhbn@brantford.ca

Dave Maunder, M.Sc., P.Eng
Project Manager
Aquafor Beech Limited
Bldg 6, Suite 202, 2600 Skymark Avenue,
Mississauga, Ontario L4W 5B2
Tel: 905-629-0099 ext.290
Email: maunder.d@aquaforbееch.com

Information relating to the Study and consultation process will also be posted on the City of Brantford's website, <https://www.brantford.ca/en/your-government/north-east-flood-remediation-study.aspx>.

All information collected will be used in accordance with the Freedom of Information and Protection of Privacy Act. RSO, 1990, c.F.31. With the exception of personal information, all comments will become part of the public record.

All information collected will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. RSO, 1990, s. 10(1). With the exception of personal information, all comments will become part of the public record.



WELCOME



North-East End Flood Remediation Study
PUBLIC INFORMATION CENTRE
October 17th, 2019



The Public Information Centre is designed to provide:

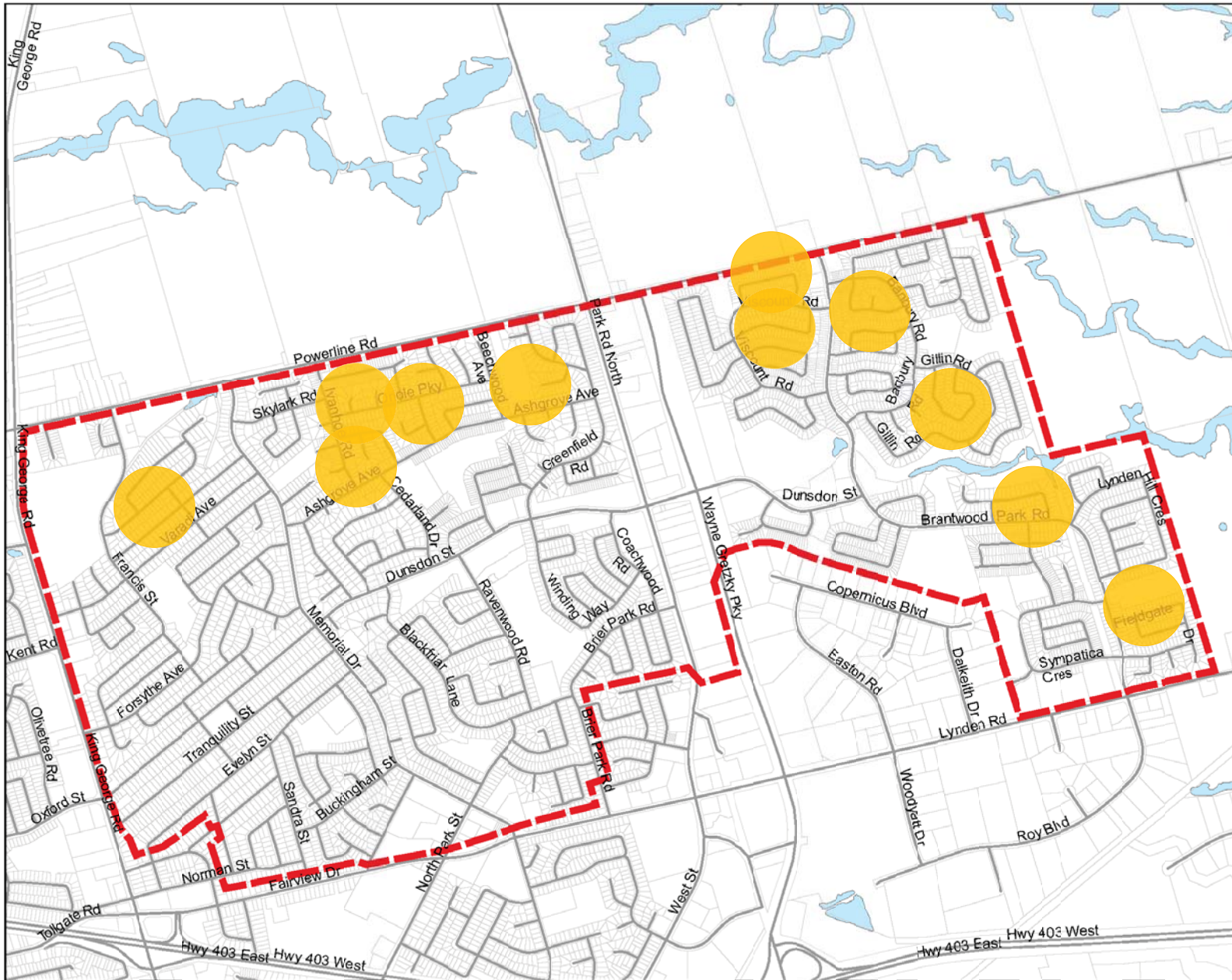
- Overview of the study
- Key tasks accomplished
- Findings of the investigations
- Stormwater recommendations
- Proposed remediation solutions
- Opportunity for community input


The north-east end of the City of Brantford experienced basement and surface flooding during a heavy rainfall event in August 2017.

As a result, the City initiated the North-East End Flood Remediation Study to investigate the causes of flooding, identify any deficiencies in the infrastructure, and recommend solutions to reduce the risk of future flooding in the area.



STUDY AREA AND FLOODING MAP






City of Brantford
North-East End
Flood Remediation Study

Legend

- Study_Area
- Property Parcel
- Road Centrelines
- Waterbodies
- Approximate Flooding Locations


Figure:

Study Area Map




0 195 390 780
Meters

1:15,000



N

Date: May 2018
Datum: NAD_83
Projection: CSRS_UTM_Zone_17N
Source: City of Brantford

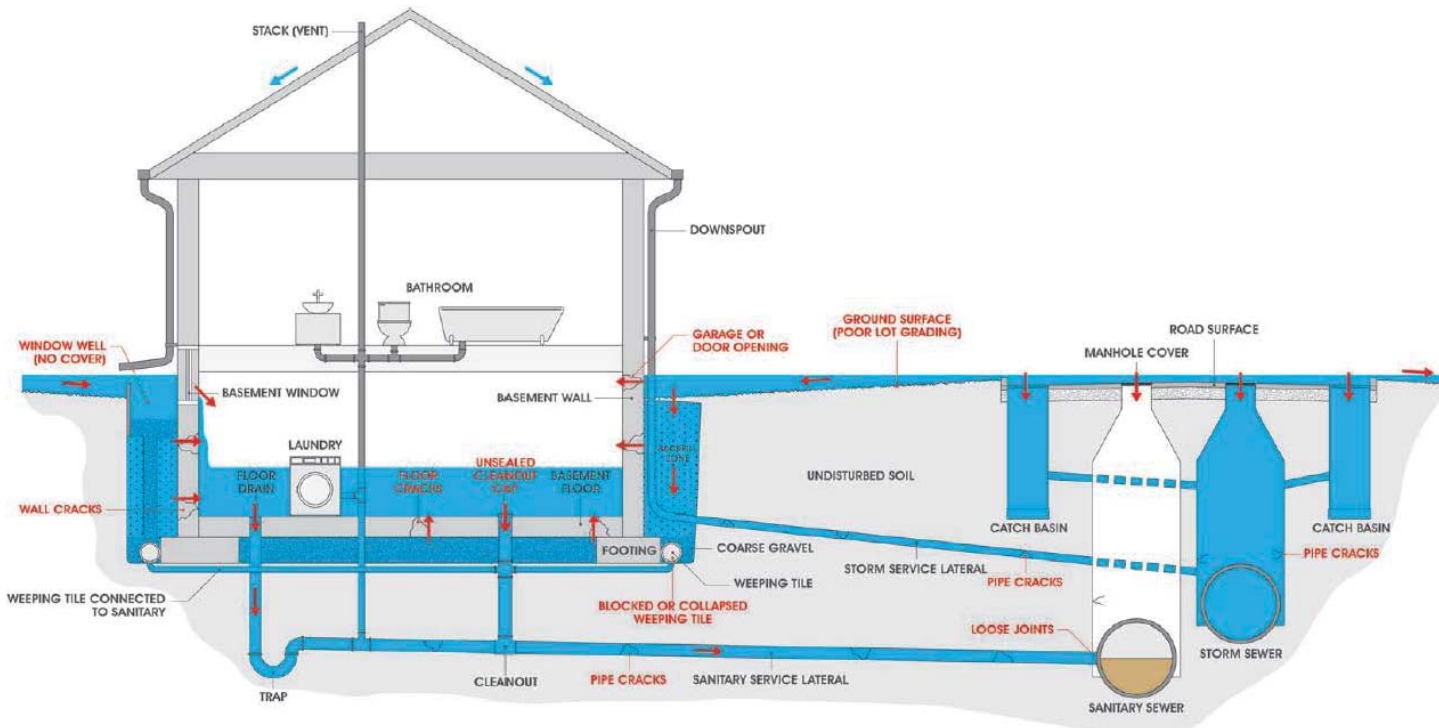


Aquafor Beech
Limited

There are 3 major conditions that can lead to basement flooding:

1. Overland flooding

- Intense rainfall events overwhelm the sewers;
- Sewer surcharges and leads to excess surface water;
- Improper lot grading directs water towards the house;
- Water enters the house through uncovered window wells, doors, etc.

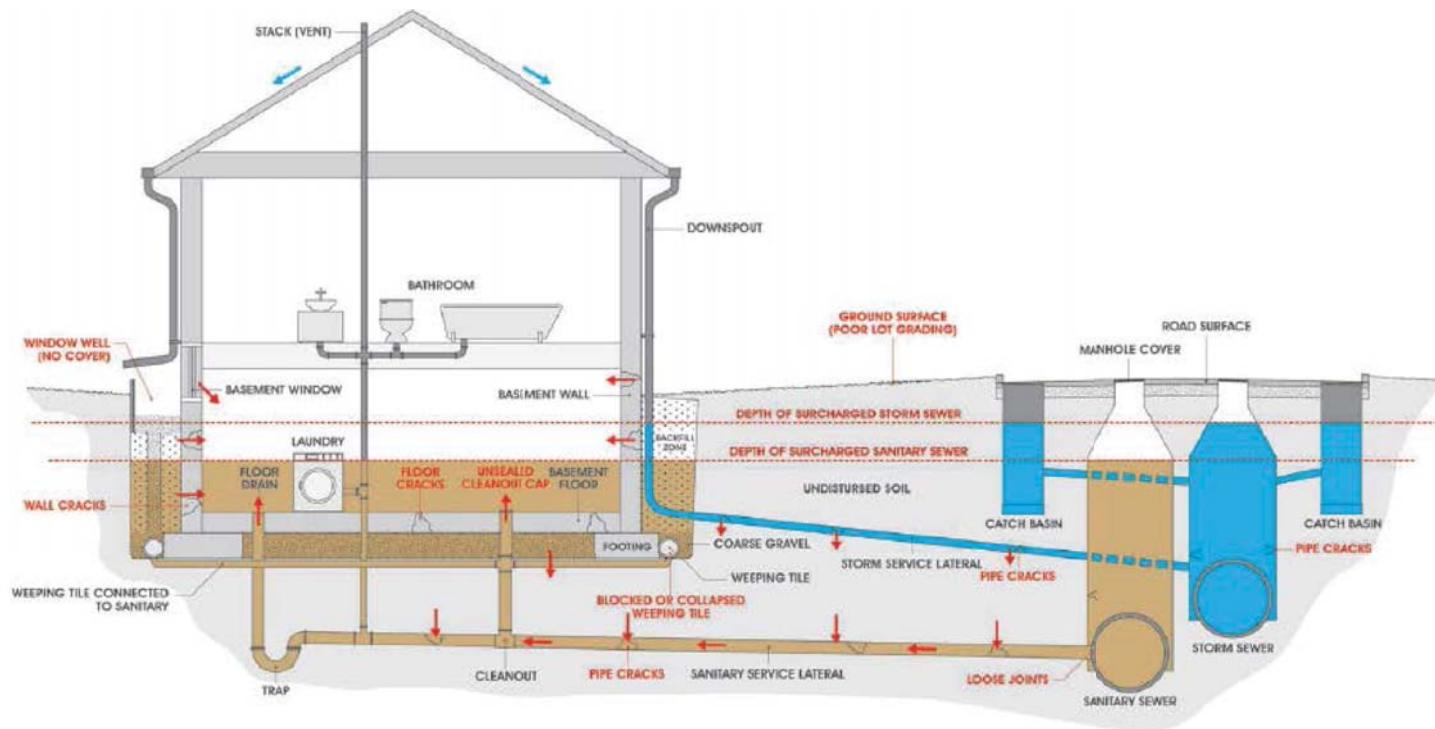


Basement flooding caused by overland flooding and infiltration flooding

Image source: Handbook for reducing Basement flooding, (Institute for Catastrophic Loss Reduction, 2009)

2. Sewer Backup

- Excess flows, infiltration and improper connections causes the flow to exceed what the storm or sanitary sewer is designed for;
- For homes with foundation drains connected to the sanitary sewer (pre 1970), water enters through weeping tile or floor drain (see illustration below).
- For homes with foundation drains connected to the storm sewer (post 1970), water enters through the weeping tile.



Basement flooding caused by Sanitary Sewer Backup

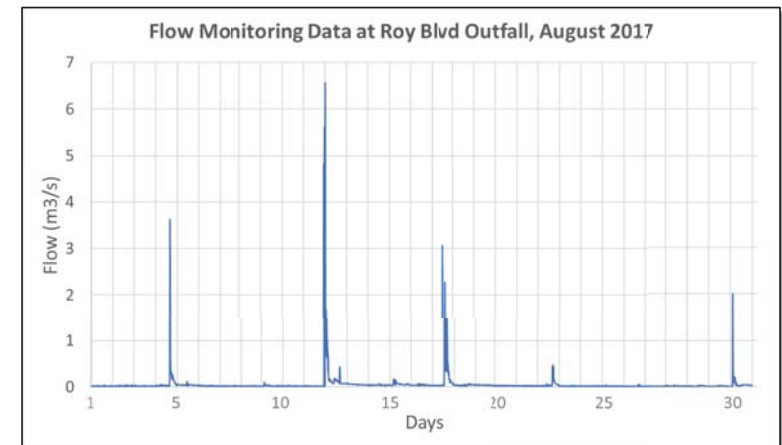
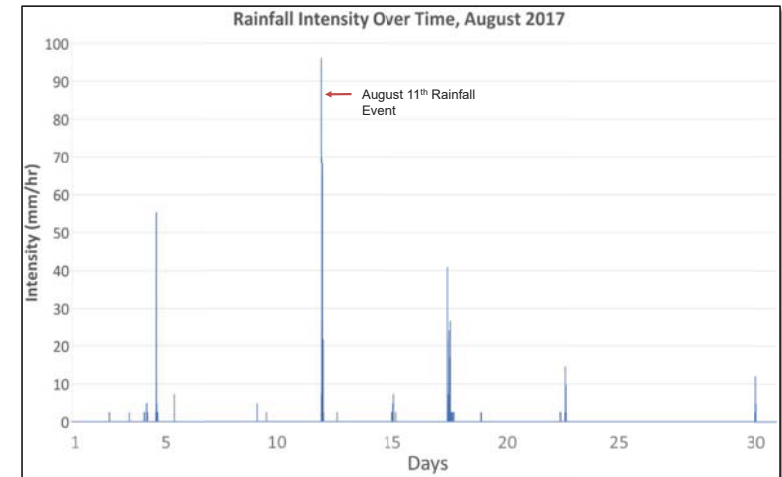
Image source: Handbook for reducing Basement flooding, (Institute for Catastrophic Loss Reduction, 2009)

3. Groundwater Infiltration

- Groundwater level is higher than the basement floor;
- Groundwater enters the house through cracks in the basement floor and walls;
- Weeping tiles / foundations drains are in disrepair and are unable to remove water from foundation.



- **Review of available background information, included:**
 - Geotechnical and topographic information
 - As-built drawings and plumbing records
 - Closed Conduit Television (CCTV) records
 - Flood records
 - Rainfall and flow monitoring data
- **Field investigation**
 - Home visits with ten (10) private home owners
 - Powerline Road drainage survey
 - Ground elevation and manhole survey
- **Development of a computer model with both storm and sanitary sewers**
- **Smoke tests on storm sewer system**





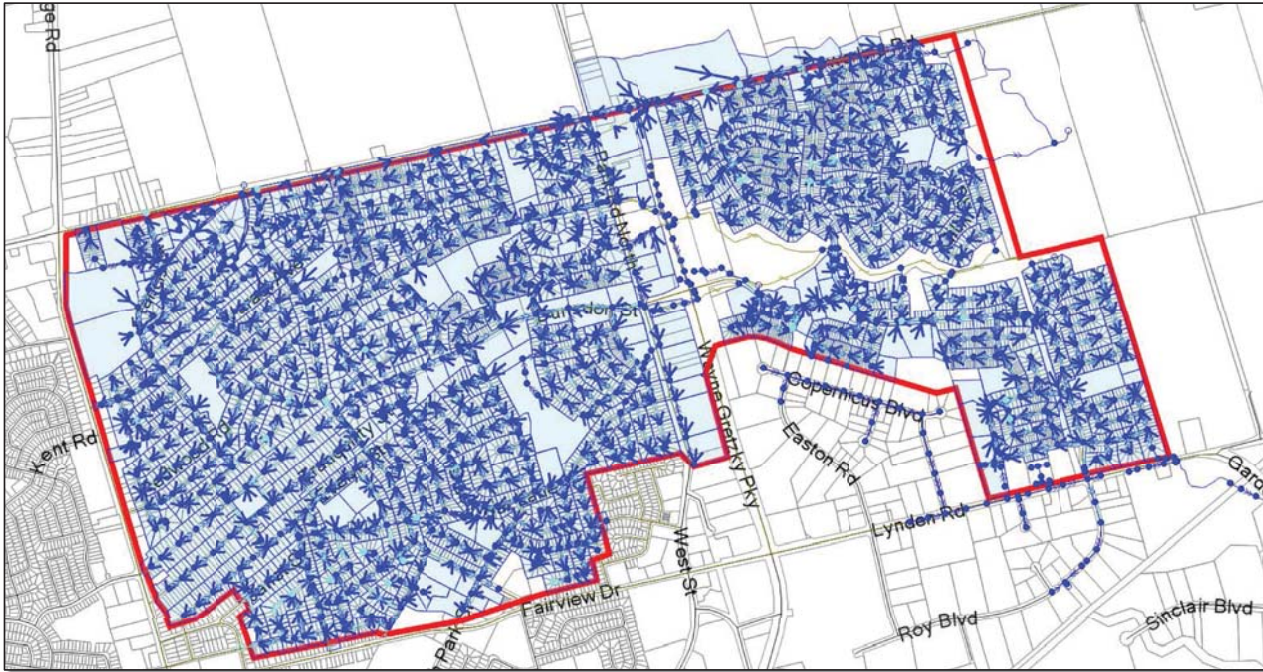
Connected downspouts (eavestroughs) direct flows into the underground sewer system and increase the potential of overwhelming the sewer system during heavy rainfall events.



Disconnected downspouts (eavestroughs) direct flows to garden or lawn, which helps promote infiltration, reduce the amount of water entering the sewer system, and delays the time of water entering the sewer system.



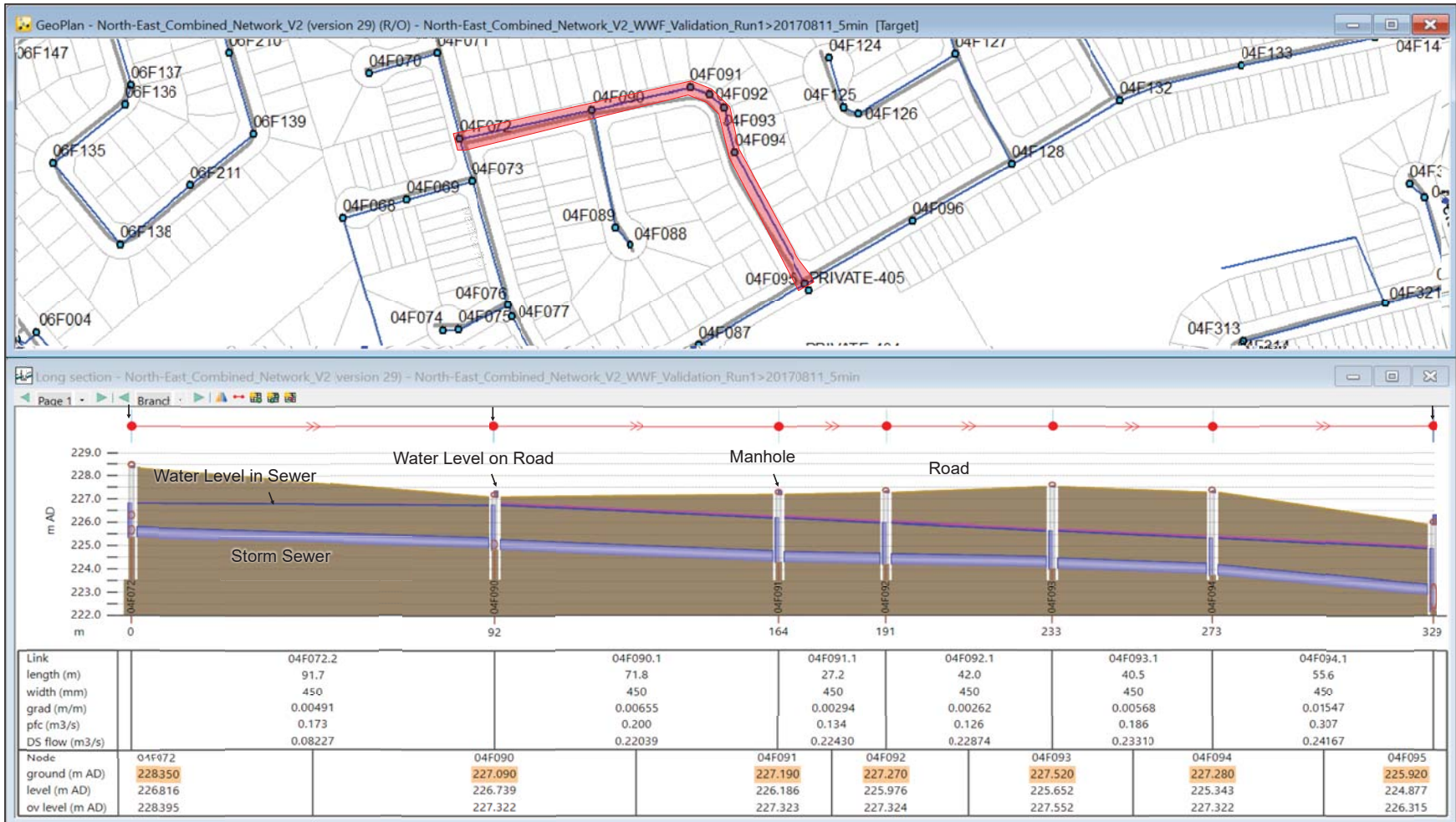
Homes with reverse slope driveways, without trench drainage in front of the garage, could be susceptible to overland flooding.



Storm network (on the top) and sanitary network (on the bottom) were developed and integrated in the computer model.

The two figures illustrate the subcatchment drainage and sewer network

COMPUTER MODEL



An example plan and profile view of model results under the August 11th, 2017 rainfall event.

The simulated water level in the storm sewer is higher than basement level at some locations.

This results in the potential for sewer back-up and basement flooding for these houses.

PRELIMINARY RESULTS OF SMOKE TESTING

Smoke tests of the storm sewer system was undertaken at ten (10) select streets with in the Study Area. Preliminary findings are illustrated below.



Smoke from plumbing vent, indicating potential cross-connection between sanitary lateral and storm sewer.



Foundation drain was smoking during the test.



Basement sump pump was smoking, indicating direct connection to storm sewers on street.



Weak smoking garage catchbasin, indicating potential blockage in storm drain.



Connected downspout was smoking during the test.

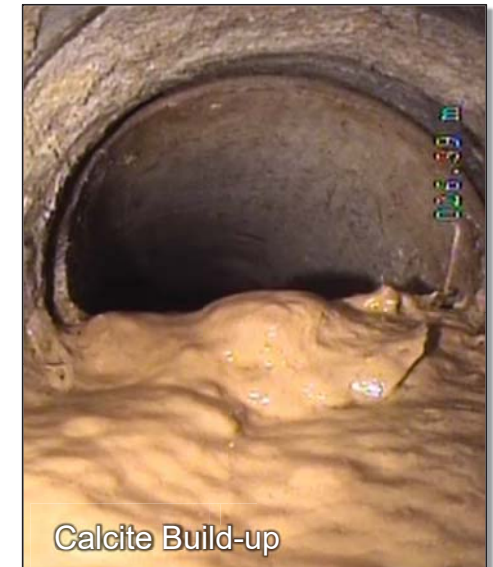
A primary cause of flooding is overloading of the storm sewer system during significant rainfall events. There are a number of measures that can be undertaken to reduce flooding. These measures are summarized below:

1. Operation and maintenance measures;
2. Private property measures;
3. Limit flow into storm sewers;
4. Protect homes with reverse slope driveways;
5. Provide extra capacity in storm sewers;
6. Other unique opportunities.

1. OPERATION & MAINTENANCE MEASURES

CCTV inspections provide a visual of the inside of a pipe and assist in defining the structural and hydraulic capacity of the sewers.

The results from the study show that some streets have issues such as calcite build-up, cracks along the sewer, etc., this can reduce flows within the pipe and ability to convey flows.



Recommendation

Continue with the existing CCTV program that identifies structural / hydraulic limitations within the system, followed with the City's Sewer Lining Program and/or installation of new pipes.

Homeowners can help mitigate flood threats by managing stormwater on private property that can assist in reducing the stormwater amounts before it enters the City's sewers.

Recommendation

1. Downspout disconnection
2. Install rain barrels to collect stormwater
3. Install a sump pump and discharge flows to pervious ground surface
4. Build rain gardens to increase infiltration

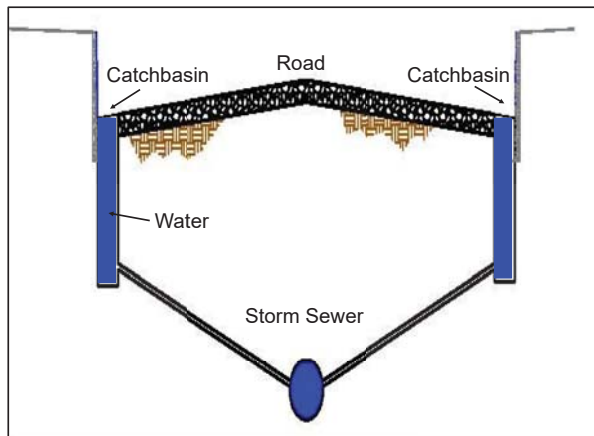


Inlet Control Devices (ICD) are used to control the flow going into the storm sewer during large rainfall events. Some benefits include:

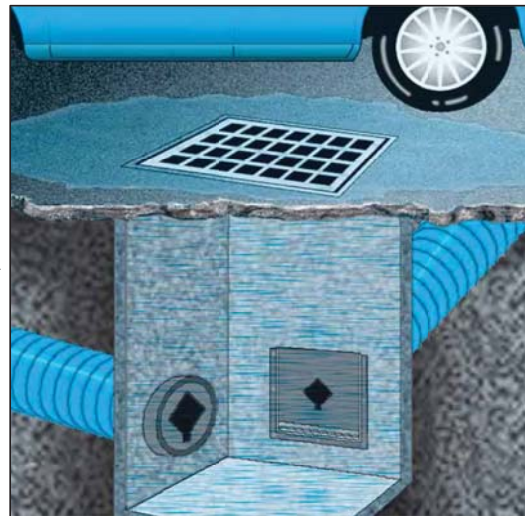
- Control flows into storm sewer and allow surface ponding where appropriate
- Reduce sewer overloading / surcharging conditions
- Mitigate foundation seepage and storm / sanitary sewer back-up downstream

Recommendation

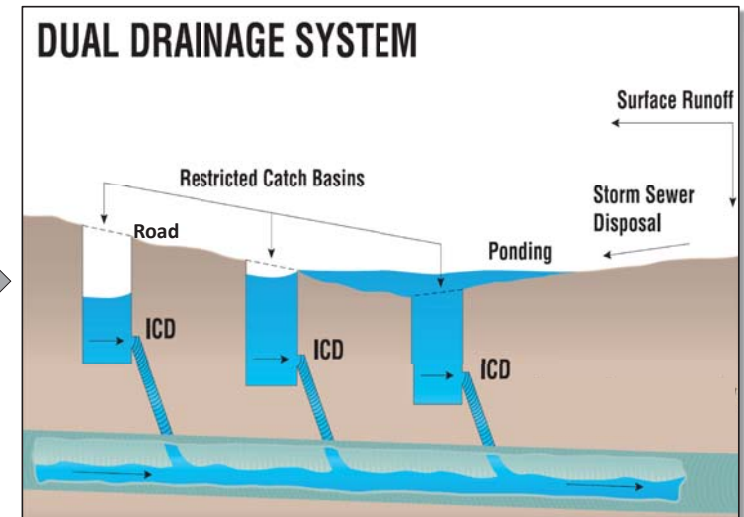
Expand the use of ICDs to restrict catch basin flows to the storm sewer system, where appropriate.



Overloaded storm sewers



ICDs installed on catchbasin



Previously overloaded sewer now able to convey flow at downstream (Source: <http://www.canadiancontroldevices.com> & <http://www.ipexamerica.com>)

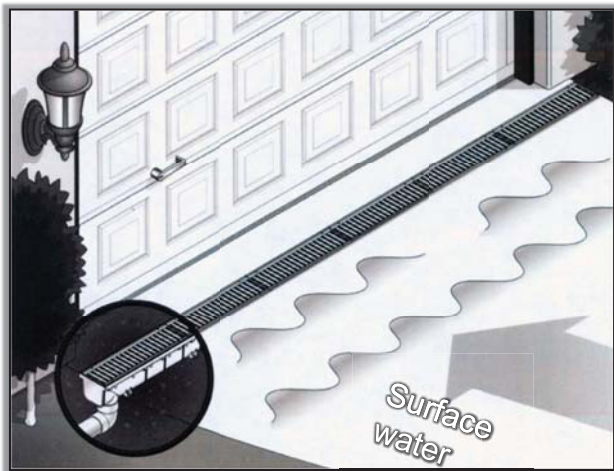
4. PROTECT HOMES WITH REVERSE SLOPE DRIVEWAYS

Many homes within the study area have reverse slope driveways with a single catchbasin drain in front of the garage (see photos to the right).

During large rainfall events, stormwater on the road spills over the curb and flows down the driveway. In turn, these homes are more subject to garage and / or basement flooding.

Recommendation

Implementation of driveway grates at driveway approaches with reverse slope driveways for better stormwater capture during rainfall events.

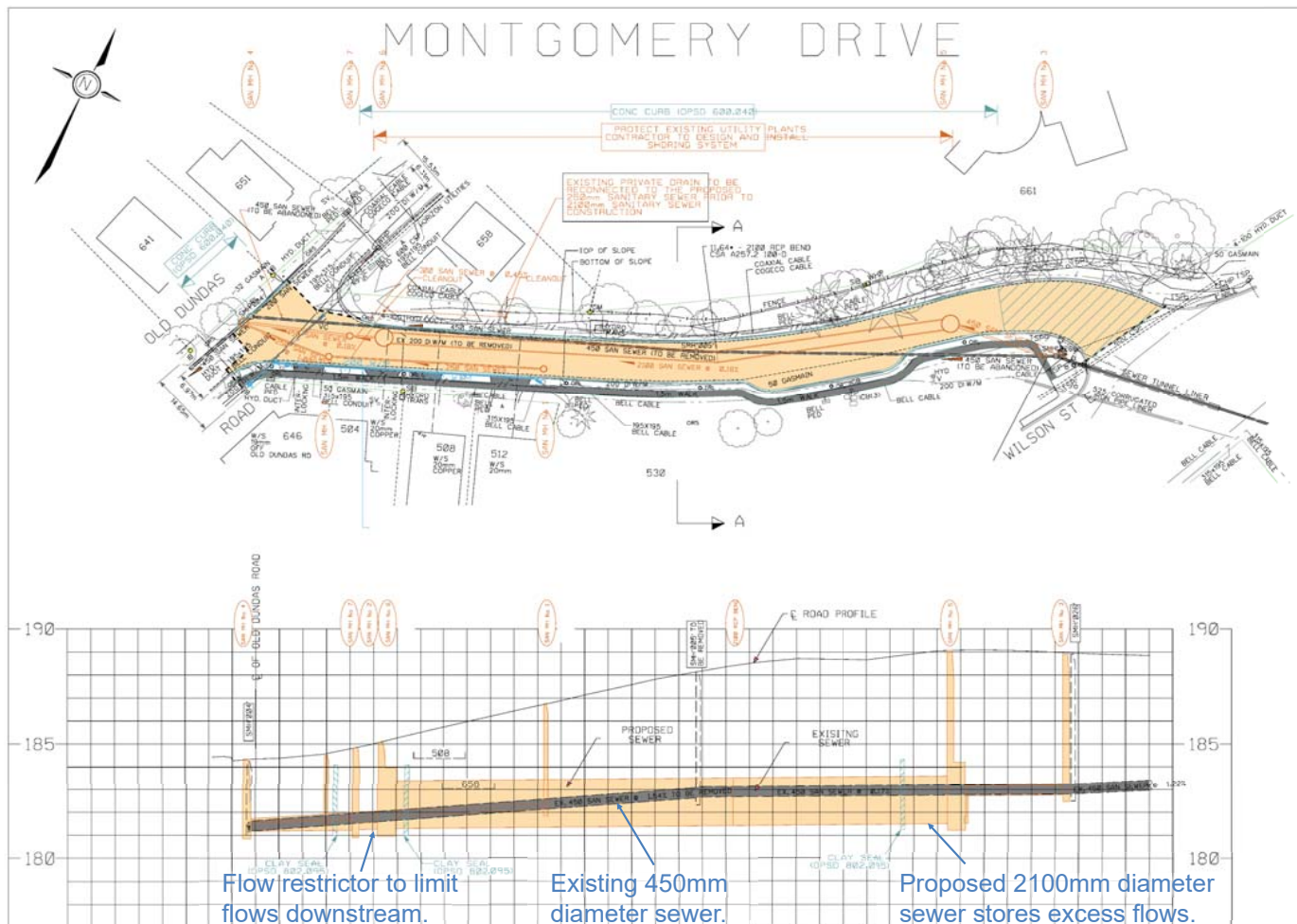


5. PROVIDE EXTRA CAPACITY IN STORM SEWERS

Conveyance control measures help to control stormwater as it travels along the drainage system (in pipes or on road).

Recommendation

1. Increased sewer capacity
2. Underground storage pipes



The example shows that the existing 450mm sewer was replaced with a 2100mm sewer for both conveyance and underground storage.



6. UNIQUE OPPORTUNITIES

An innovative solution, includes a recreational playground or soccer field with an infiltration basin underneath. This assists local flooding issues with recreational services at the same time. The playground could provide storage for stormwater runoff and the infiltration facility underneath the playground can treat stormwater runoff.

Recommendation

Implement the comprehensive solution where appropriate.



This example illustrates the implementation of a comprehensive and innovative plan to address a number of issues including flood control, recreation, water quality management, and aquatic and terrestrial habitat improvement. Terraview Park, City of Toronto.

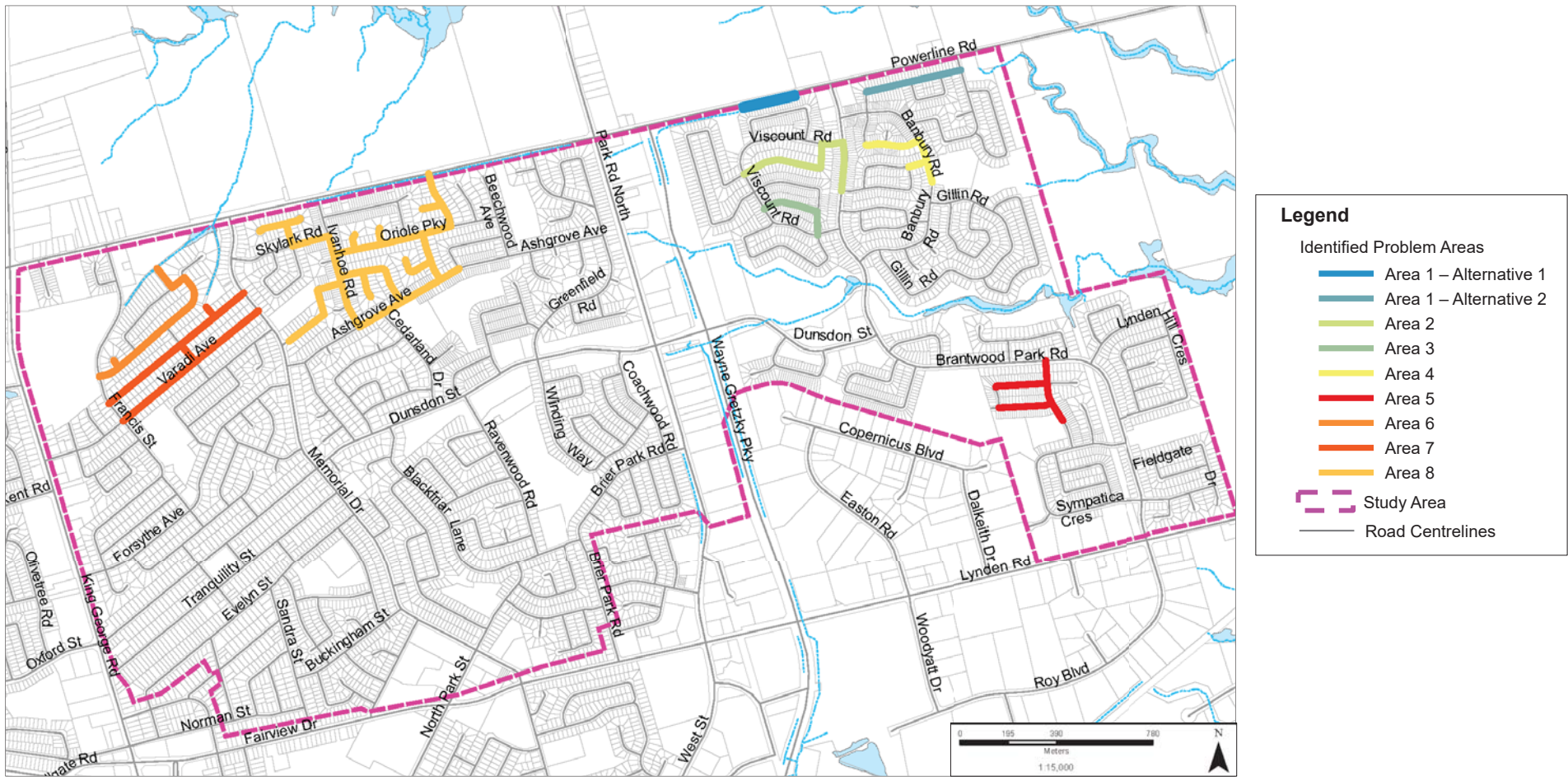


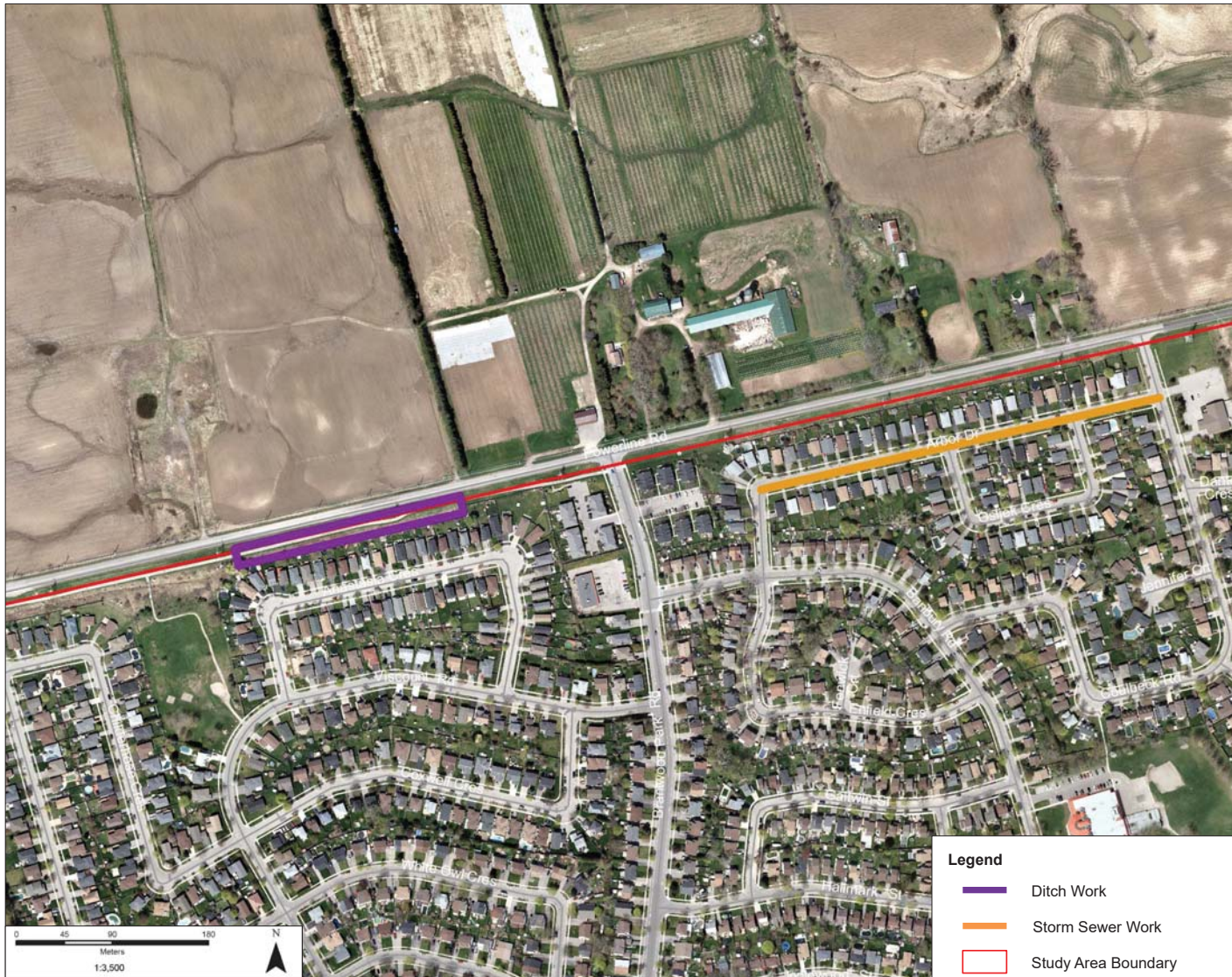
Infiltration basin underneath the soccer field to treat stormwater runoff.

PROPOSED SOLUTIONS FOR PROBLEM AREAS

The North-East End Flood Study identified eight (8) areas that have been categorized based on the potential cause of flooding and the location.

A combination of remediation alternatives are identified for different areas within the flood study areas.





Flows along Powerline Road are conveyed easterly to a storm sewer located along Arbor Drive.

Remediation Solutions

- Regrade the channel along Powerline Road to increase the capacity, highlighted in purple; or
- Increase the storm sewer capacity along Arbor Drive, highlighted in orange.

PROPOSED SOLUTIONS FOR AREA 2 - 5



The highlighted streets have undersized storm sewers.

Remediation Solutions

- Limit flows into storm sewers
- Provide extra capacity in the storm sewer at strategic locations within the area

PROPOSED SOLUTIONS FOR AREA 6 & 7



The storm sewers highlighted convey stormwater to a trunk storm sewer and adjacent creek (outlets).

Remediation Solutions

- Limit flows into storm sewers
- Increase the storm sewer capacity at strategic locations

PROPOSED SOLUTIONS FOR AREA 8



The stormwater sewers highlighted convey stormwater to a storm trunk sewer along Ashgrove Avenue.

Remediation Solutions

- Limit flows into storm sewers
- Protect homes with reverse slope driveways
- Increase the storm sewer capacity
- Opportunities to provide storage in St. Leo School playground, Cedarland Park may be implemented.

The City of Brantford has a few grant, loan and incentive programs that are available to the residents within the Study Area.

1. Basement Flooding Prevention Program

<https://www.brantford.ca/en/living-here/basement-flooding-prevention.aspx>

2. Private Sewer Lateral Replacement Grant Program

<https://www.brantford.ca/en/living-here/private-sanitary-sewer-lateral-replacement.aspx>

3. Rain Barrels

<https://www.brantford.ca/en/living-here/rain-barrels.aspx>



WE WANT TO HEAR FROM YOU!



Please fill out the comment sheets.

All information collected will be used for this study only, and will not be shared with other parties. Your continued input will help us better understand the existing conditions, improve the results and help us create a comprehensive plan that can be implemented in partnership with the community.

Anyone that has further information or questions should send their comments to:

Nahed Ghbn, P.Eng

City of Brantford

City Hall, 100 Wellington Square,

Brantford, Ontario N3T 2M2

Tel: 519-759-4150 ext. 5262

Email: nghbn@brantford.ca

Dave Maunder, M.Sc., P.Eng

Aquafor Beech Limited

Bldg 6, Suite 202, 2600 Skymark Avenue,

Mississauga, Ontario L4W 5B2

Tel: 905-629-0099 ext.290

Email: maunder.d@aquaforbreech.com

Your comments are encouraged and appreciated, as this will provide us an opportunity to address project issues and concerns.

NEXT STEPS

PUBLIC CONSULTATION – October, 2019

- Comment forms available for input.
- Compile and review feedback.

DEVELOPMENT OF SOLUTIONS – Q4, 2019

- Refine and finalize short and long-term solutions.

STUDY REPORT AND DRAWINGS – Q2-Q3, 2020

- Preparation of study report and conceptual design drawings.

NEXT STEPS FOR IMPLEMENTATION

- Implementation of remedial measures will be in phases, subject to Council approval.

THANK YOU

FOR PARTICIPATING IN THE NORTH-EAST END FLOOD REMEDIATION STUDY



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] PARK RD N BRANTFORD N3R8B6	[REDACTED]	[REDACTED]@outlook.com
[REDACTED]	[REDACTED] PARK RD N	[REDACTED]	
[REDACTED]	[REDACTED] BRIDLE PKWY BRANTFORD N3R4W7		
[REDACTED]	[REDACTED] WOODWAY TRAIL	[REDACTED]	[REDACTED]@bfree.on.ca
[REDACTED]	[REDACTED] Hobart Cres	[REDACTED]	[REDACTED]@sculub.com
[REDACTED]	[REDACTED] Scotia Ave	[REDACTED]	[REDACTED]@hotmail.com
[REDACTED]	[REDACTED] Canary Drive	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] MEMORIAL	[REDACTED]	



North East End Flood Remediation Study



PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] ROYAL OAK DRIVE	[REDACTED]	[REDACTED] @SYMPATICO - CA
[REDACTED]	[REDACTED] RUFFIAN RD	[REDACTED]	[REDACTED] @ rogers.com
[REDACTED]	[REDACTED] RIVA RIDGE	[REDACTED]	[REDACTED] @ sympatico.ca
[REDACTED]	[REDACTED] Palomino Dr	[REDACTED]	[REDACTED] @live .ca
[REDACTED]	[REDACTED] PARK RD N.	[REDACTED]	[REDACTED] @ OUTLOOK.COM
[REDACTED]	[REDACTED] Park Rd. N.	[REDACTED]	[REDACTED] @ hotmail.com
[REDACTED]	[REDACTED] Canary Dr. 3 Hidden Ct [REDACTED] Ash Grove [REDACTED] Banbury	[REDACTED]	[REDACTED] rogers.com
[REDACTED]	[REDACTED] CAVARDO DR.	[REDACTED]	[REDACTED] @ gmail.com



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019
5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] Rosewood Court	[REDACTED]	[REDACTED] 1986@rogers.com
[REDACTED]	[REDACTED] PUFFIAN RD	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] Bux RD N / #13	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] Branlyn Cres	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	[REDACTED] COALBROOK RD	[REDACTED]	
[REDACTED]	[REDACTED] POWERLINE	[REDACTED]	
[REDACTED]	[REDACTED] CHILDERHOSE	[REDACTED]	
[REDACTED]	[REDACTED] Bell Manor Court	[REDACTED]	[REDACTED] [REDACTED]

rogers.com
gmail.com



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[Redacted]	[Redacted] Ridge Hockney	[Redacted]	[Redacted]@hotmail.com
[Redacted]	"	[Redacted]	[Redacted]@hotmail.com
[Redacted]	[Redacted] Nashua Drive	[Redacted]	[Redacted]
[Redacted]	[Redacted] Kent	[Redacted]	[Redacted]
[Redacted]	[Redacted] Greenfield Rd	[Redacted]	[Redacted]@yahoo.com
[Redacted]	[Redacted] Viscount	[Redacted]	[Redacted]@ROBESON.COM
[Redacted]	[Redacted] Banbury Rd	[Redacted]	[Redacted]@live.ca
[Redacted]	[Redacted] URABDI AVE	[Redacted]	[Redacted]



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	Brantwood Pk Rd	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	Wicketwood Ct	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	Varadi Ave	[REDACTED]	[REDACTED]@icloud.com
[REDACTED]	WOOD FARM RD	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	Wilderhose Cres.	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	LYNDEN Hill Cr.	[REDACTED]	[REDACTED]@petesphotography.ca
[REDACTED]	Viscount Rd	[REDACTED]	[REDACTED]@live.com
[REDACTED]	ADDON HILL CRES	[REDACTED]	



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	Cedarland	[REDACTED]	[REDACTED]
[REDACTED]	5 PARK RD N	[REDACTED]	[REDACTED]@out.com
[REDACTED]	SCOTIA AVE	[REDACTED]	[REDACTED]
[REDACTED]	18 DOODWAY TRAIL	[REDACTED]	[REDACTED]
[REDACTED]	Beaver	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] the [REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	116 GLEWOOD ST	[REDACTED]	if you have already
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	Secretariat Crt. 90	[REDACTED]	[REDACTED]@hotmail.com
[REDACTED]	Bernard Ave	[REDACTED]	[REDACTED]@rogers.com
[REDACTED]	ASHGROVE AV 5	[REDACTED]	[REDACTED]@coateswelding.com
[REDACTED]	Hobart Cres 5	[REDACTED]	[REDACTED]@live.ca
[REDACTED]	Oriole Park W	[REDACTED]	[REDACTED]@gmail.com
[REDACTED]	ASHGROVE AVE 5	[REDACTED]	[REDACTED]@yahoo.ca
[REDACTED]	Gillin Rd 5	[REDACTED]	[REDACTED]@rogers.com



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] FILDGATE	[REDACTED]	[REDACTED] @yahoo.ca
V [REDACTED]	[REDACTED] Amethyst Court	[REDACTED]	[REDACTED]@rogers.com
R [REDACTED]	[REDACTED] Brantlyn cres	[REDACTED]	[REDACTED] @yahoo.ca



North East End Flood Remediation Study

PUBLIC INFORMATION CENTRE

Public Information Centre

October 17th, 2019

5:00 p.m. – 7:00 p.m.

SIGN-IN SHEET

Please Print Clearly

Name	Address	Phone #	E-mail
[REDACTED]	[REDACTED] Billin Rd	5 [REDACTED] 3	[REDACTED]
[REDACTED]	[REDACTED] Frankoe Rd	5 [REDACTED]	[REDACTED]



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Information Centre - Branlyn Community Centre
Thursday, October 17th, 2019
5:00 p.m. – 7:00 p.m.

Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [Redacted] Email: [Redacted]@rogers.com.
 Address: Personal - [Redacted] Kanaryk, Rentals@ [Redacted] Hidden Ct, [Redacted] Ashgrove,
 [Redacted] Bankburg, [Redacted] Bankburg

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

at the time of the first event when accepting the initial relief fund, the city said they are accepting no liability - now that you see its an issue, what are you going to do to reimburse the money I've spent to address City

2. Do you have any comments / preference / concerns regarding the potential solutions?

infrastructure
See attached receipts. Our rental at [Redacted] issues?
3 Hidden Ct flooded. It was covered by insurance but they would not cover us in the future reverse

3. Do you have any comments regarding the study?

Please send me the specific results pertaining to my addresses above.

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **October 31, 2019**

Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

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without a back-up valve. The city refused financial help because it's a rental. This cost me \$4345.30 to pay for a fix for a city issue. It seems only fair given the recent results to reimburse citizens for this.

Additionally, we had the back up valve installed at our personal house at 19 Canary. ~~Less~~ the \$1200 grant we are out of pocket \$3501.91 totaling \$7847.21 - the city should review this. That is a substantial amount of money and your study contractor told me it may not even prevent a future flood.

Please contact me after reviewing this



A handwritten signature in blue ink, appearing to be 'JTA'.



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Information Centre - Branlyn Community Centre
Thursday, October 17th, 2019
5:00 p.m. – 7:00 p.m.

Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED] .CA
 Address: [REDACTED] Lynden Hill Crescent

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

[REDACTED] Lynden Hill Crescent gets flooded by the higher elevated park, photos were provided

2. Do you have any comments / preference / concerns regarding the potential solutions?

When will this be fixed?
Build a dyke? Excavate slope to farm land?

3. Do you have any comments regarding the study?

There was no "meeting" as advertised boards with pictures, may as well have been a link to a website.

Thank you for taking the time to complete this comment sheet!

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 Nahed Ghbn P.Eng, City of Brantford
 City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2
 Tel: 519-759-4150 ext. 5262
 By Email: nghbn@brantford.ca

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NORTH-EAST END FLOOD REMEDIATION STUDY

Public Information Centre - Branlyn Community Centre

Thursday, October 17th, 2019

5:00 p.m. – 7:00 p.m.

Comment Sheet

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Name: [REDACTED] Email: [REDACTED]@YAHOO.COM
 Address: [REDACTED] GREENFIELD RD., BRANTFORD

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

WHAT WE INCURRED IN OUR BASEMENT DURING HEAVY RAIN OR SPRING RUNOFF OUR BASEMENT WOULD HAVE FLOODED, WE INSTALLED SUMP PUMP. THE DRAINAGE PIPE NOT WORKING PROPERLY. THE AREA IS HEAVY CLAY & MOISTURE DOES NOT RUN OFF STAYS AROUND FOUNDATION. DURING THE WET PERIOD, THE PUMP RUNS CONTINUALLY. (HARD SOIL)

2. Do you have any comments / preference / concerns regarding the potential solutions?

DIG FOUNDATIONS & REINSTALL WEEPING TILE PROPERLY; HIGH COST TO DO PROPER

3. Do you have any comments regarding the study?

[Empty lines for comments]

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Comment Sheet

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Name: [REDACTED]	Email: _____
Address: [REDACTED] Forsythe	

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

There is an old drainage system in backyards with sewer grates on Forsythe Ave. Over the years some of these grates have been covered by homeowners.
I believe an inspection and uncovering of these grates may be of some help.

2. Do you have any comments / preference / concerns regarding the potential solutions?

3. Do you have any comments regarding the study?

Thank you for taking the time to complete this comment sheet!

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Comment Sheet

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Name:	[Redacted]	Email:	[Redacted]@
Address:	Thicketwood Ct, Brantford, Rogers.com		

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

- previously provided

2. Do you have any comments / preference / concerns regarding the potential solutions?

3. Do you have any comments regarding the study?

- please advise of the outcome of the smoke testing specific to my address

Thank you for taking the time to complete this comment sheet!

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Public Information Centre - Branlyn Community Centre

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Name: [redacted] Email: [redacted]@hotmail.com
 Address: [redacted] Scotia Ave

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

ON Scotia Ave 4 level back splits tend to flood
 90% more times than 2 storey houses

2. Do you have any comments / preference / concerns regarding the potential solutions?

[Empty lines for comments]

3. Do you have any comments regarding the study?

[Empty lines for comments]

Thank you for taking the time to complete this comment sheet!

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Public Information Centre - Branlyn Community Centre
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Name: _____	Email: _____
Address: _____	MEMORIAL

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

NO

2. Do you have any comments / preference / concerns regarding the potential solutions?

THE WATER STORAGE AT ST LEO'S WILL THE INCREASE THE RISK OF BASEMENT FLOODING IN THE AREA? WILL IT BE AN OPEN CATCHMENT? (CHILDREN AT RISK)

3. Do you have any comments regarding the study?

I APPRECIATE YOUR EFFORTS.

ASK RESIDENTS TO KEEP THEIR ~~GRATES~~ GRATES CLEAR OF LEAVES.

Thank you for taking the time to complete this comment sheet!

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Public Information Centre - Branlyn Community Centre
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Comment Sheet

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Name: [REDACTED]	Email: [REDACTED]@live.ca
Address: [REDACTED] Palomino Dr	

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

Bridle Park that runs behind Palomino Dr collects a lot of water and needs a place to drain (Bladder)

2. Do you have any comments / preference / concerns regarding the potential solutions?

[Empty lines for handwritten response]

3. Do you have any comments regarding the study?

[Empty lines for handwritten response]

Thank you for taking the time to complete this comment sheet!

<p>Please return the completed comment sheet by October 31, 2019</p> <p>Nahed Ghbn P.Eng, City of Brantford City Hall, 100 Wellington Square, Brantford, Ontario N3T 2M2 Tel: 519-759-4150 ext. 5262 By Email: nghbn@brantford.ca</p>
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NORTH-EAST END FLOOD REMEDIATION STUDY

Public Information Centre - Branlyn Community Centre
Thursday, October 17th, 2019
5:00 p.m. – 7:00 p.m.

Comment Sheet

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Name: [REDACTED] Email: _____
 Address: [REDACTED] Oriole PKwy Brantford, Ont. N3R 6W7

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

*Some houses had water in basement, some did not. Why?
 Some houses had smoke during the test, others didn't if all piping was clear why didn't they all have smoke.*

2. Do you have any comments / preference / concerns regarding the potential solutions?

*Storm was similar to the one that occurred 30 years ago.
 That was called a really bad rain storm. Only has happened twice in about 30 years.*

3. Do you have any comments regarding the study?

*Accept it for what it was. A storm that overwhelmed the sewer system.
 We look forward to your response in Feb. 2020.*

Thank you for taking the time to complete this comment sheet!

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Public Information Centre - Branlyn Community Centre
Thursday, October 17th, 2019
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Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Hobart Crescent, N3P 1T7 Email: [REDACTED]@execulink.com

Address: _____

1. ~~I have attended the related public information centres (PIC) and missed any reference to the alien invasive species *fragmites australis*, which appears to be resident in local ditches; along the project team?~~ Do you have any additional information regarding the existing conditions you would like to share with the project team? Powerline Road as well as Wayne Gretzky Parkway. On the one hand, ditches for some time have appeared to me to be inadequately maintained to facilitate maximum water flow. On the other hand, the presence of this invasive species appears to be so dense as to restrict flow.

2. Do you have any comments / preference / concerns regarding the potential solutions? I would like to have access to topographical maps from the pre-“development” phase of the affected flood area. This is preliminary to considering how land use has impacted natural elevation and surface water movement.

3. Do you have any comments regarding the study?

~~I have asked at each PIC that this exercise become fully democratic as well as maximally engaging and educative. I believe that this could be facilitated by asking the owner/resident of each affected property is s/he would be amenable to speaking publicly with persons attending the PICs about their experience of both the water infiltration and the remediation. Too quick answers (excuses?) have been offered to the effect that this would violate privacy interests. I challenge this response and believe that each attendee could benefit from direct conversation relative to lived experience.~~

Thank you for taking the time to complete this comment sheet!

Please return the completed comment sheet by **October 31, 2019**

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Tel: 519-759-4150 ext. 5262

By Email: ngbhn@brantford.ca

[REDACTED]
Hobart Crescent, N3P 1T7

[REDACTED]@execulink.com

I have attended the related public information centres (PIC) and missed any reference to the alien invasive species *fragmites australis*, which appears to be resident in local ditches; along Powerline Road as well as Wayne Gretzky Parkway. On the one hand, ditches for some time have appeared to me to be inadequately maintained to facilitate maximum water flow. On the other hand, the presence of this invasive species appears to be so dense as to restrict flow.

I would like to have access to topographical maps from the pre-“development” phase of the affected flood area. This is preliminary to considering how land use has impacted natural elevation and surface water movement.

I have asked at each PIC that this exercise become fully democratic as well as maximally engaging and educative. I believe that this could be facilitated by asking the owner/resident of each affected property if s/he would be amenable to speaking publicly with persons attending the PICs about their experience of both the water infiltration and the remediation. Too quick answers (excuses?) have been offered to the effect that this would violate privacy interests. I challenge this response and believe that each attendee could benefit from direct conversation relative to lived experience.



NORTH-EAST END FLOOD REMEDIATION STUDY

Public Information Centre - Branlyn Community Centre
Thursday, October 17th, 2019
5:00 p.m. – 7:00 p.m.

Comment Sheet

Your input will assist in creating a comprehensive plan that can be implemented in partnership with the community. Please take a few minutes and provide us with your thoughts and comments on the following questions.

Name: [REDACTED] Email: [REDACTED]@rogers.com
 Address: [REDACTED] DUNSTON ST, BRANTFORD, ON, N3R 3J6

1. Do you have any additional information regarding the existing conditions you would like to share with the project team?

THE RESIDENCE IS LOCATED IN FRONT OF A CATCH BASIN. WHEN THE RUNOFF FROM A THUNDER SHOWER OVERWELMS THE CATCH BASIN IT RUNS INTO THE WEEPING TILES OF THE HOUSE AND HAS CAUSED FLOODING INTO THE DRAIN OF THE BASEMENT STAIR WELL. THE GROUND WATER IS HIGHER THAN HOUSES THAT ARE FARTHER AWAY FROM THE CATCH BASIN.

2. Do you have any comments / preference / concerns regarding the potential solutions?

IN 1981 A POOL WAS INSTALLED AND THE CONTRACTOR NOTICED WATER, SO THE POOL COULD NOT BE CONSTRUCTED TO THE 8 FOOT DEPTH. THE CONTRACTOR COMMENTED HOW A FEW HOUSES DOWN WAS DRY, IN ORDER TO SOLVE THE PROBLEM MORE CATCH BASINS SHOULD BE INSTALLED IN ORDER TO REMOVE STREET WATER AS QUICK AS POSSIBLE.

3. Do you have any comments regarding the study?

INFRASTRUCTURE NEEDS TO BE RETHOUGHT. THE STANDARDS IN THE PAST ARE TOO CONSERVATIVE AND NEED TO BE THOUGHT AS INADEQUATE. IN THE LATE 80'S, EARLY 90'S THE CATCH BASIN WAS OVERWELMED AND WATER BACKED UP INTO THE WEEPING TILES AND FILLED THE STAIR WELL 3 FEET UP THE SLIDING DOOR.

PLEASE CONTACT ME IF YOU NEED MORE INFORMATION

Thank you for taking the time to complete this comment sheet!

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NORTH-EAST END FLOOD REMEDIATION STUDY – CITY OF BRANTFORD

Public Information Centre – Branlyn Community Centre – Thursday, Oct. 17th, 2019

Comment Sheet:

Name: [REDACTED] Email: [REDACTED]@rogers.com
[REDACTED] Rosewood Crt., Brantford, Ont. N3R 7C9

1) Do you have any additional information regarding the existing conditions you would like to share with the project team?

A) We have lived at this address since April 1, 1990. The Spring of 2018 was the first time we had flooding in our basement, but not a lot.

- However, During the Spring of 2019, we received a lot of water in our basement. It was seeping through the floor – at times 1½ to 2 inches of water. We had to use two Shop Vacs at times to vacuum up the water.

2) Do you have any comments/preference/concerns regarding the potential solutions?

A) Our only solution was to have a sump pump installed. However, we note that it operates every week and a lot of times every day, even over the summer months. Also, we still have a wet spot behind our furnace of 10/12 inches wide by four feet long, which dries up, but then returns every two weeks (approx.).

- It would appear from the almost continual operation of our sump pump (even though only for short periods at a time), but over the whole summer, that larger storm basins are required.

3) Do you have any comments regarding the study?

A) About a month ago, we saw smoke rising from the ground at St. Leo's school, which is behind our property. We understand from attending the Public Information Centre that this is how testing is conducted for leaks in tiling etc. We noted that the storm drain line comes down our street & then routes at the end of our court over to the school yard.

- We assume that no leaks were discovered, as no construction occurred other than the installation of two more portables at St. Leo's school.