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Client: Town of Tecumseh Dillon - 4x180

Client Approval: _____


Typesetter: Camera Ready

Account Rep: Lucy

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TOWN OF TECUMSEH STORM DRAINAGE MASTER PLAN NOTICE OF PUBLIC INFORMATION CENTRE No. 1



The Town of Tecumseh is completing a Storm Drainage Master Plan to address the impacts of surface flooding on the community. This Master Plan will confirm the factors contributing to surface flooding resulting from significant storm events, identify and evaluate alternative solutions to reduce the risk and impacts of surface flooding, and outline a recommended long-term implementation strategy.

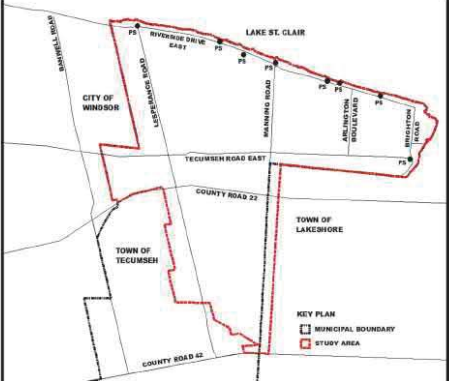
This Master Plan does not directly address basement flooding resulting from sanitary sewer surcharging. The Town of Tecumseh has been addressing basement flooding risks separately through other studies, initiatives, and subsidy programs since 2010.

Your participation in this Tecumseh Storm Drainage Master Plan process will contribute to the results and help to develop suitable solutions that can be implemented in partnership with the community. Consultation is an integral part of this process and members of the public, agencies, Indigenous communities and other interested persons are encouraged to participate.

This **first** Public Information Centre (PIC) meeting has been scheduled to present the following:

- Learn more about the causes and factors being considered to address surface flooding;
- Preliminary results identifying the problem areas in the storm sewer and overland drainage systems;
- Identification and evaluation of alternative storm drainage solutions, including preferred regional solutions; and
- Next steps

The **first** PIC meeting is being held as follows:



Public Information Centre #1	
Date:	Wednesday, July 25 th , 2018
Time:	3:00pm to 5:00pm and 6:00pm to 8:00pm
Location:	Royal Canadian Legion Branch 261 12326 Lanoue St, Tecumseh, ON N8N 1N3

A second PIC meeting will be held in late 2018 to present a more detailed analysis of the recommended solutions for public and agency input. Visit the Town of Tecumseh website for updated information and resources related to this study and to provide additional input to the study team.

www.tecumseh.ca/townhall/departmental-services/Engineering_Services/studies/storm_drainage_master_plan

This study is being carried out in accordance with the Master Plan Approach No. 2 of the Municipal Class Environmental Assessment (EA) (Municipal Engineers Association, 2015) process. This study will fulfill EA requirements for Schedule B projects and satisfy Phases 1 and 2 of the process for Schedule C projects.

If you have any questions, please contact either of the project representatives:

Phil Bartnik, P.Eng.
Director, Public Works & Environmental Services
Town of Tecumseh
917 Lesperance Road
Tecumseh, Ontario, N8N 1W9
Ph: (519) 735-2184 ext. 148
Email: TecumsehDrainageMP@dillon.ca

Flavio Forest, P.Eng.
Project Manager
Dillon Consulting Limited
3200 Deziel Drive, Suite 608
Windsor, Ontario, N8W 5K8
Ph: (519) 948-4243 ext. 3233
Email: TecumsehDrainageMP@dillon.ca

All comments and information received from individuals, stakeholder groups and agencies regarding this study are being collected to assist the Town of Tecumseh in completing the Storm Drainage Master Plan. 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. This notice is also available on the Town's website and social media accounts.

This notice first issued on July 13, 2018

Sign-in Sheet

July 25, 2018 | 3:00 p.m. to 5:00 p.m. and 6:00 p.m. to 8:00 p.m.
Tecumseh Storm Drainage Master Plan Public Information Centre #1

NAME	MAILING ADDRESS (PLEASE PRINT)	POSTAL CODE
[REDACTED]	Talhoipe Pl. Tecumseh	N8N 3K9
[REDACTED]	RUSSEL WOODS DR, LAKE SHORE ON	N8N 4K5
[REDACTED]	MANNING, TEC. ON.	N8N 2G8
[REDACTED]	SHAWNEE ROAD TC	N8N 1S9
[REDACTED]	SHAWNEE Rd TEC.	N8W 1S8
[REDACTED]	Riverside Dr. T.	N8N 1A3
[REDACTED]	WILLIAM	N8N 2A5
[REDACTED]	WEDGEWOOD	N8N 4J5
[REDACTED]	Gordon	N8N 2/7
[REDACTED]	Carmelita	N8N - 0E3
[REDACTED]	Gauthier	N8N-4E3
[REDACTED]	Lesperance Rd	

Information collected for the study will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, such as name, address and property location, all comments received throughout the study will become part of the public record and included in project documentation.

Sign-in Sheet

July 25, 2018 | 3:00 p.m. to 5:00 p.m. and 6:00 p.m. to 8:00 p.m.
Tecumseh Storm Drainage Master Plan Public Information Centre #1

NAME	MAILING ADDRESS (PLEASE PRINT)	POSTAL CODE	EMAIL
[REDACTED]	FARVIEW AVE W	N6M1C2	[REDACTED]
[REDACTED]	St. Marks	N8N 2H7	[REDACTED]
[REDACTED]	RIVERSIDE DR E	N8N 2M2	[REDACTED]
[REDACTED]	Riverside Dr E.	N8N 1B7	[REDACTED]
[REDACTED]	Leopance	N8N 1X8	[REDACTED]
[REDACTED]	Talthorpe	N8N 3C9	[REDACTED]
[REDACTED]	Cedar Cres.	N8N 2J4	[REDACTED]
[REDACTED]	KIMBERLY	N8N 3M1	[REDACTED]
[REDACTED]	DESLIPPE DR	N9K 1C6	[REDACTED]

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Sign-in Sheet

July 25, 2018 | 3:00 p.m. to 5:00 p.m. and 6:00 p.m. to 8:00 p.m.
Tecumseh Storm Drainage Master Plan Public Information Centre #1

NAME	ADDRESS (PLEASE PRINT)	POSTAL CODE	EMAIL
[REDACTED]	Manning RD	N8N 2L9	
[REDACTED]	MANNING RD	N8N 2L9	
[REDACTED]	Meander Cres	N8N 4P3	
[REDACTED]	Clarice Ave	N8N 1J5	[REDACTED]
[REDACTED]	Corbi Lane	N8N 2N1	
[REDACTED]	Corbi Lane	N8N 5C8	
[REDACTED]	Amberly Cr	N8N 3L8	[REDACTED]
[REDACTED]	11 th Lane	N0R 1C0	

Information collected for the study will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, such as name, address and property location, all comments received throughout the study will become part of the public record and included in project documentation.

Comment Sheet

July 25, 2018
TECUMSEH STORM DRAINAGE MASTER PLAN
PUBLIC INFORMATION CENTRE #1

Name / Email Address:

Mailing Address:

Gauthier

PLEASE RETURN THIS FORM BY AUGUST 15, 2018, BY EMAIL TO: TECUMSEHDRAINAGEMP@DILLON.CA OR RETURN THIS FORM TO:

Flavio R. Forest, P.Eng.,
Project Manager
Dillon Consulting Ltd.
3200 Deziel Drive, Suite 608
Windsor, ON N8W 5K8

Share with us your input on the materials presented:

What did you learn about surface flooding in Tecumseh?

What questions do you still have about fi

Deslippe concerns
- flooding over curbs
15-20' up driveways
each of large
weather events
others as well
- concern re: future
development + its
effect on existing
subdivision

Keep the ditches
clean of trees +
weeds + that new
invasive weed, so
water can flow
freely. (LACHANCE
DRAIN)

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Comment Sheet

July 25, 2018

TECUMSEH STORM DRAINAGE MASTER PLAN
PUBLIC INFORMATION CENTRE #1

If you were deciding which alternatives to implement, what factors would be most important to you?

What do you want to see at the next information centre?

Other comments, questions, or suggestions?

Note: My home has back up valve of sump pump & battery back up.

Suggestion: ~~to~~ Utilize sensors (rain gauges, man hole water height) to evaluate status ~~then~~ when critical/alert status is reached - use social media or reverse 911 to notify homes. This will give households time to react -

Example: 2016 my basement was flooded, 2017 almost flooded again except we saw signs & dropped 3rd pump in sump pump - so we were able to run water out through hose/window.

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Comment Sheet

July 25, 2018
TECUMSEH STORM DRAINAGE MASTER PLAN
PUBLIC INFORMATION CENTRE #1

Name / Email Address:

[REDACTED]

Mailing Address:

[REDACTED]

SHAWNEE ROSS

PLEASE RETURN THIS FORM BY AUGUST 15, 2018 , BY EMAIL TO: TECUMSEHDRAINAGEMP@DILLON.CA OR RETURN THIS FORM TO:

Flavio R. Forest, P.Eng.,
Project Manager
Dillon Consulting Ltd.
3200 Deziel Drive, Suite 608
Windsor, ON N8W 5K8

Share with us your input on the materials presented:

What did you learn about surface flooding in Tecumseh?

WHAT THEY WOULD LIKE TO DO

What questions do you still have about flooding that were not answered?

WHEN

Information collected for the study will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, such as name, address and property location, all comments received throughout the study will become part of the public record and included in project documentation.

Comment Sheet



July 25, 2018
TECUMSEH STORM DRAINAGE MASTER PLAN
PUBLIC INFORMATION CENTRE #1

If you were deciding which alternatives to implement, what factors would be most important to you?

What do you want to see at the next information centre?

BACK AND FORTH DECUSSION'S

Other comments, questions, or suggestions?

KEEP DITCHES CLEAN 047

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PIC No 1 Notes - RTL

July 25/18

- Town should look into alert system to residents once accumulated rainfall amounts reach a point of basement flooding potential.

Victoria School site

- have we considered site in its fully developed state for purposes of assessing storm solutions.

Open Streets - COW

- Pop-up.

Antaya Drain

- include as part of exist cond. flooding
- solⁿ rigid?

- 4 homes Sq Gouin
- Basmt flooding from storm
- 3 or 4 events
- over wheels s. sump pump
- lots of groundwater pressure on basmt walls/floors (water through cracks)
- Sump pump can't keep up
 - pump against surcharged storm sewer & not effective.
- Happens to multiple homes on that street.

PIC #1 Comments

Plan that is
affordable and
cost effective

CHANGE PRIORITIES
FROM
INDOOR SOCCER
TO PUBLIC
INFRASTRUCTURE

We need
larger diameter
storm drains
along Riverside Dr E.
from Arlington to
Kensington
Thank-you.

Please prevent Beach
Grove Golf Course from
pumping out during
heavy rain.

- MORE PERMABLE PAVING
- NEW TECHNIQUES IN
STORM PIPE THAT ALLOW
FOR INFILTRATION INTO GROUND
- MANHOLE DOWNSPOUT
DISCONNECTION
- LIMIT LANDSCAPE
IN RESIDENTIAL DRIVEWAY
- HIGH DENSITY PLANNING



Durocher, Maggie <mdurocher@dillon.ca>

Re: Resident Question - [REDACTED] re Drainage Master Plan

1 message

Thu, Aug 2, 2018 at 10:48 AM

To: fforest@dillon.ca

Cc: TecumsehDrainageMP@dillon.ca, pbarnik@tecumseh.ca, adowie@tecumseh.ca

Flavio,

Thank you for responding to my inquiry regarding the increased level (but still considered acceptable) of water on Oak Park. While we keep using the 1:100 moniker, we can't afford to rely on that language and rating. We did experience an event of the 1:100 scale two years in a row, and with the ongoing climate changes and storm intensity, this will likely continue every few years as predicted by climate scientists the world over. Obviously I cannot provide localized measurements for this future likeliness, and my feelings and understanding of these events are at least partially emotional based on the past flooding, but are still reasonably sound expectations of future, more frequent events.

Relating to the specific matter of the Alternative #2 plan increasing water levels, would you mind clarifying what I should expect to see given my position in the middle of Oak Park ([REDACTED]) if we had a repeat of of the 2016 event? Both 2016 and 2017 events resulting in at least a foot of water in front of my home, and I believe it was much higher, as neighbours were able to kayak and float around in the street. I specifically remember water spilling over my boots when I was on the road, which are much higher than a foot in height. Perhaps part of the issue is that the water levels during these events were reported lower than what was actually experienced. I can't imagine increasing the water level further, as I was just barely able to keep the water out, while most of my neighbours flooded. Water was half way up my front lawn and driveway, which has a significant grade pitch.

I am pleased to hear that the climate changes are the next discovery phase, as I fully believe it would be incredibly short-sighted to proceed with a plan that doesn't account for these events become 1:10 events.

In summary, I would appreciate feedback on the following:

- 1) I'd like to know what the plans look like for the actual water level experienced during the 2016 flood, as it was certainly more than 30 cm in front of my home, where the new plans call for an increased allowance of water.
- 2) How was the water level of the 2016 and 2017 event calculated per street (as the resulting plans are completely dependent on this information), and does this calculation extend through an entire street, or merely an average of it (some parts of the street had half as much water)?
- 3) If the main sewers are fully loaded to capacity, and the issue isn't draining water from the road, how does adding additional localized flooding solutions help move the water when there isn't capacity for it to drain? I ask this specifically due to watching water come up from the road over more than an hour during the last two events. There was absolutely no water draining from the roadway during this time, and clearly the inverse of storm sewers emptying into the road through every drain and crack in the asphalt instead.

Thank you again for reaching out, as I do very much appreciate you doing so. I hope you can see my comments as constructive comments to this process.

Best regards,

[REDACTED]

On Thu, Aug 2, 2018 at 10:17 AM Forest, Flavio <fforest@dillon.ca> wrote:

[REDACTED], thank you for your comments and relating your experience during recent major storms in 2016. Your input will be taken into consideration as we further evaluate the preferred solutions before they are finalized.

In order to provide some context, the 2016 storm event was well in excess of the 1:100 year design storm, which is used in establishing a generally accepted level of service standard for the evaluation/design of overland drainage systems. The 1:100 year design storm is what has been used in this initial stage of our study to identify areas of surface flooding concern, as well as to develop alternative solutions.

Based on the results from this initial stage of our study, we have interpreted the surface flooding in your area as a more localized matter. The modeling suggests that under the 1:100 year design storm, there would only be 1 isolated area in which the surface flooding depth exceeds the accepted standard of 0.3m (1 foot). In order to address this, we identified the opportunity of introducing inlet control devices at catchbasins along Oak Park in order to distribute this surface flooding more evenly along the roadway, which as you pointed out, results in some areas having an increased level of surface flooding, although still within the allowable limits of less than 0.30m.

The next stage of our study involves the further evaluation of these solutions under a climate change scenario, in which the 1:100 year standard design storm is increased by a factor that, to a degree, recognizes the potential for storms of greater intensity that have been associated with climate change. This next stage is intended to reconfirm that the preferred solutions are still suitable. In those areas that show an increased sensitivity/vulnerability to flooding from climate change considerations, the preferred solutions may be adjusted and/or another solution may be deemed more preferable.

The updated results of our study will be presented at a subsequent public information centre later this year.

I will have you added to the public notification list so that you can remain more directly informed of upcoming updates for this study, and we look forward to your further input.

Please let us know if you have any further questions based on the clarification I've provided.

Regards,



Flavio Forest
Partner
Dillon Consulting Limited
3200 Deziel Drive Suite 608
Windsor, Ontario, N8W 5K8
T - 519.948.4243 ext. 3233
F - 519.948.5054
M - 519.791.2166
FForest@dillon.ca
www.dillon.ca

Please consider the environment before printing this email

On Thu, Jul 26, 2018 at 4:27 PM, Andrew Dowie <adowie@tecumseh.ca> wrote:

Hi Flavio:

I received the following note from [REDACTED] Oak Park. His email address is [REDACTED].

Would you be in a position to respond at this time.

Thanks!

Andrew

Hi [REDACTED],

I was just reviewing the Drainage Master Plan document, and the accepted solution for my street (Oak Park Dr) isn't fitting well with me. While the recommended plan (Alternative #2) addresses the heavy flooding areas, my home on the result view shows more water than we previously experienced during the last hundred year event [REDACTED], and we were all absolutely hammered with water.

I was fortunate enough to have minor flooding, and was able to use my pool pump to drain many neighbour's homes in 2016. This new plan actually increases the expected water to fully saturate my part of the street with the medium rated 15-30 cm standing water. I can appreciate that localized surface flooding solution can be used at the north and south ends of my street, but I simply cannot accept the cost of even more water for us left in between the new solution. The imagery does clearly show a higher concentration of expected water on the recommended solution, and this is not acceptable.

Does the town internally have the result image if Alternative #3 was used? I would also like to know if the localized surface flooding solutions can be implemented over the entire street rather than just two-thirds of the street. Personally I feel that if a good portion of the street is slated for the local surface solution, the entire street should be treated this way, as per Clapp and Meander to the direct south of Oak Park.

Thank you for your time, and I hope reason will prevail with the entire street treated, rather than just two thirds.



Andrew Dowie

Councillor Ward 1

adowie@tecumseh.ca

Town of Tecumseh - 917 Lesperance Rd. - Tecumseh, ON. - N8N 1W0

Phone: 226 773 1910 Fax: 519 735-8326 - www.tecumseh.ca

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Durocher, Maggie <mdurocher@dillon.ca>

RE: Storm Drainage Master Plan / Tecumseh Storm Drainage Master Plan

1 message

Phil Bartnik <pbartnik@tecumseh.ca>

Tue, Feb 20, 2018 at 11:06 AM

To: [REDACTED] "TecumsehDrainageMP@dillon.ca" <TecumsehDrainageMP@dillon.ca>

[REDACTED]

As discussed your property is within the study area for the Storm Drainage Master Plan. We'll ensure that you are added to the mailing list for upcoming notices for public meetings.

Our Public Works Department will review the existing sewer system to ensure there isn't any blockages downstream of your location.

Our Drainage Superintendent will be contacting you shortly to schedule a date/time to investigate and review the foundation drains and discharge pipes within your basement and provide suggestions on how to further flood proof your basement.

Attached is a detail depicting the sump pump discharge conversion we discussed.

Please do not hesitate to contact me should you have any questions.

Regards,

Phil Bartnik, P.Eng.

Manager Engineering Services

The Corporation of the Town of Tecumseh

From: [REDACTED]**Sent:** February-20-18 10:30 AM**To:** Phil Bartnik; TecumsehDrainageMP@dillon.ca**Cc:** [REDACTED]**Subject:** RE: Storm Drainage Master Plan / Tecumseh Storm Drainage Master Plan

To: Mr Bartnik, - Manager Engineering Services Town of Tecumseh and Mr Forest - Project Manager of Tecumseh Storm Drainage Master Plan

I am a concerned resident in the Town of Tecumseh and reside with my family at [REDACTED] Deslippe Dr. I have lived at this residence since March 2005 and have experienced four major floods of my basement costing approx. 60,000.00 in damages each time. The first was in July 2007, the next was in 2010, then Sept 2016 and finally the last was in August of 2017. I just want to ensure that my residence area is part of this study and want to be informed when the public meeting will be held in early 2018.

I have done everything I can to reduce the water coming into my sump area during major storms but does not appear to be enough. I ensured that my downspouts are not connected to the storm drain and installed pop-up emitters that carry the water from the troughs 12 to 14 feet away from the foundation onto sloped grade away from my house. I inquired at Tecumseh City Hall to have the township use the underground camera on my storm drain at the road and no potential blockage was found. I also had a third party camera my storm drain through my property and there was no blockage found.

During heavy rains as listed above I do get lots of water pouring into my sump pump approx. 15 to 18 secs between sump pump discharges from a 1/2 hp Liberty pump with a 1/3 hp battery backup pump and still could not keep up during these big storms. I also had an additional pump that I placed in the top of the sump area and carried a pool hose out the back door into the field behind my house. This still was not enough.

What I did find during my investigation was a Y connection of the 6" diameter storm drain that I share with my neighbour going into the 30" Storm drain at the road. This can be seen on the Schematic of Lot Grading & Private Service Connections - Morand Residential Subdivision (Lot20). Each time that I flooded, the water in my Cul-de-sac had risen past the height of the curb half way up my driveway. Each time I flooded, the storm pipe cannot handle the water and backs up through my storm drain to my backyard where my solid storm pipe is connected to the perforated pipe from my backyard drain. Which comes back to my house foundation where I then keep recycling the water. I believe this is all caused by the 30" storm drain supplied by the Township at the road not being able to handle the volume from the houses in the Cul-de-sac. I am the only house that floods in my Cul-de-sac and basically the lowest house as well. I have spent lots of money trying to divert the storm water from my property and in insurance claims and need to understand the proposed resolution from this study and how it impacts my area.

There is a lot more to the above story but I need to know when the next public meeting is so I can find out how my area will be impacted. Thanks for your time and look forward to a response.

Regards,

[REDACTED]

[REDACTED] Deslippe Dr.

Tecumseh, ON

N9K1C6

[REDACTED]

Email: [REDACTED]

Phil Bartnik
Manager, Engineering Services
pbartnik@tecumseh.ca




Town of Tecumseh - 917 Lesperance Rd. - Tecumseh, ON. - N8N1W9
Phone: 519 735-2184 ,148 Fax: 519 735-6712 - www.tecumseh.ca

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 **Sump Pump Discharge.pdf**
30K



Durocher, Maggie <mdurocher@dillon.ca>

Master Plan updates

1 message

Wed, Aug 1, 2018 at 2:22 PM

[REDACTED]
To: TecumsehDrainageMP@dillon.ca

Please add me to your Master Plan updates.

Many thanks

[REDACTED]

[REDACTED] Riverside Drive

[REDACTED] Riverside Drive

[REDACTED]



Durocher, Maggie <mdurocher@dillon.ca>

Fwd: Storm Drainage Master Plan

1 message

Langlois, Ryan <rlanglois@dillon.ca>

Wed, Jan 2, 2019 at 9:27 AM

To: Maggie Durocher <mdurocher@dillon.ca>

Cc: Sabrina Stanlake-Wong <sstanlake@dillon.ca>, 164880 <164880@dillon.ca>

Maggie

Please add this individual to the Tecumseh Master Drainage Study Stakeholder list.

Thanks

Ryan Langlois, P.Eng
Dillon Consulting Limited

----- Forwarded message -----

From: **Phil Bartnik** <pbartnik@tecumseh.ca>

Date: Wed, Jan 2, 2019, 9:15 AM

Subject: Storm Drainage Master Plan

To: rlanglois@dillon.ca <rlanglois@dillon.ca>

Ryan,

Can you please ensure that [REDACTED] Lacasse Blvd is added to the interested Stakeholder List.

Thanks

Phil Bartnik, P.Eng.

Director Public Works & Environmental Services

The Corporation of the Town of Tecumseh

From: Phil Bartnik

Sent: October-04-18 3:15 PM

To: [REDACTED]

Cc: Andrew Dowie; Tony Haddad

Subject: RE: Lacasse Blvd Road flooding

Good Afternoon [REDACTED]

Councillor Dowie had forwarded your concerns to Administration for our review and follow up. I would like to offer the following comments in response:

- I was able to experience the road flooding first hand on Lacasse Boulevard in the exact area you have described during the rain event on September 20th.

- Road (or 'surface') flooding is often encountered during rain events that exceed the design capacity of the storm sewers. Intensity-Duration-Frequency (IDF curves) are created from historical data to guide engineers and governing bodies determine the appropriate design standard for the sewers. The Ministry of Environment recommends that storm sewers be designed to a minimum 1:2 year or 1:5 year return period. The Town's sewers all fall within the 1:2 – 1:5 year return period (which is typical for most municipalities within Ontario).

- The recent rain events of September 20th and September 25th were categorized as a 1:10 year event and a 1:2 year event, respectively. In both events, it would be expected that road (or surface) flooding may be experienced.

- In other instances road flooding is encountered due to the intensity of the rainfall exceeding the inlet capacity of the catch basins or due to catch basin blockages.

- Administration is undertaking a two-step approach to your concerns, being:
 - Ensuring the existing storm infrastructure is free of debris and is functioning as originally designed. PW Staff have been on-site (Wednesday October 3rd) to flush and video inspect the sewers on Lacasse.

 - We have also forwarded these concerns to our Engineering Consultant who is completing a 2D Hydraulic Model of the Town's storm sewer infrastructure and overland flow routes. This area will undergo further analysis, which may result in recommendations to improve the level of service.

- The Town is currently undertaking a Storm Drainage Master Plan study. We recently held a Public Information Centre (PIC) on July 25, 2018, for which the display boards and additional information are found on the Town's website. Link: http://www.tecumseh.ca/townhall/departamental-services/Engineering_Services/studies/storm_drainage_master_plan

A date for the second PIC has not yet been scheduled, however if you wish, we can add your name to the project contact list as an interested stakeholder, and you should receive direct notification of future PICs and when the final report is completed for public review and comment.

- As part of the Master Plan and the 2D Hydraulic Model, the Town has also obtained LiDAR information by flying the study area to map out the topography. This technology was utilized to determine the low lying areas and overland flow routes storm water would travel during an event that would exceed the design capacity of the storm sewers. The attached PDF is a snapshot of the 300 block of Lacasse Boulevard, which clearly depicts the low points within the road coinciding with the areas that landowners and Administration have witnessed flooding.

➤ It is also important to note that in addition to the overland flow towards these low lying areas, that the road flooding could be compounded once the storm system exceeds capacity and it surcharges into the lowest lying areas. This results in prolonged road flooding, and the perception that the 'water isn't moving', while in fact the lower lying areas remain surcharged until conveyance capacity and pump capacity have normalized within the system.

Should you have any additional questions, please do not hesitate to contact me

Regards,

Phil Bartnik, P.Eng.

Director Public Works & Environmental Services

The Corporation of the Town of Tecumseh

From: Andrew Dowie [mailto:andrew@andrewdowie.ca]
Sent: September 20 18 10:05 AM
To: Phil Bartnik
Subject: Fwd: Lacasse Blvd road flooding

Hi Phil FYI following up on our chat on this a few days ago Andrew

----- Forwarded message -----

From: [REDACTED]
Date: Thu, Sep 20, 2018 at 9:40 AM
Subject: Lacasse Blvd road flooding
To: <andrew@andrewdowie.ca>

Andrew I had mentioned to you upon your visit a couple weeks ago about the flooding issues on the 300 block of Lacasse I'm sending you a couple pictures of the roadway. It only has been raining for an hour and not a downpour either just a steady rain and the road looks like this already after an hour. You can only imagine how bad it gets if there is a downpour especially in a shorter time frame. You can see the southbound lane has been flooded first then the northbound lane. The water is over the curb into the boulevard and into the stone shoulder of the road. Moments after this picture was taken the Tecumseh Transit bus went by and drove onto the stone shoulder of the road to miss the backed up water laying on the road. This is so typical here. Yet town employees don't think this is a big problem. You asked and now I'm showing you what goes on here just like the parking situation next door. Will any of these issues get resolved. My opinion, probably not. That's why I don't bring things up because it's a waste of my time. Nobody wants to deal with a problem only good things like warm and fuzzy things and photo ops etc. You asked now I'm just showing you proof. Careful what you ask for. I don't mean to be difficult just letting you know since you asked.

Sent using the mail.com mail app




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