January 24, 2019

Canital Capital Corp. 14046 Riverside Dr E Tecumseh, Ontario N8N 1B6 This is an example of the cover letter sent to residents around the sites of the proposed upgrades to the Pump Stations.

Town of Tecumseh Storm Drainage Master Plan Proposed Upgrades to PJ Cecile Pump Station and Impact on Resident Beach Access

The Town of Tecumseh retained Dillon Consulting Limited in 2016 to complete a Storm Drainage Master Plan for the northerly portion of the municipality to address the impacts of surface flooding on the community. As part of the Master Plan, the team has developed several alternative solutions to increase the resiliency of the storm drainage system and reduce the risk of surface flooding on the community. Storm pump station improvements are being recommended at the PJ Cecile pump station located at 14080 Riverside Drive East at the intersection of Riverside Drive and Kensington Blvd adjacent to Beach Grove Golf and Country Club. The proposed upgrades have been recommended with added resiliency to reduce surface flooding within the area south of Riverside Drive and north of Tecumseh Road, between Arlington Boulevard and Brighton Road.

Each potential alternative solution has been evaluated based on disruption or displacement to private property and community features, impacts on future uses, capital and maintenance costs, and reduction in flooding risk.

The existing pump station is currently located on lands owned by local residents. We would like to meet with adjacent residents and businesses in order to provide details of the alternative solutions for the proposed storm pump station upgrades prior to Public Information Meeting # 2 being held on February 6th, 2019. The alternative solutions proposed may be of interest to you since the existing pump station and alternative pump station options are located near your property.

We would be happy to meet with you on either of the following dates:

- Wednesday January 30th at 3:00pm
- Friday February 1st at 3:00pm

Please contact one of the below contacts to finalize the date and time to meet and discuss further. Your input is valuable in determining a recommended solution.

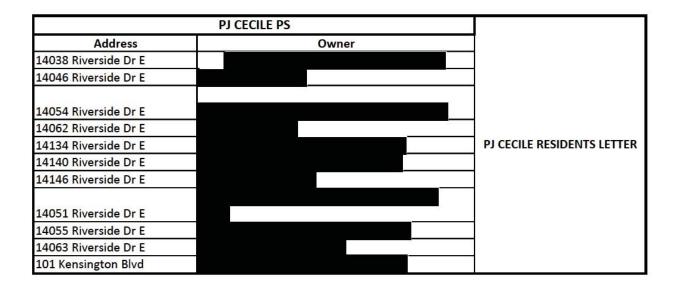
- Ryan Langlois, P.Eng Dillon Consulting 519-948-4243 x 3231
- John Henderson, P.Eng Town of Tecumseh 519-735-2184 x 166

We also invite you to attend the Public Information Centre Meeting # 2 being held on February 6th, 2019 at the Tecumseh Royal Canadian Legion Branch 261 at 12326 Lanoue Street. The Public Information Centre notice has been attached to this letter.

Yours sincerely,

DILLON CONSULTING LIMITED

Flavio Forest, P.Eng. Project Manager FRF:rrk Enclosure Mr. Phil Bartnik, P.Eng., Town of Tecumseh CC: Our file: 16-4880



	LESPERANCE PS	
Address	Owner	
12226 Riverside Dr E		
12238 Riverside Dr E		
12246 Riverside Dr E		
12310 Riverside Dr E		
12318 Riverside Dr E		
12322 Riverside Dr E		
	WEST ST. LOUIS PS	6
Address	Owner	
12874 Riverside Dr E		
12902 Riverside Dr E	· · · · · · · · · · · · · · · · · · ·	
12906 Riverside Dr E		
12922 Riverside Dr E		
The second second second second		
12942 Riverside Dr E		
12946 Riverside Dr E		
		GENERAL SDMP LETTER
	EDGEWATER PS	
Address	Owner	
13676 Riverside Dr E		
13682 Riverside Dr E		
13694 Riverside Dr E		
13706 Riverside Dr E		
13710 Riverside Dr E		
13720 Riverside Dr E		
	ST. MARKS PS	
Address	Owner	Ad .

13752 Riverside Dr E		
13756 Riverside Dr E		
13760 Riverside Dr E	l and	
13778 Riverside Dr E		
13784 Riverside Dr E		
13788 Riverside Dr E		

STARWOOD/SOUTHWIND PS		
Address	Owner	
234 Southwind Crescent		
248 Southwind Crescent		SOUTHWIND/STARWOOD
252 Southwind Crescent		LETTER
254 Southwind Crescent		LETTER
262 Southwind Crescent		
270 Southwind Crescent		
210 Brighton Road		

Baillargeon Drain Area		
Address	Owner	
12372 Charlene Lane		
2010 Charlene Lane		
		Charlene Relief Sewer Letter

Project Overview

The Town of Tecumseh is completing a Storm Drainage Master Plan to:

- Identify and address the impacts of surface flooding on the community.
- Identify and evaluate a range of solutions to reduce and minimize the risk of surface flooding.
- Recommend a phased approach to implementation that requires action by the Town and property owners.
- Develop recommendations to ensure no adverse impacts from future development on existing neighbourhoods.

This study does not address the following:

- Basement flooding resulting from sanitary sewer surcharging, which the Town of Tecumseh has been addressing separately through other studies, initiatives, and subsidy programs since 2010.
- Surface flooding due to high Lake Levels, which is to be addressed in a future study outlined within the Towns Flood Mitigation Strategy.

Study Storm Outlets and Service Areas



Surface Flooding Considerations

Many Tecumseh residents have been impacted by surface flooding during the major storms of 2016 and 2017 which exceeded the design 1:100 year event **(108mm in 24 hours)**:

• September 28/29 2016 storm dumped **220 mm** of rain in 24 hours

(110mm of rainfall fell between 8:00am - 10:00am).

• August 28 2017 event dumped **126mm** of rainfall in six hours.

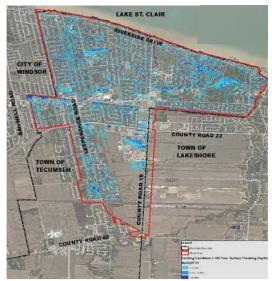
Flooding assessment in Tecumseh:

To address the risk of surface flooding, various factors were

considered, including:

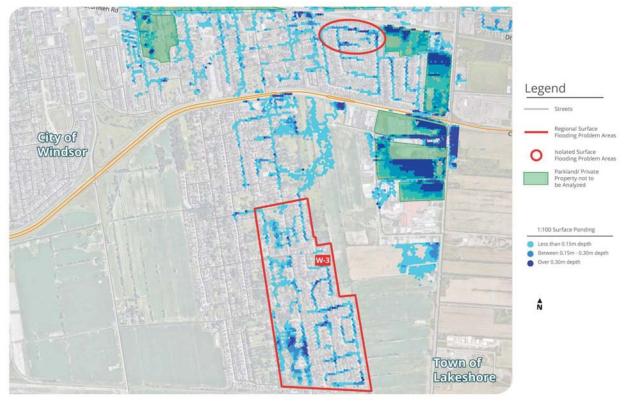
- Lake and creek water levels and ground elevations;
- Rainfall amount, duration and distribution;
- Ground cover, soil type and soil saturation conditions;
- Capacity of storm drainage systems;
- Storm drainage design criteria and level of service standard; and
- Climate change.

This current study does not include a review of the sanitary system to evaluate sanitary surcharging or surface flooding due to high Lake Levels. This will be reviewed under future studies as part of the Towns Flood Mitigation Strategy.



PCSWMM 2D Model Surface Flooding Results: 1:100 year Event









Existing Condition 1:100yr Surface Flooding under High Lake Levels



Southwind/Starwood Pump Station Location Options

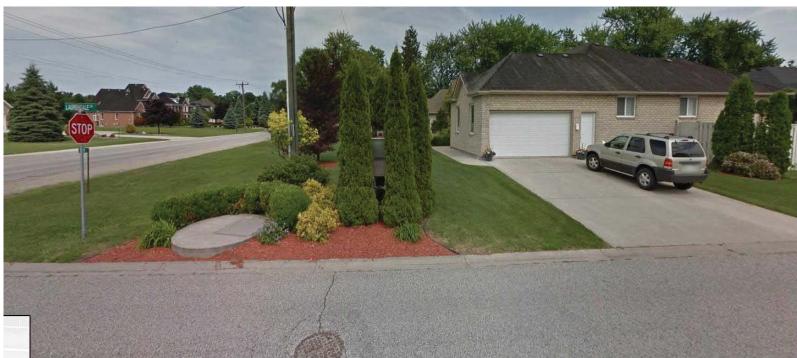


Future Condition 1:100yr Surface Flooding under High Lake Levels



EXAMPLE OF A PUMP STATION ELECTRICAL BOX





EXAMPLE OF A PUMP STATION ELECTRICAL BOX WITH LANDSCAPE FEATURES

Project Overview

The Town of Tecumseh is completing a Storm Drainage Master Plan to:

- Identify and address the impacts of surface flooding on the community.
- Identify and evaluate a range of solutions to reduce and minimize the risk of surface flooding.
- Recommend a phased approach to implementation that requires action by the Town and property owners.
- Develop recommendations to ensure no adverse impacts from future development on existing neighbourhoods.

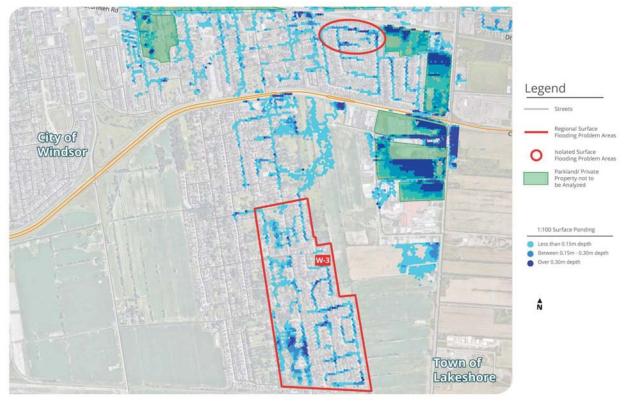
This study does not address the following:

- Basement flooding resulting from sanitary sewer surcharging, which the Town of Tecumseh has been addressing separately through other studies, initiatives, and subsidy programs since 2010.
- Surface flooding due to high Lake Levels, which is to be addressed in a future study outlined within the Towns Flood Mitigation Strategy.

Study Storm Outlets and Service Areas











Lesperance Pump Station Options

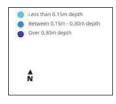


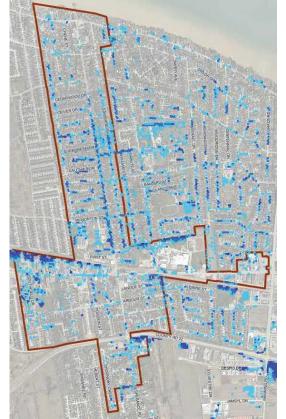


RECOMMENDED G STRUCTURE 10 副副 THE 間 i ABANDON SE OF EXISTING OUTFALL EXISTING O DEMOLISH OLD SCREW PUMP STATION ABANDON SECTI NEW INLET 0000 EXISTING PL STATION TO NEW INLET WIT DEMOLISH OLD EXISTING 19500 INLE AFTER NEW INLET IS 12 4 0m on 50

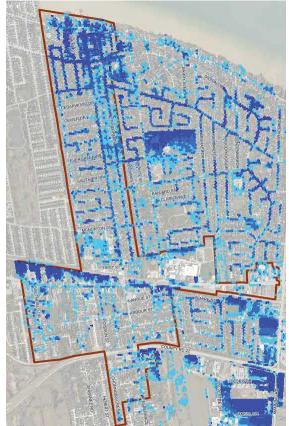
EXISTING VS FUTURE CONDITION 1:100 YR SURFACE FLOODING



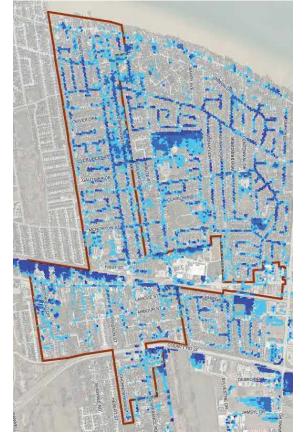




EXISTING VS FUTURE CONDITION 1:100 YR + 40% SURFACE FLOODING







Project Overview

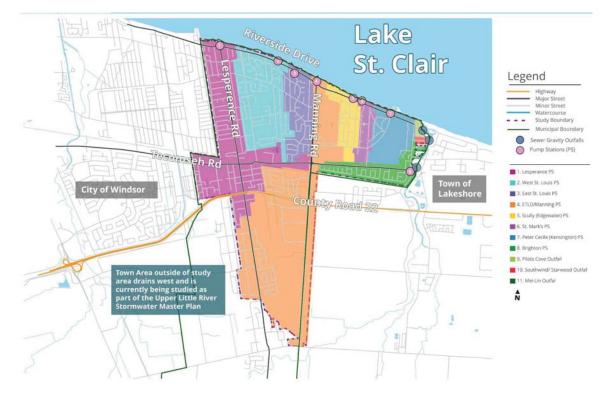
The Town of Tecumseh is completing a Storm Drainage Master Plan to:

- Identify and address the impacts of surface flooding on the community.
- Identify and evaluate a range of solutions to reduce and minimize the risk of surface flooding.
- Recommend a phased approach to implementation that requires action by the Town and property owners.
- Develop recommendations to ensure no adverse impacts from future development on existing neighbourhoods.

This study does not address the following:

- Basement flooding resulting from sanitary sewer surcharging, which the Town of Tecumseh has been addressing separately through other studies, initiatives, and subsidy programs since 2010.
- Surface flooding due to high Lake Levels, which is to be addressed in a future study outlined within the Towns Flood Mitigation Strategy.

Study Storm Outlets and Service Areas



Surface Flooding Considerations

Many Tecumseh residents have been impacted by surface flooding during the major storms of 2016 and 2017 which exceeded the design 1:100 year event **(108mm in 24 hours)**:

• September 28/29 2016 storm dumped **220 mm** of rain in 24 hours

(110mm of rainfall fell between 8:00am - 10:00am).

• August 28 2017 event dumped **126mm** of rainfall in six hours.

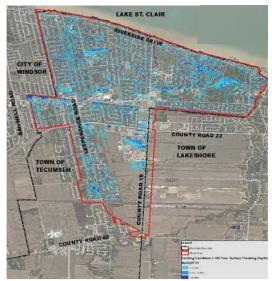
Flooding assessment in Tecumseh:

To address the risk of surface flooding, various factors were

considered, including:

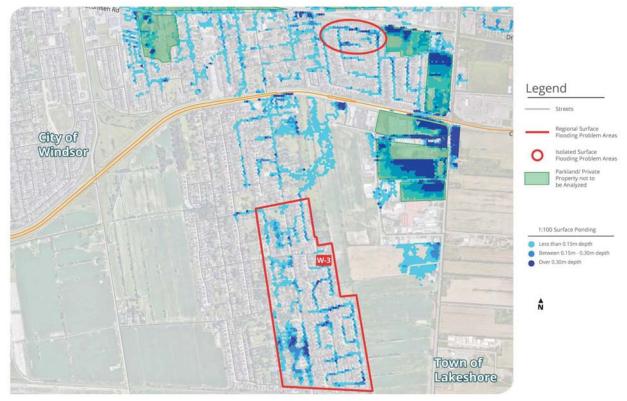
- Lake and creek water levels and ground elevations;
- Rainfall amount, duration and distribution;
- Ground cover, soil type and soil saturation conditions;
- Capacity of storm drainage systems;
- Storm drainage design criteria and level of service standard; and
- Climate change.

This current study does not include a review of the sanitary system to evaluate sanitary surcharging or surface flooding due to high Lake Levels. This will be reviewed under future studies as part of the Towns Flood Mitigation Strategy.



PCSWMM 2D Model Surface Flooding Results: 1:100 year Event

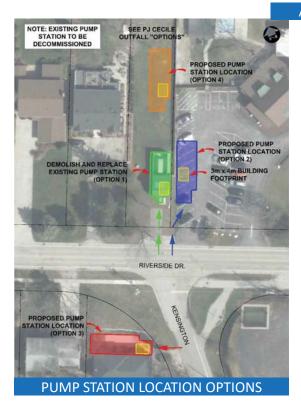


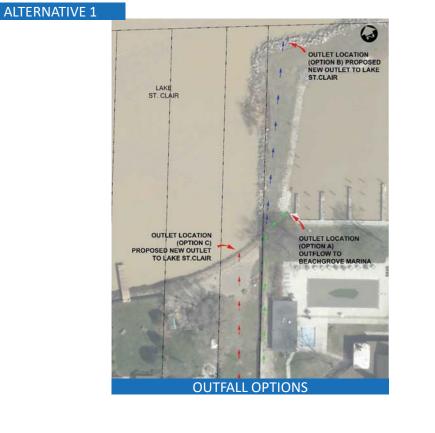






PJ Cecile Pump Station Options





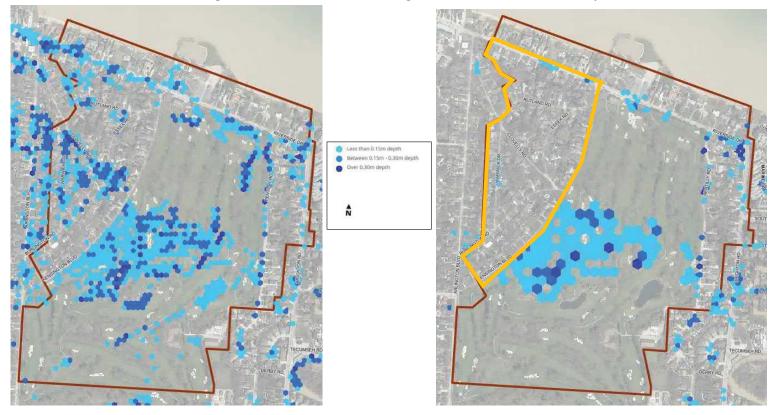
PJ Cecile Pump Station Options

ALTERNATIVE 2



Existing vs Future Condition 1:100yr Surface Flooding

Kensington Dish Area surface flooding maintained below 0.30m depths



Existing vs Future Condition 1:100yr + 40% Surface Flooding

Kensington Dish Area surface flooding maintained below 0.40m depths

