



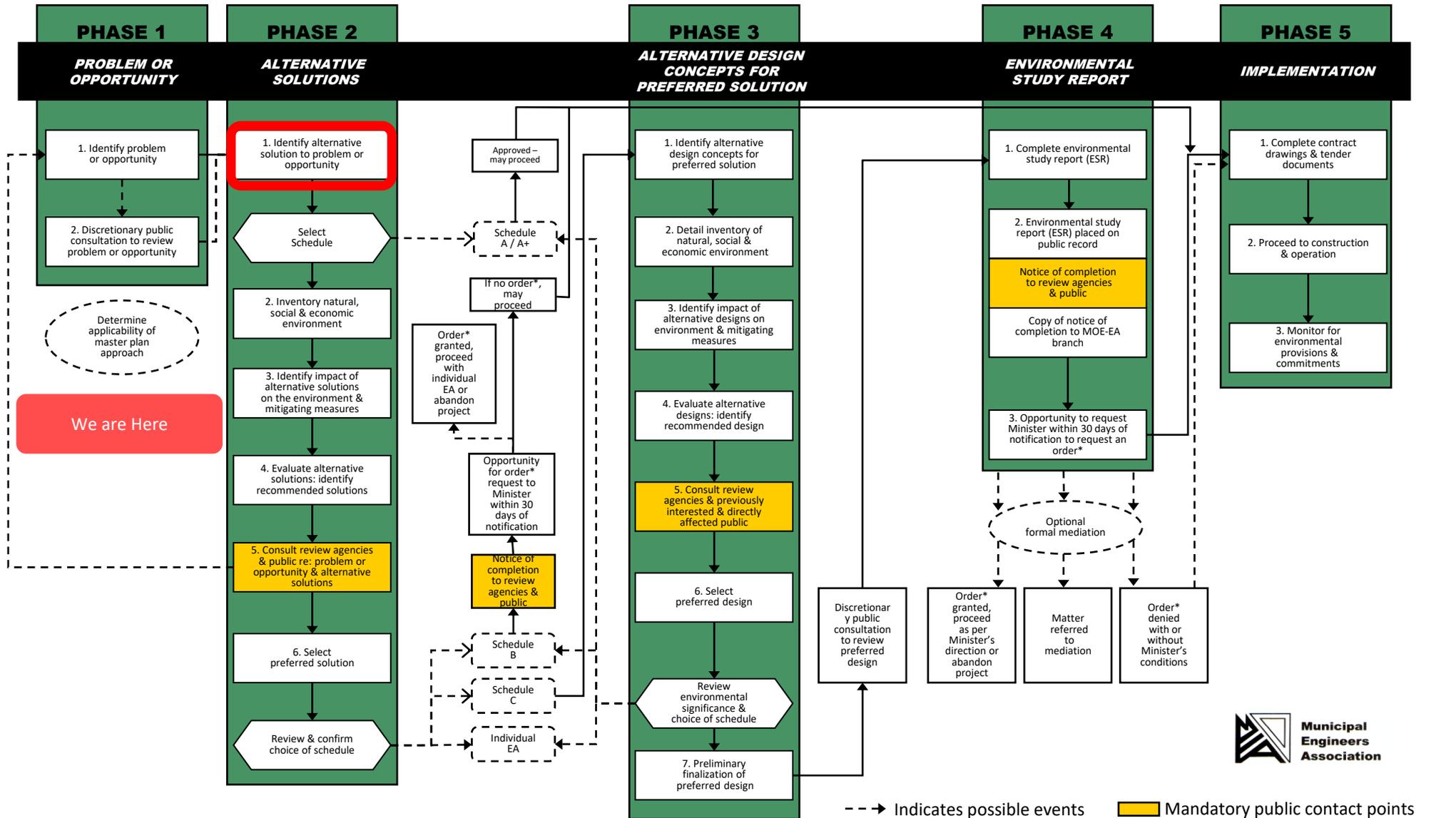
# Town of Wasaga Beach Drainage Master Plan

## Public Information Centre 1

### PUBLIC MEETING PRESENTATION



# Municipal Class Environmental Assessment and Master Planning Process



---> Indicates possible events      Yellow box: Mandatory public contact points  
 → Indicates mandatory events      Hexagon: Decision points on choice of schedule  
 ---> Indicates probable events      Dotted circle: Optional

\* Part II order



# Study Area



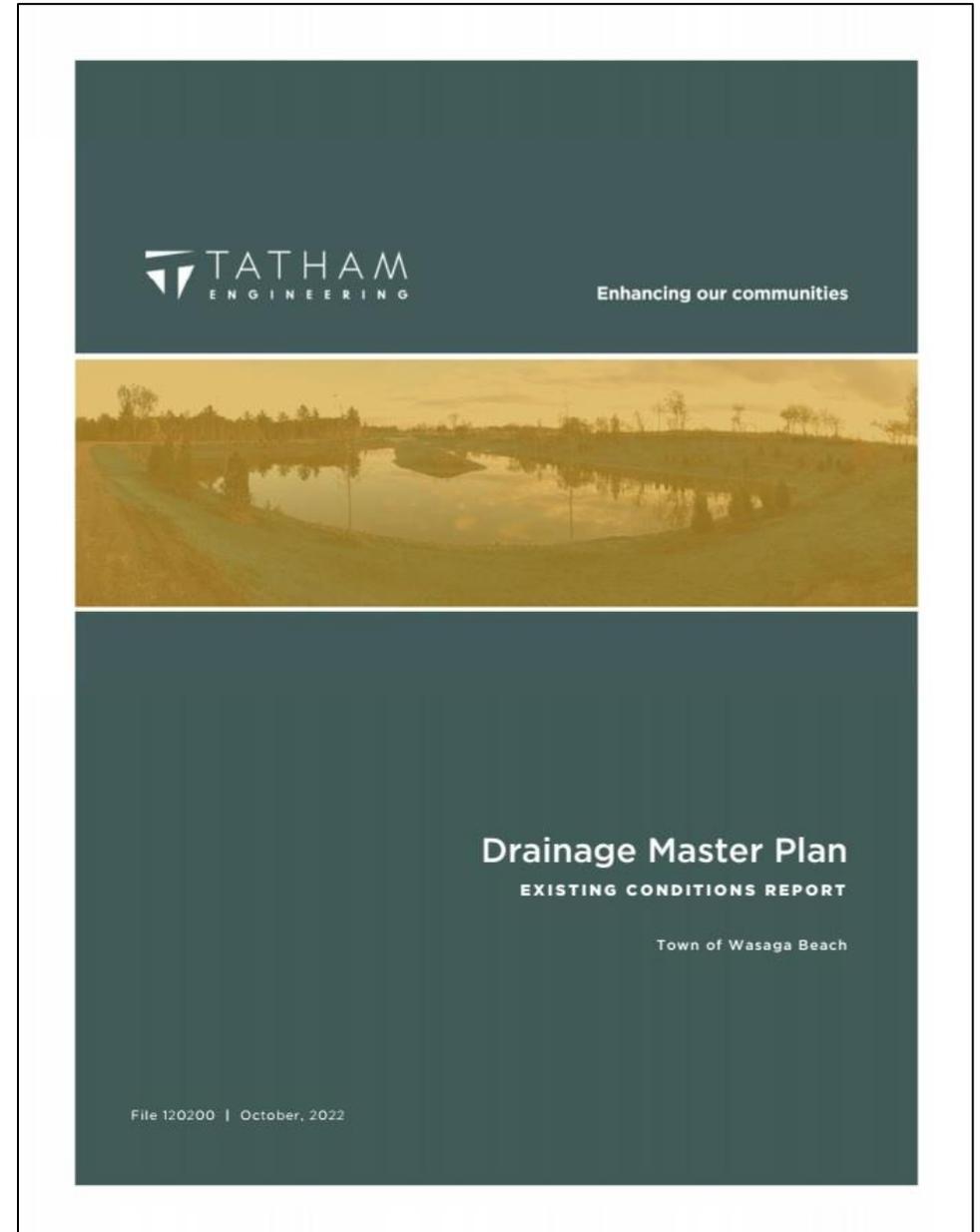
# Project Background

To date the drainage and stormwater management studies completed in the study area:

- Have been completed on a piecemeal basis;
- Focus on specific developments or issues;
- Lack a consistent and comprehensive approach; and
- Use a variety of drainage modelling software and approaches.

To identify the problems and opportunities across the Town:

- LiDAR topographic survey data of the entire Town was collected;
- Site visits to problematic areas and key infrastructure were completed;
- Comprehensive Town Wide drainage models have been created; and
- The deficiencies in the Town's existing drainage infrastructure have been identified.



# Public Information Centre 1

The purpose of Public Information Centre 1:

- Present the drainage deficiencies identified across the Town;
- Present the initial improvement opportunities being considered; and
- Elicit feedback from the public and interested stakeholders.

## Your Input is Needed!

Are you aware of any drainage issues or deficiencies in the Town?

If so, please take a moment and complete the Comment Sheet available at today's meeting or on the projects webpage at the following location:

<https://www.wasagabeach.com/en/town-and-government/studies.aspx#Environmental-Assessments-Public-Works>



**TOWN OF WASAGA BEACH DRAINAGE MASTER PLAN  
PUBLIC INFORMATION CENTRE 1  
COMMENT SHEET**

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Personal information on this form is collected under the authority of the Environmental Assessment Act, Chap. E18, Section 7, and will be used in the development of the Municipal Class EA. Questions about this collection should be directed to Jonathan Uylenbroek, Project Coordinator at the Town of Wasaga Beach, by calling (705) 429-2540, Ext. 2342 or emailing Jonathan (projects@wasagabeach.com).

**NAME OF RESPONDENT:** \_\_\_\_\_

**REPRESENTING (Agency, Municipality, Property Owner, Tenant, etc.):** \_\_\_\_\_

**ADDRESS (Including Postal Code & Telephone Number):**

**Street Address:** \_\_\_\_\_ **Unit/Apt:** \_\_\_\_\_

**Postal Code:** \_\_\_\_\_ **Telephone Number:** \_\_\_\_\_

The Opportunity Statement, which sets the framework for this Class EA study, is as follows:

*"Identify drainage deficiencies and recommend solutions to improve the storm drainage systems across the Town of Wasaga Town in consideration of impacts to the natural, social, physical, cultural and economic environments."*

A PDF version of the Drainage Master Plan Existing Conditions Report is available online on the Town of Wasaga Beach web page at the following link: [www.wasagabeach.com/en/town-and-government/studies.aspx](https://www.wasagabeach.com/en/town-and-government/studies.aspx). A paper copy of the report is available for review upon request:

**Questions About Existing Flooding and Drainage Issues**

Select the answers that apply and add further explanation below if required:

Are you aware of any watercourses or Town drainage infrastructure (sewers/catch basins) on your property?	Yes	No
If so, are you aware of any issues with the drainage infrastructure on your property?	Yes	No
Have you ever had damage caused by runoff on your property?	Yes	No
Have you ever noticed flooding on your street or another roadway in the Town?	Yes	No
If so, what street? _____		
Do you have any concerns regarding the water quality of the storm runoff in the Town?	Yes	No

Please list below any specific drainage concerns you are aware of within the Town of Wasaga Beach:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

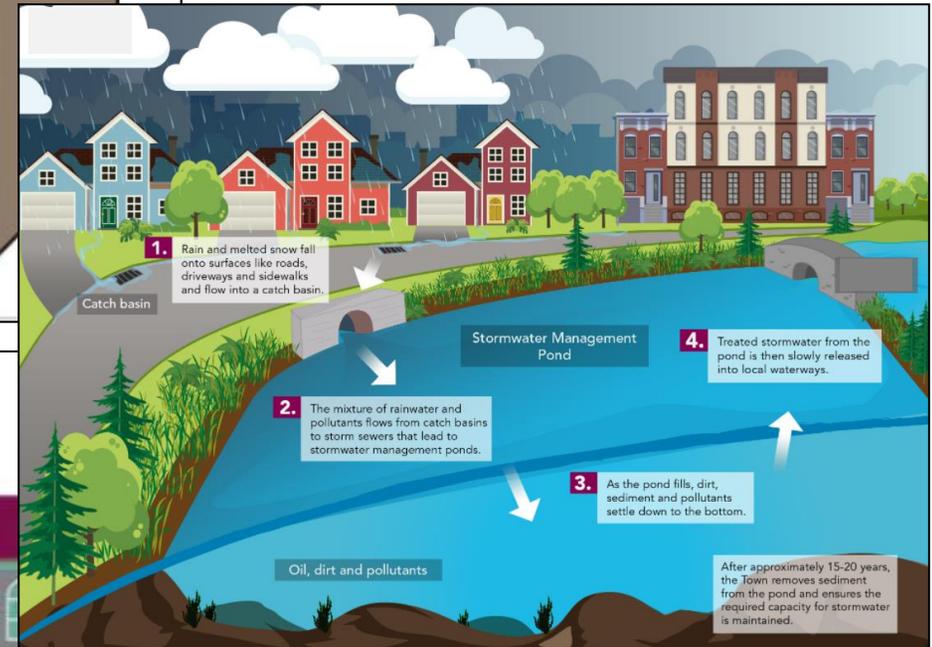
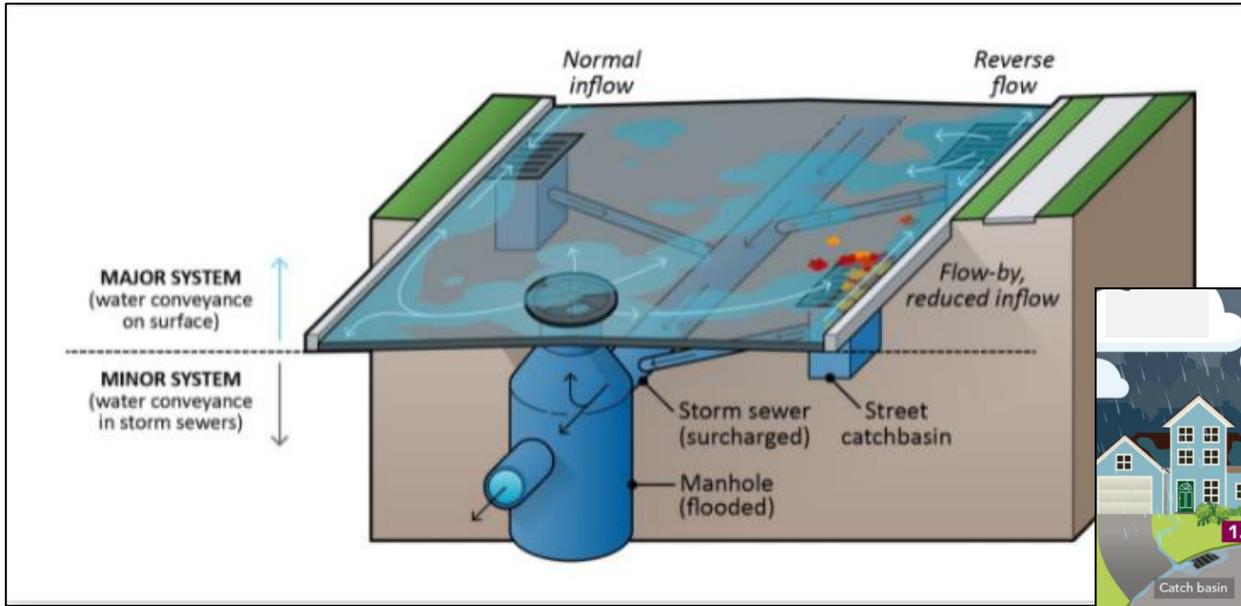
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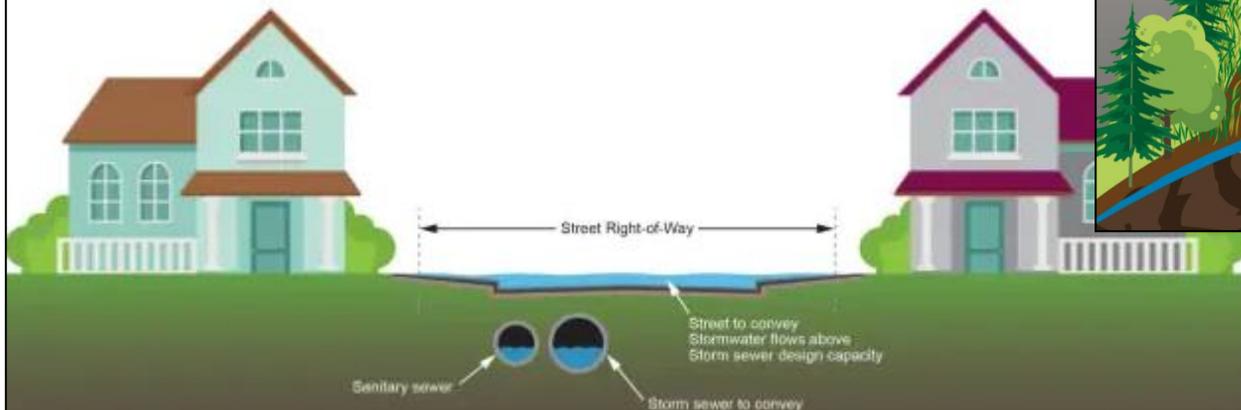


## Town's Existing Drainage Systems

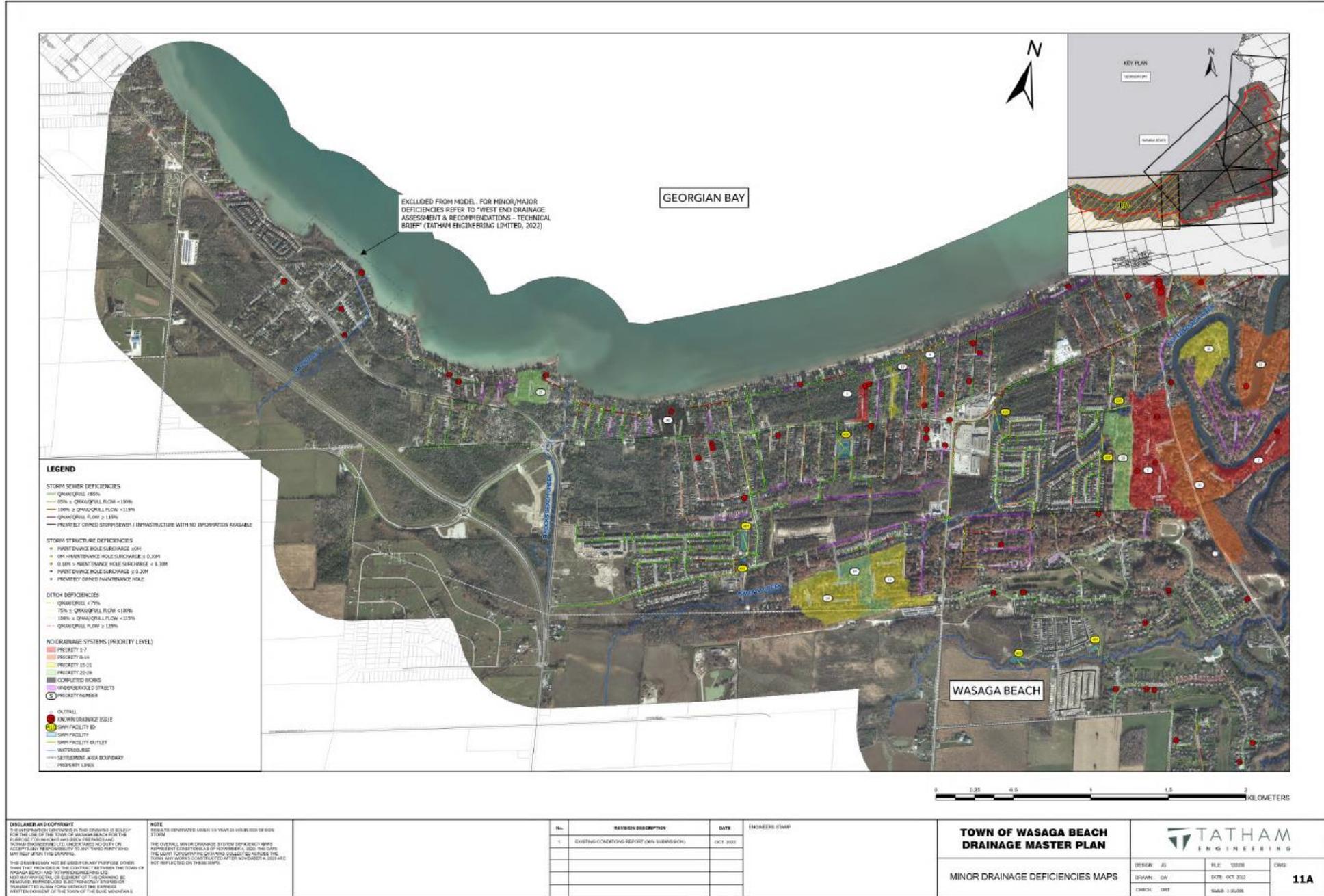
# Town of Wasaga Beach Existing Drainage Systems



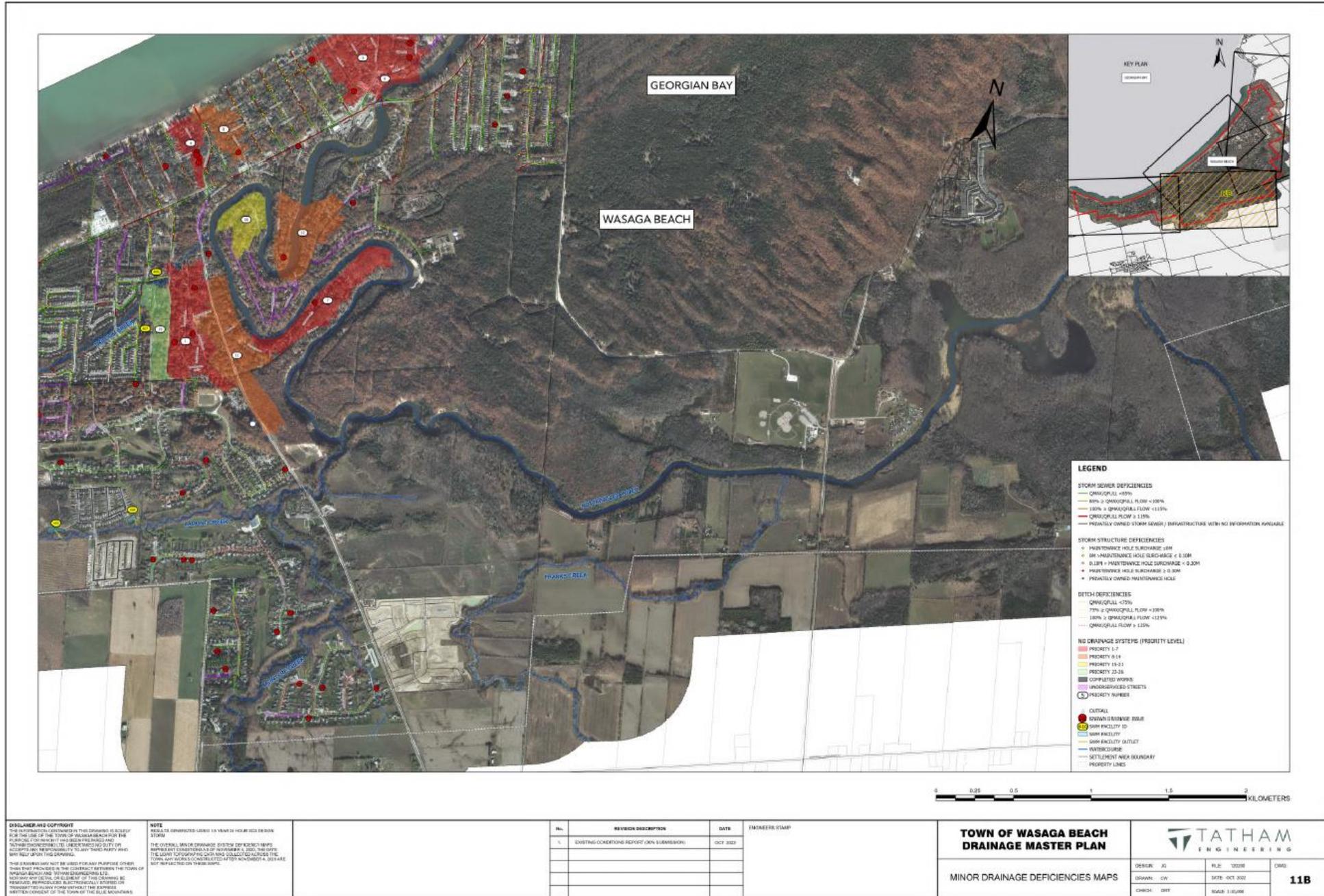
- Streets (major system) convey major storms that exceed the storm sewer capacity.
- Temporary ponding on streets is expected during major rain storms.



# Existing Minor Drainage System Deficiencies



# Existing Minor Drainage System Deficiencies



**DISCLAIMER AND COPYRIGHT**

THIS IS A PRELIMINARY DRAWING OF THE DRAINAGE SYSTEM FOR THE USE OF THE TOWN OF WASAGA BEACH FOR THE PURPOSES OF THE TOWN'S DRAINAGE MASTER PLAN. THE TOWN OF WASAGA BEACH IS NOT RESPONSIBLE FOR ANY DEFICIENCIES OR DAMAGES THAT MAY BE INCURRED BY ANY USER OF THIS DRAWING.

THIS DRAWING MAY NOT BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF THE TOWN OF WASAGA BEACH. ANY REVISIONS TO THIS DRAWING WILL BE MADE BY THE TOWN OF WASAGA BEACH AND WILL BE INDICATED BY A REVISION NUMBER AND DATE.

**NOTE**

AREAS OF UNIMPROVED LOTS OR YARDS IN RED OR BLUE ON THIS MAP ARE NOT PART OF THE DRAINAGE SYSTEM. THE TOWN OF WASAGA BEACH IS NOT RESPONSIBLE FOR ANY DEFICIENCIES OR DAMAGES THAT MAY BE INCURRED BY ANY USER OF THIS DRAWING.

No.	REVISION DESCRIPTION	DATE	ENGINEER'S STAMP
1.	EXISTING CONDITIONS REPORT (ON SUBMISSION)	OCT 2022	

**TOWN OF WASAGA BEACH  
DRAINAGE MASTER PLAN**

**MINOR DRAINAGE DEFICIENCIES MAPS**

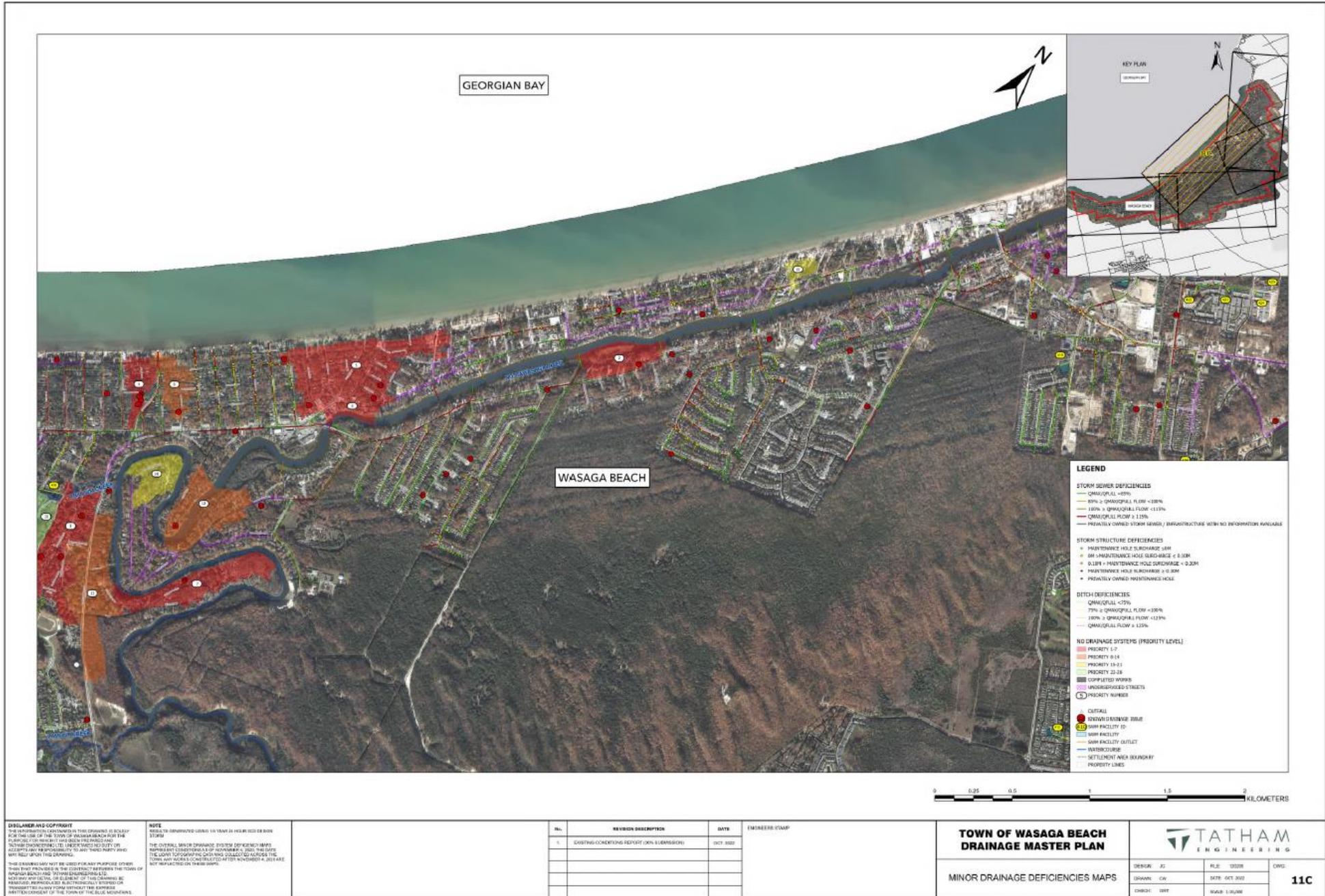
**TATHAM ENGINEERING**

DESIGNER: JG      FILE: 102210      DATE: OCT 2022      118

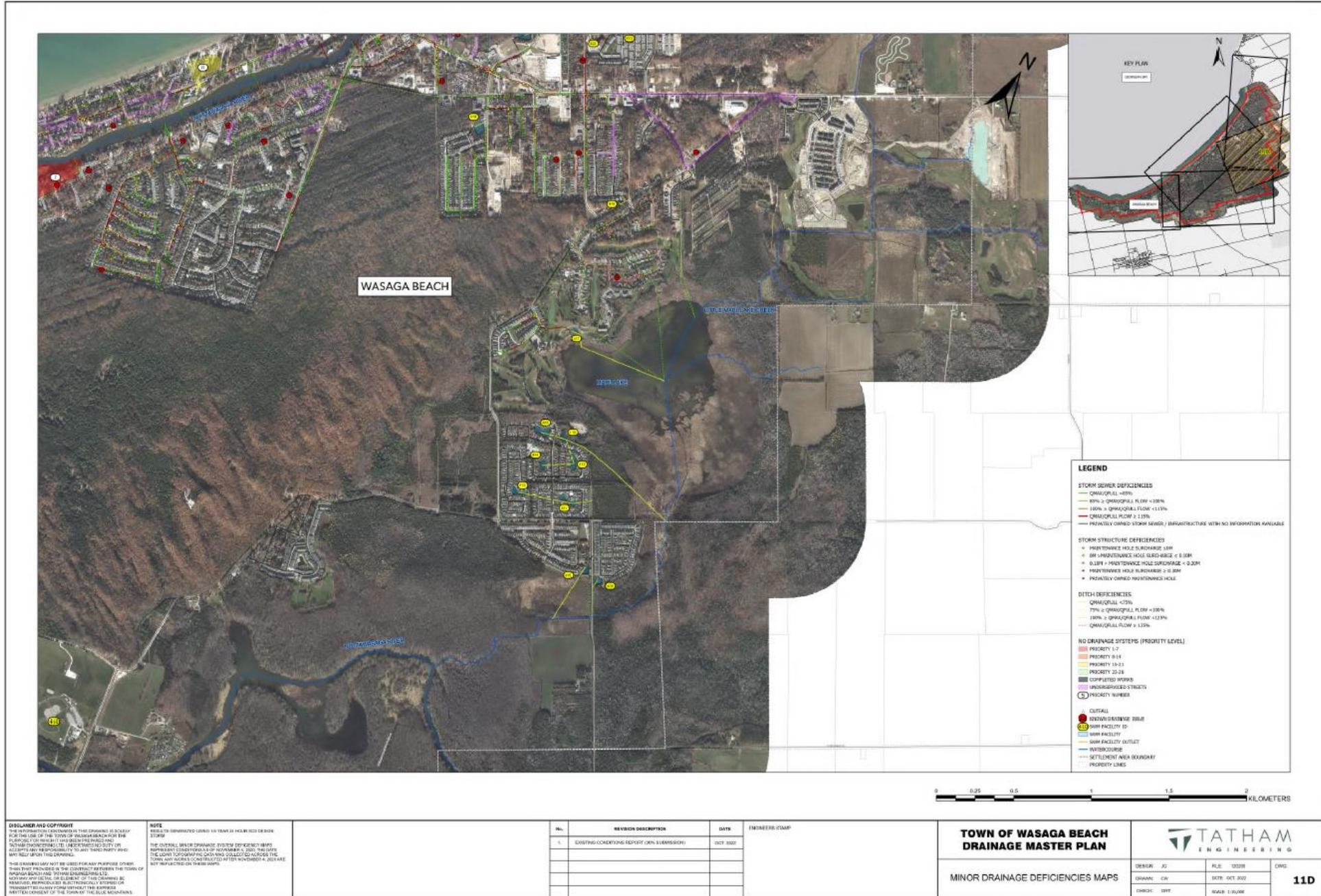
DRAWN: CW      DATE: OCT 2022

CHECK: DRY      SCALE: 1:10,000

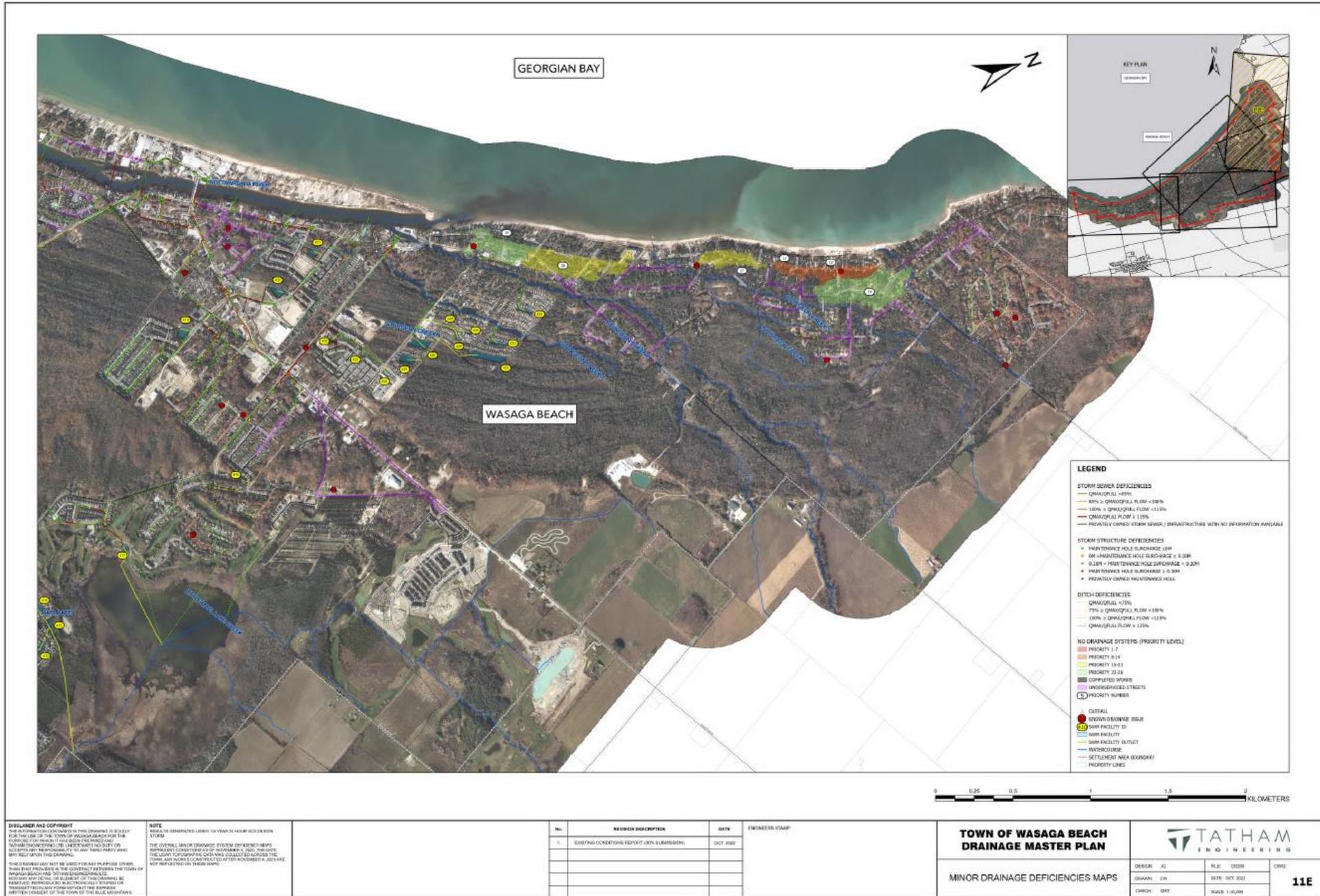
# Existing Minor Drainage System Deficiencies



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# Existing Minor Drainage System Deficiencies



**DISCLAIMER AND COPYRIGHT**  
 THIS INFORMATION CONTAINED IN THIS DRAWING IS SOLELY FOR THE USE OF THE TOWN OF WASAGA BEACH FOR THE PLANNING PURPOSES ONLY. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND ACCURACY AND ASSUMES ALL LIABILITY TO ANY THIRD PARTY WHO MAY RELY UPON THIS DRAWING.  
 THIS DRAWING MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE TOWN OF WASAGA BEACH AND TATHAM ENGINEERING LTD.  
 ALL RIGHTS ARE RESERVED. REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF THE TOWN OF WASAGA BEACH IS PROHIBITED.

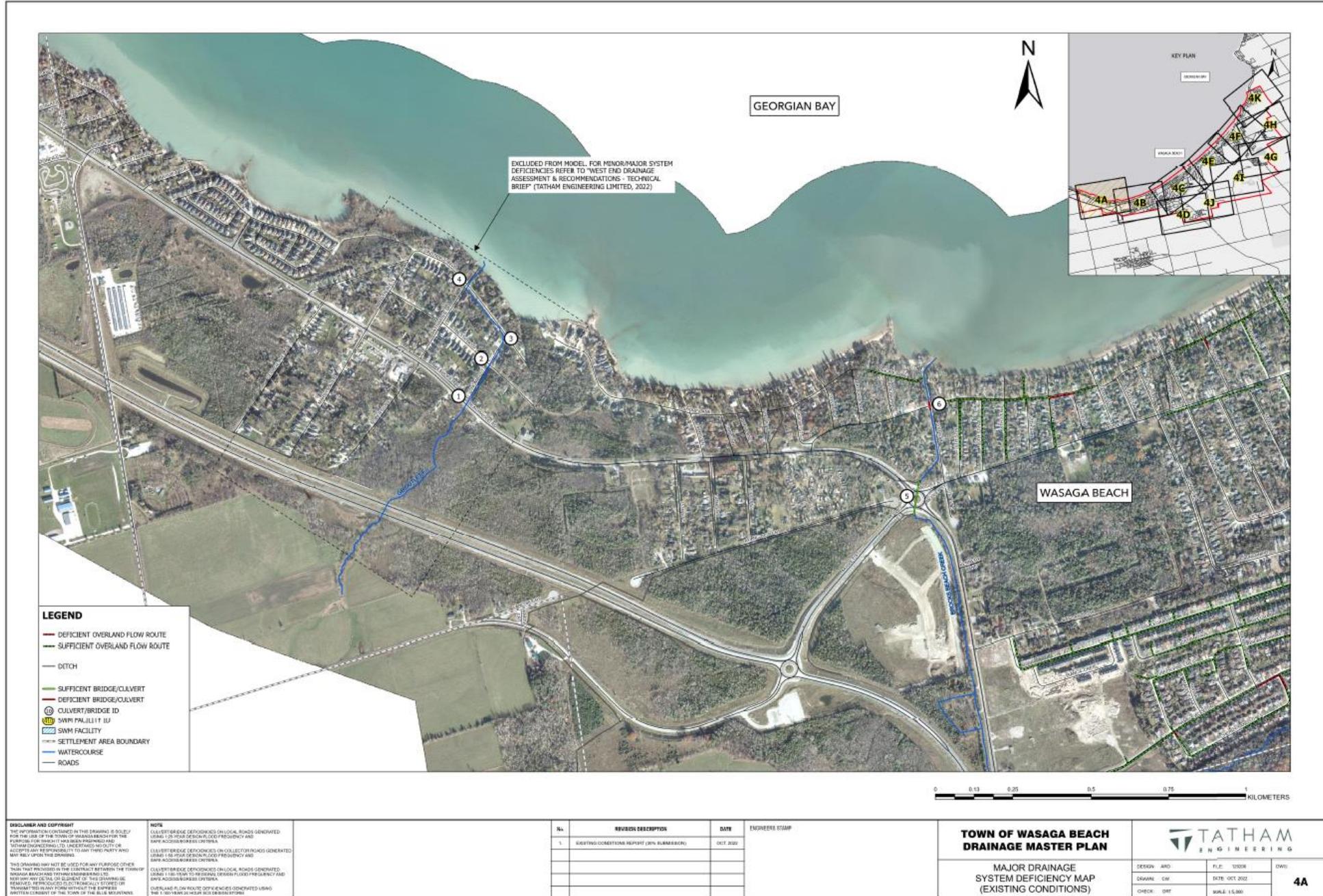
**NOTE**  
 RESULTS GENERATED UNDER 18 MONTHS FROM THE END OF STORM  
 THE OVERALL MINOR DRAINAGE SYSTEM DEFICIENCIES MAPS WERE GENERATED AS OF NOVEMBER 1, 2023. THE DATE THE LATEST DATA WAS COLLECTED ALONG THE TOWN AND AREA IS INDICATED AFTER NUMBER 4. THIS DATE IS NOT REFLECTED ON THESE MAPS.

No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP
1	EXISTING CONDITIONS REPORT (OWN SUBMISSION)	OCT 2023	

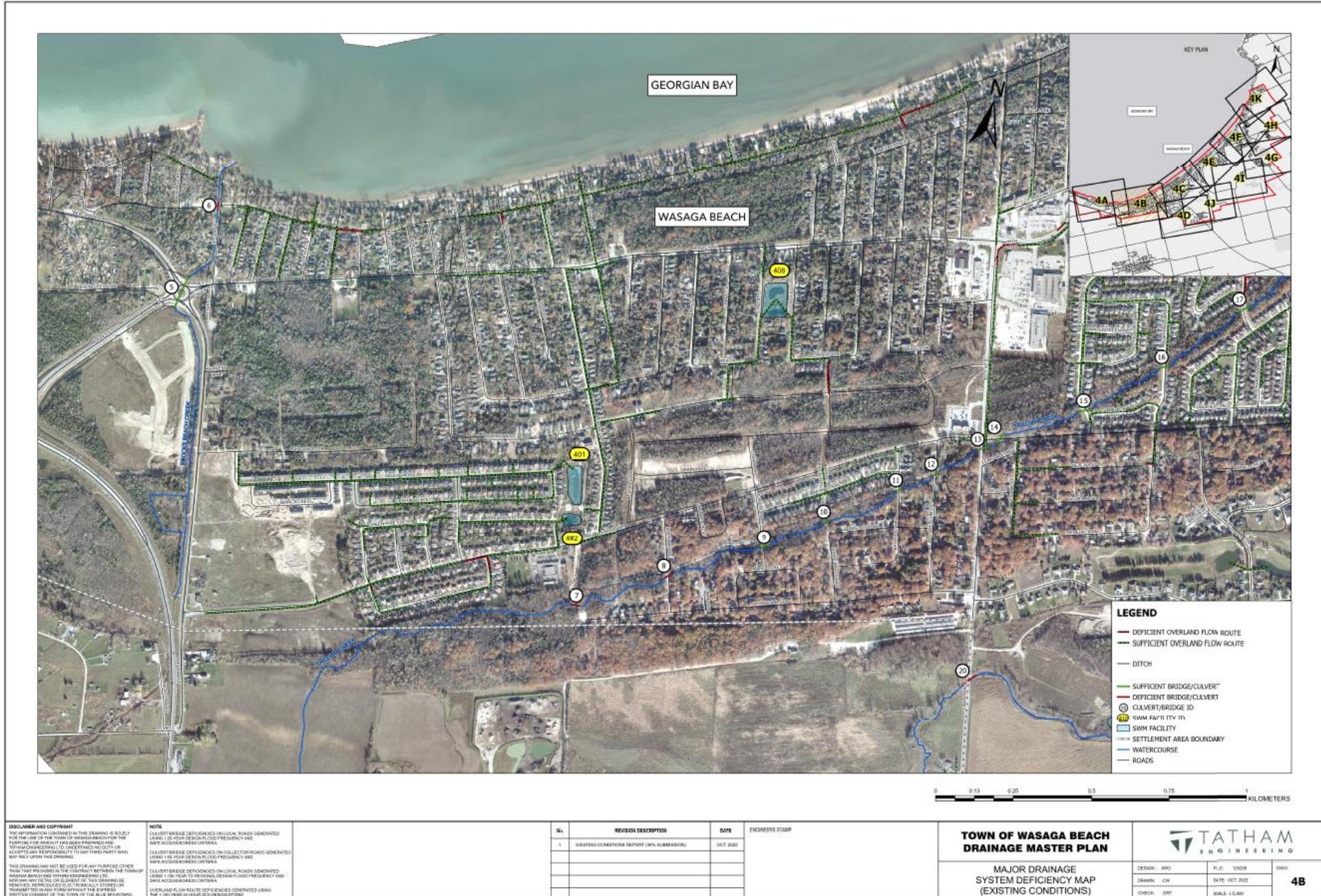
<b>TOWN OF WASAGA BEACH DRAINAGE MASTER PLAN</b>		
MINOR DRAINAGE DEFICIENCIES MAPS		

<b>TATHAM ENGINEERING</b>			
DESIGN: JJ	FILE: 10030	DATE: OCT 2023	SCALE: 1:2000
DRAWN: CW	DATE: OCT 2023		
CHECK: TBT			

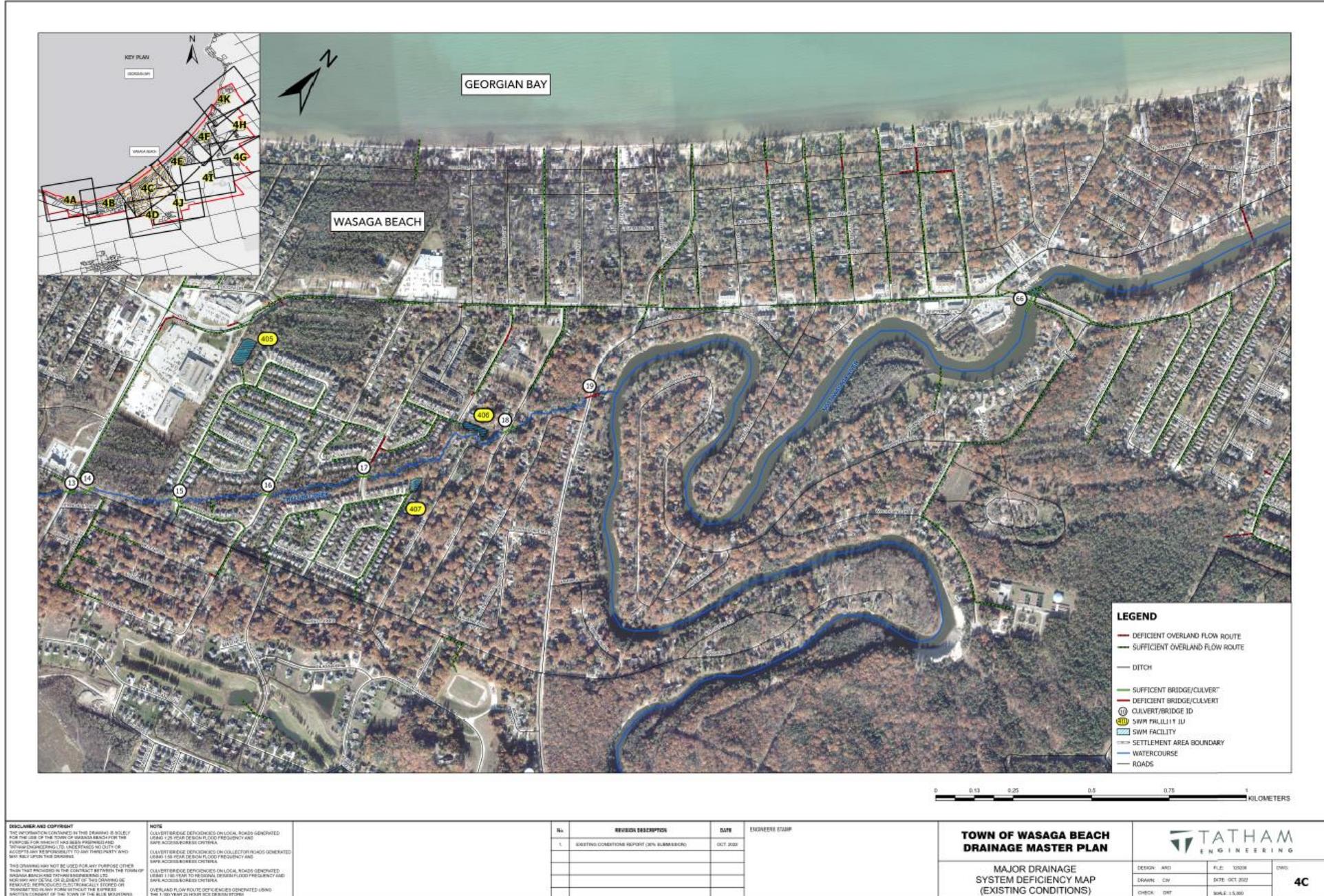
# Existing Major Drainage System Deficiencies



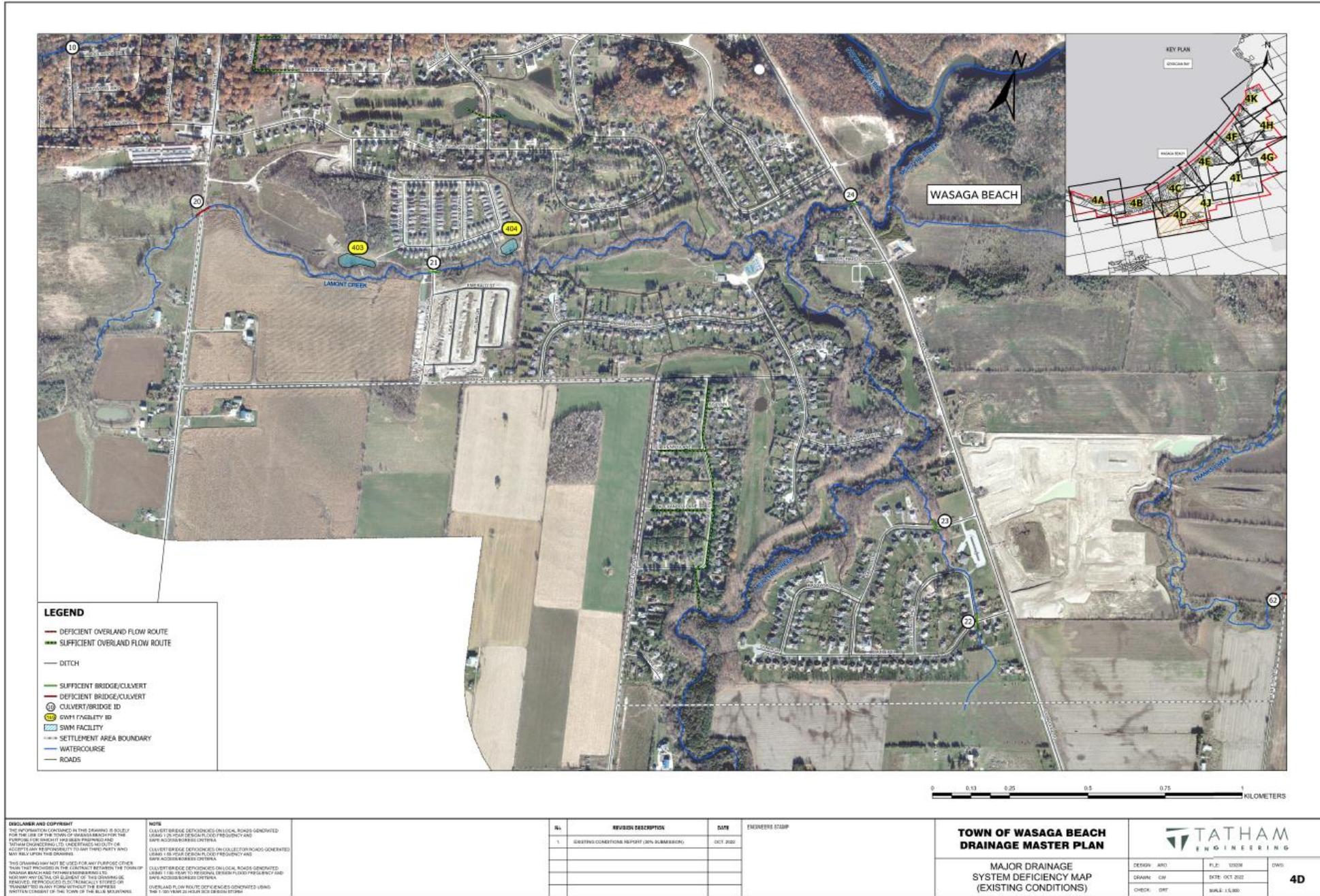
# Existing Major Drainage System Deficiencies



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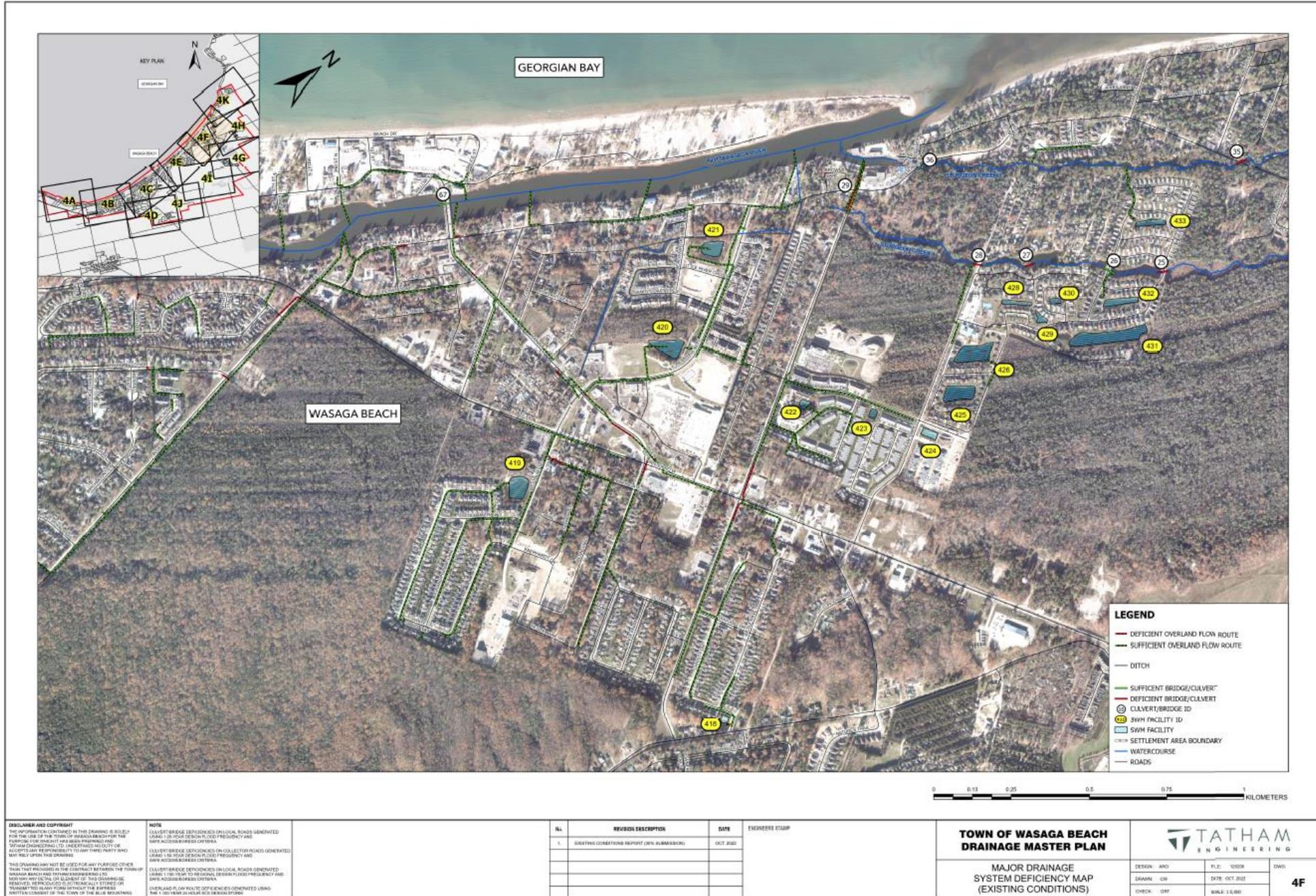


# Existing Major Drainage System Deficiencies

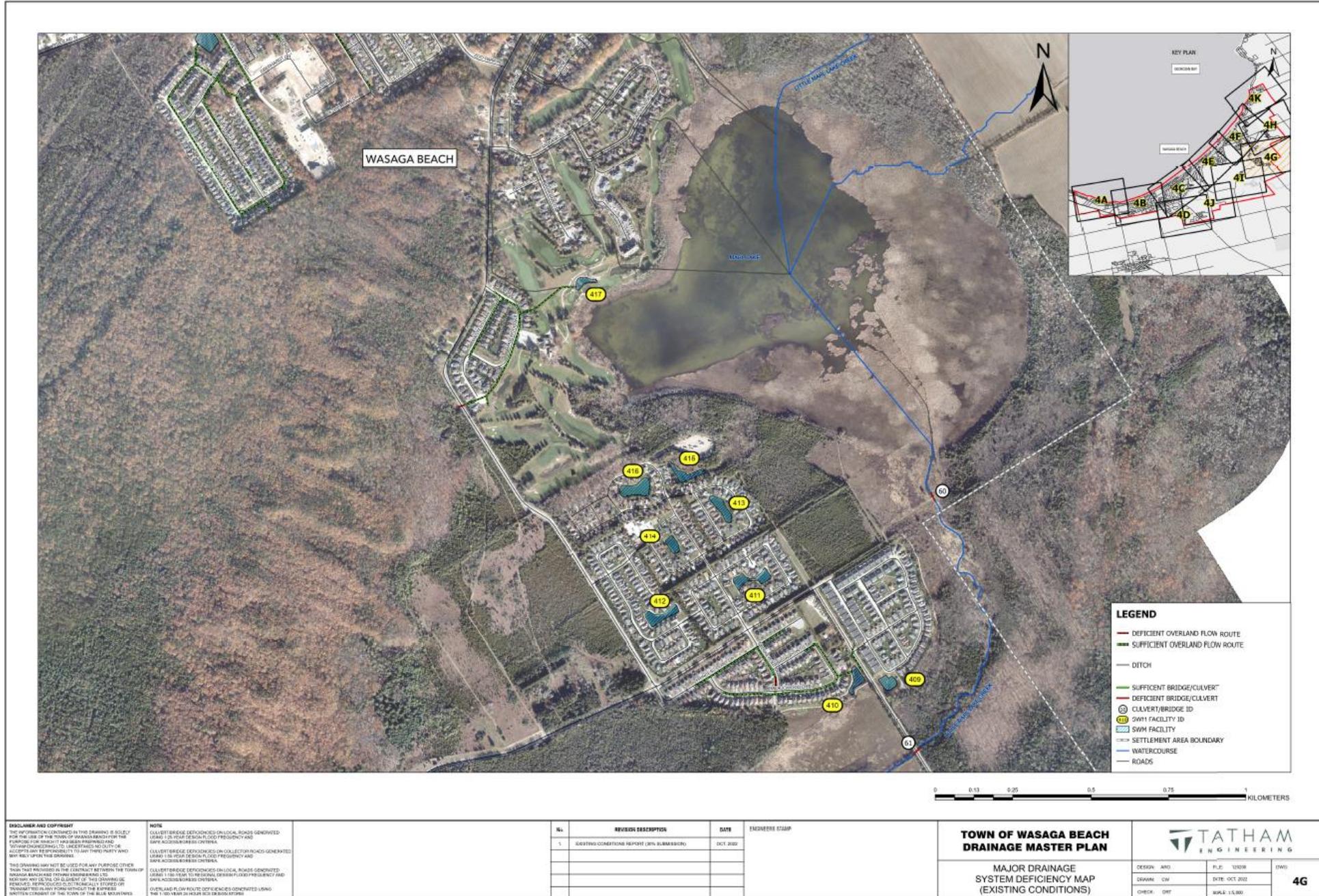




# Existing Major Drainage System Deficiencies

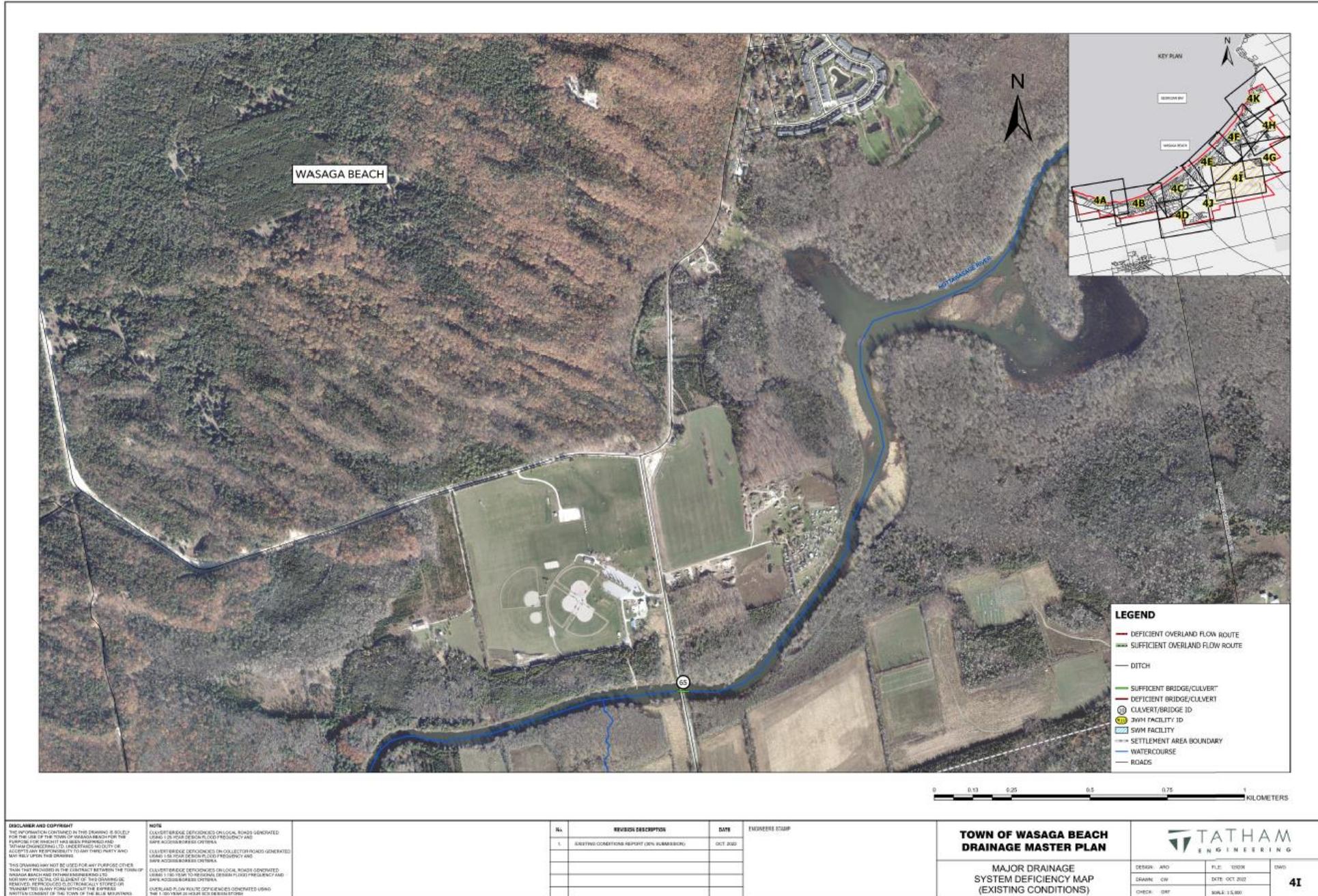


# Existing Major Drainage System Deficiencies

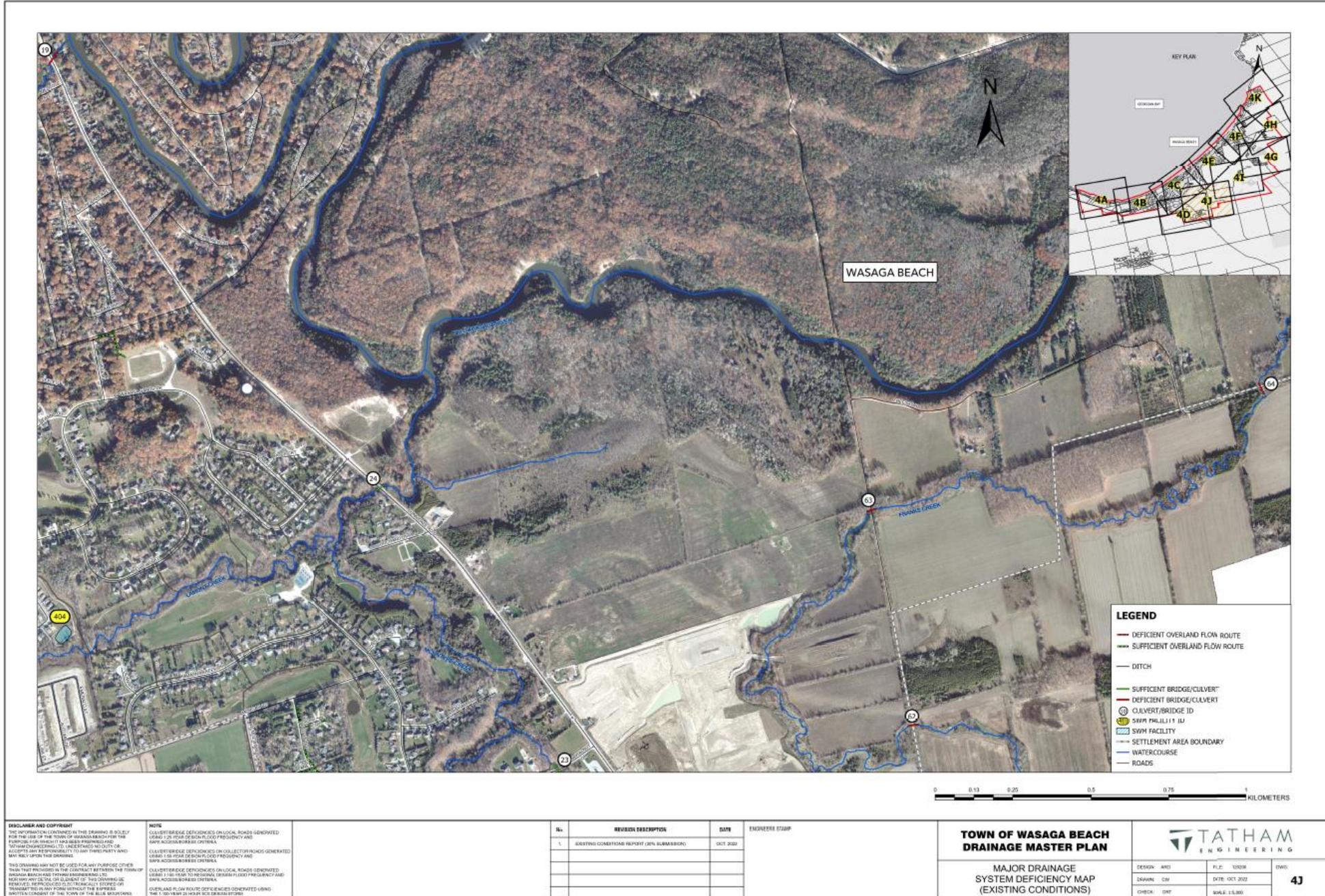




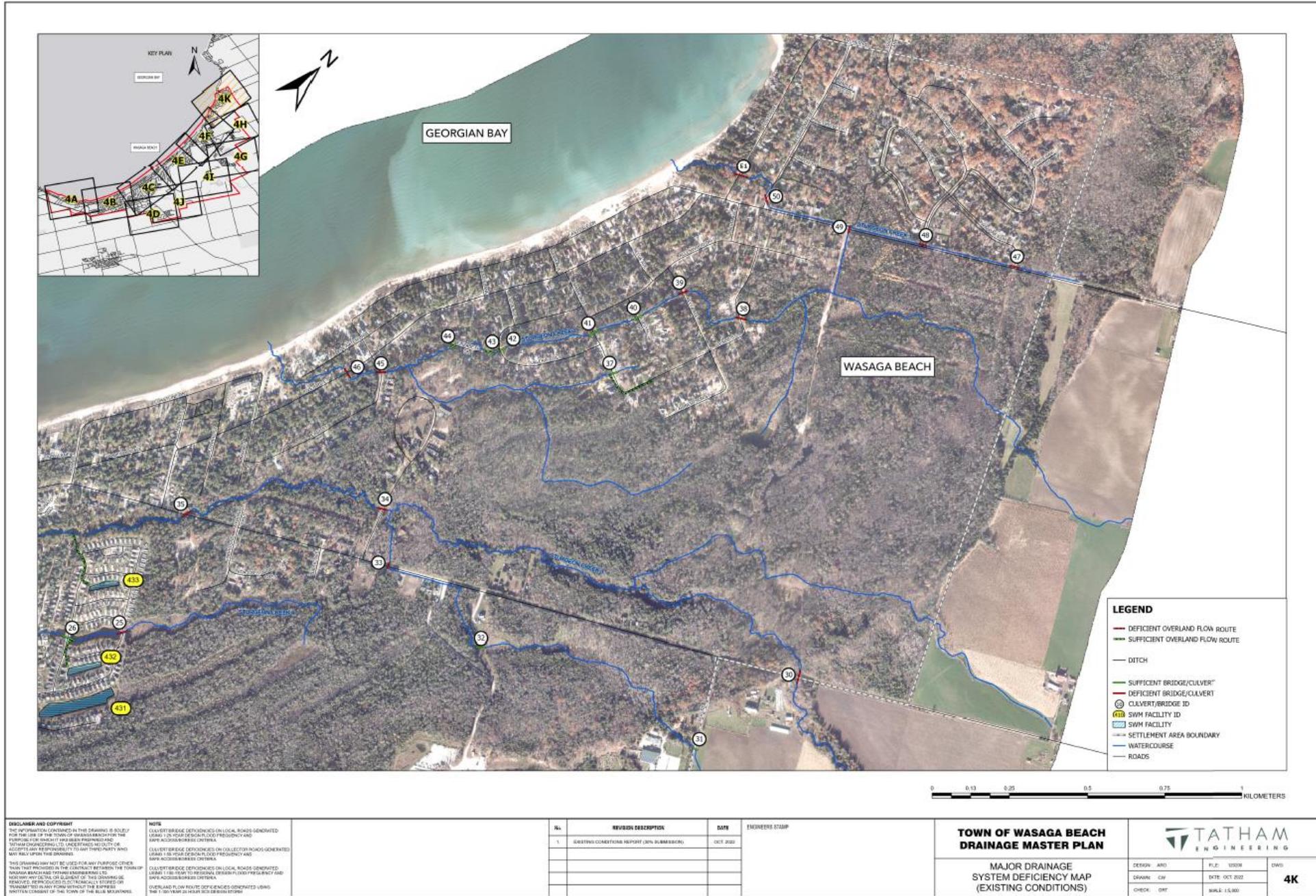
# Existing Major Drainage System Deficiencies



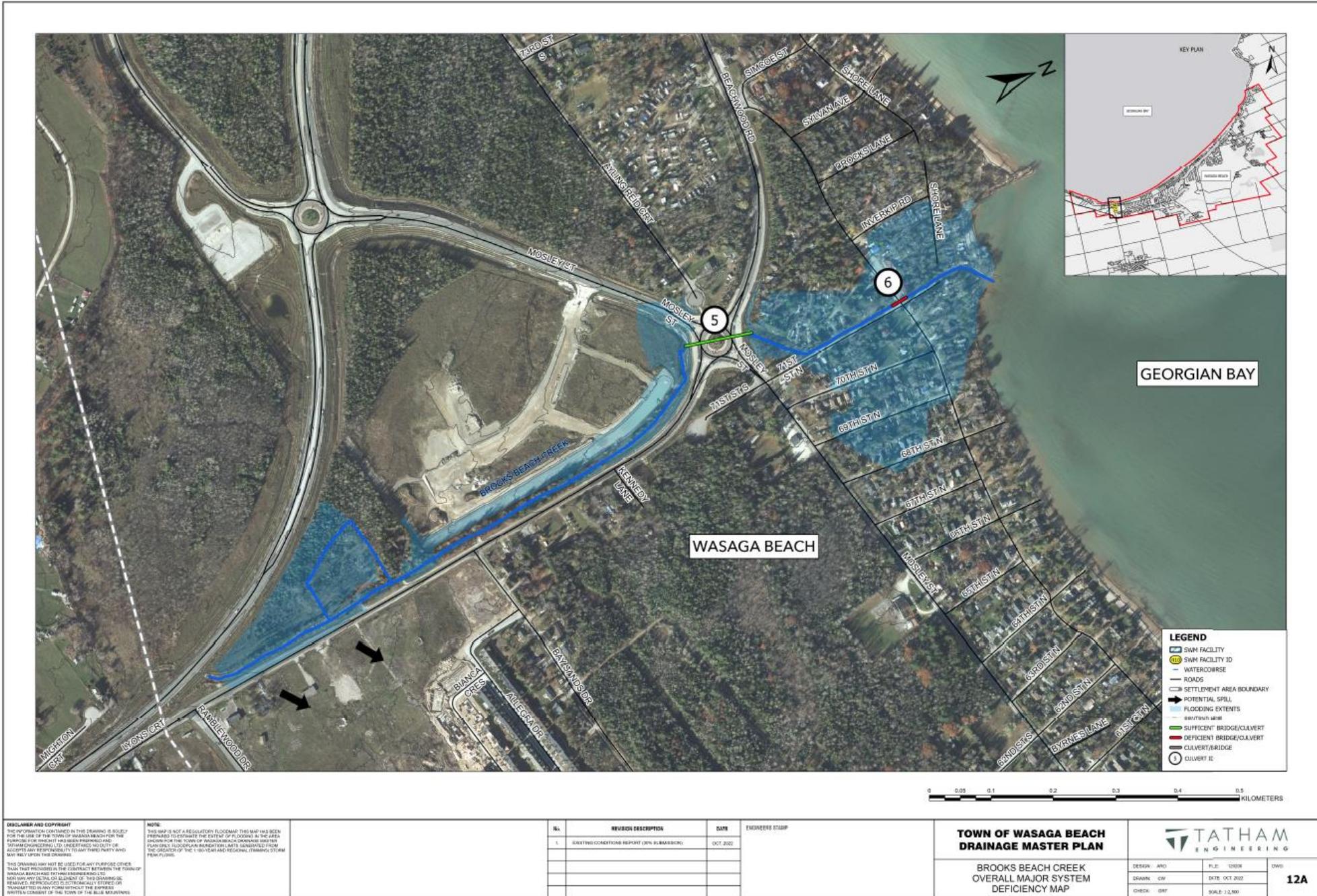
# Existing Major Drainage System Deficiencies



# Existing Major Drainage System Deficiencies



# Existing Flood Inundation Maps



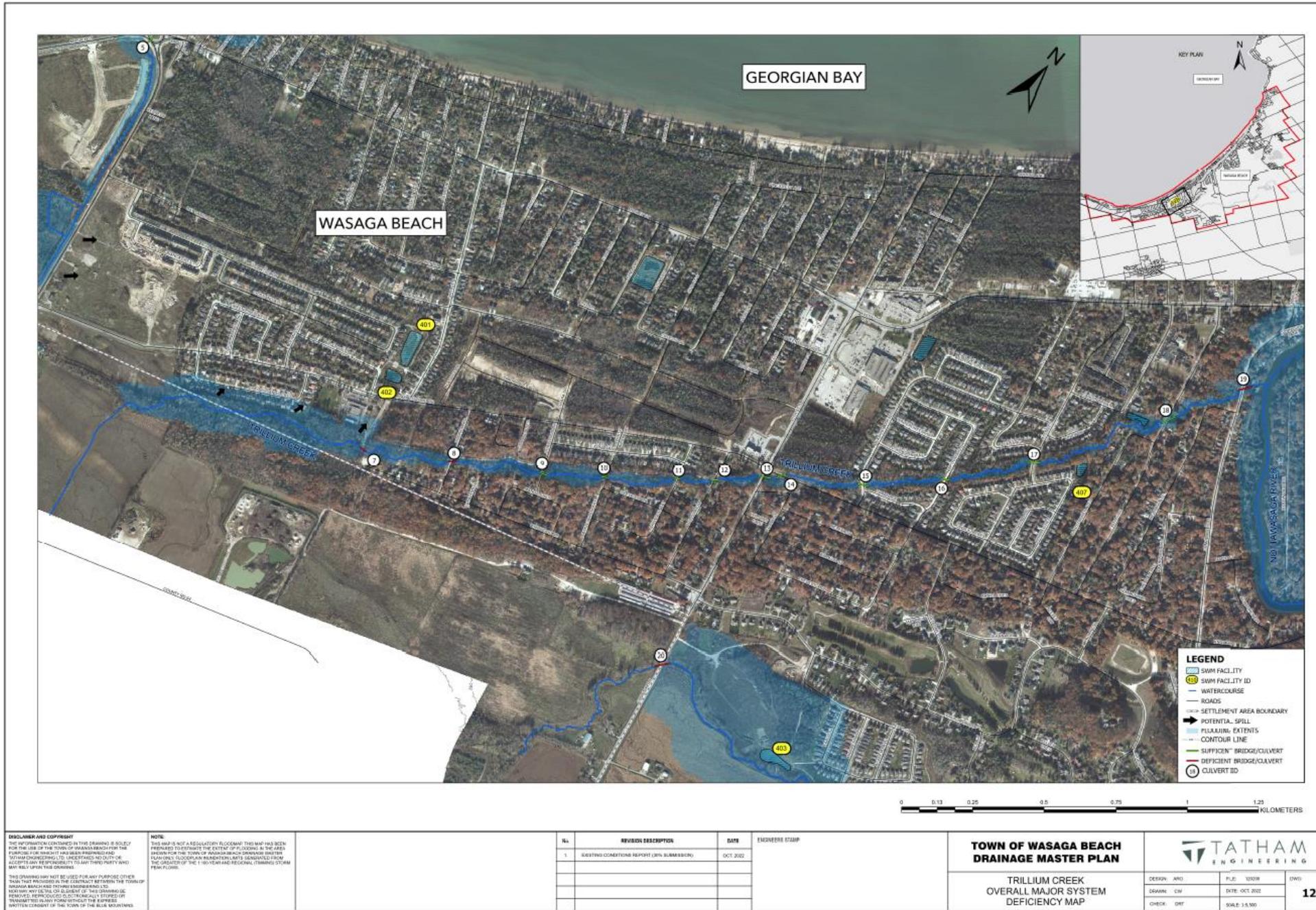
**DISCLAIMER AND COPYRIGHT**  
THE INFORMATION CONTAINED IN THIS DRAWING IS SOLELY FOR THE USE OF THE TOWN OF WASAGA BEACH FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND TATHAM ENGINEERING LTD. ACCEPTS NO LIABILITY OR ACCEPTS NO RESPONSIBILITY TO ANY THIRD PARTY WHO MAY RELY UPON THIS DRAWING.

**NOTE:**  
THIS MAP IS NOT A REGULATORY FLOODMAP. THIS MAP HAS BEEN PREPARED TO ESTIMATE THE EXTENT OF FLOODING IN THE AREA SHOWN FOR THE TOWN OF WASAGA BEACH DRAINAGE MASTER PLAN ONLY. FLOODPLAIN BOUNDARIES, LIMITS, CONTOURS, AND THE LOCATION OF THE 100-YEAR AND REGIONAL (TIMBER CREEK) FLOODS.

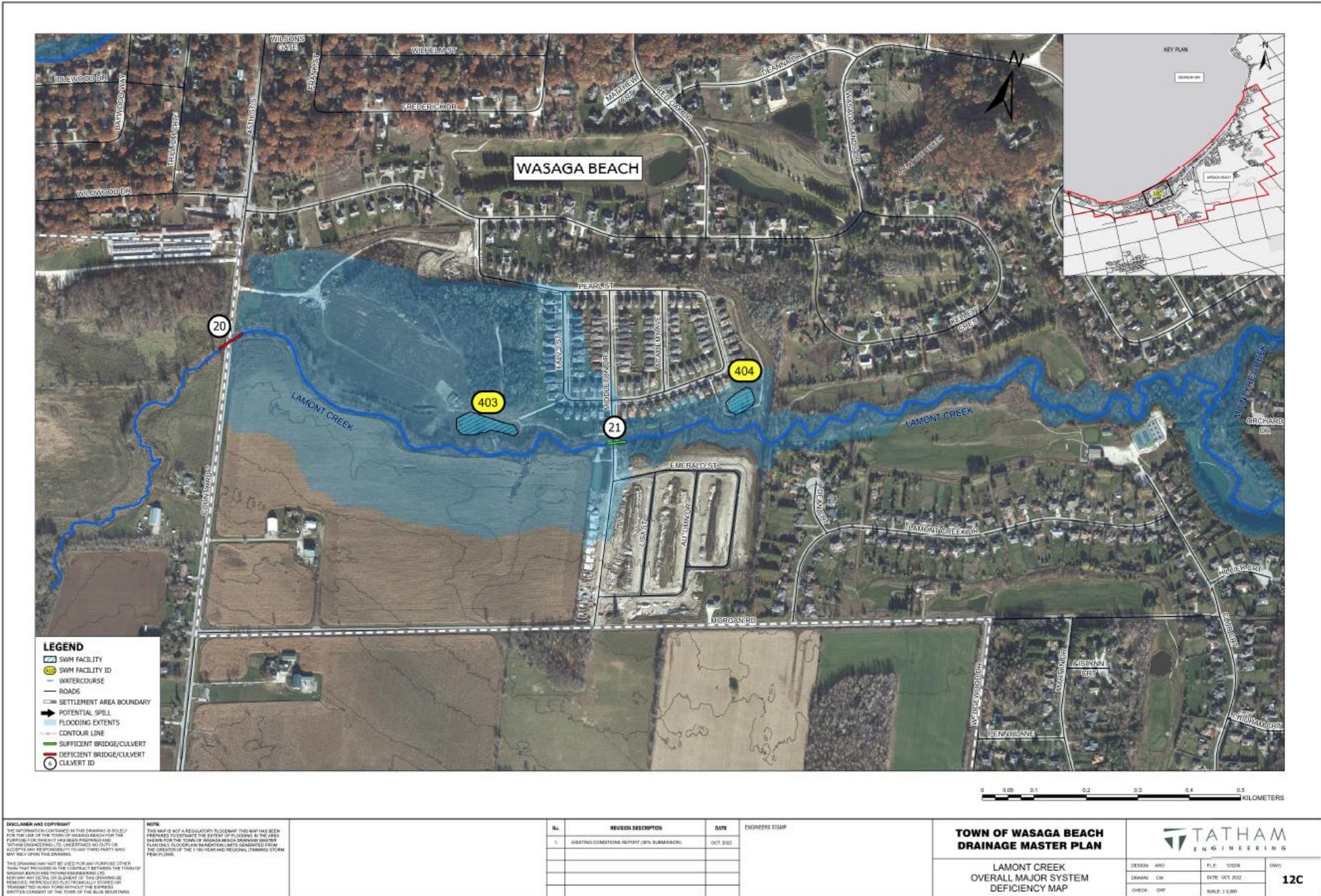
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No.	REVISION DESCRIPTION	DATE	ENGINEER STAMP
1.	EXISTING CONDITIONS REPORT (DPA SUBMISSION)	OCT. 2022	

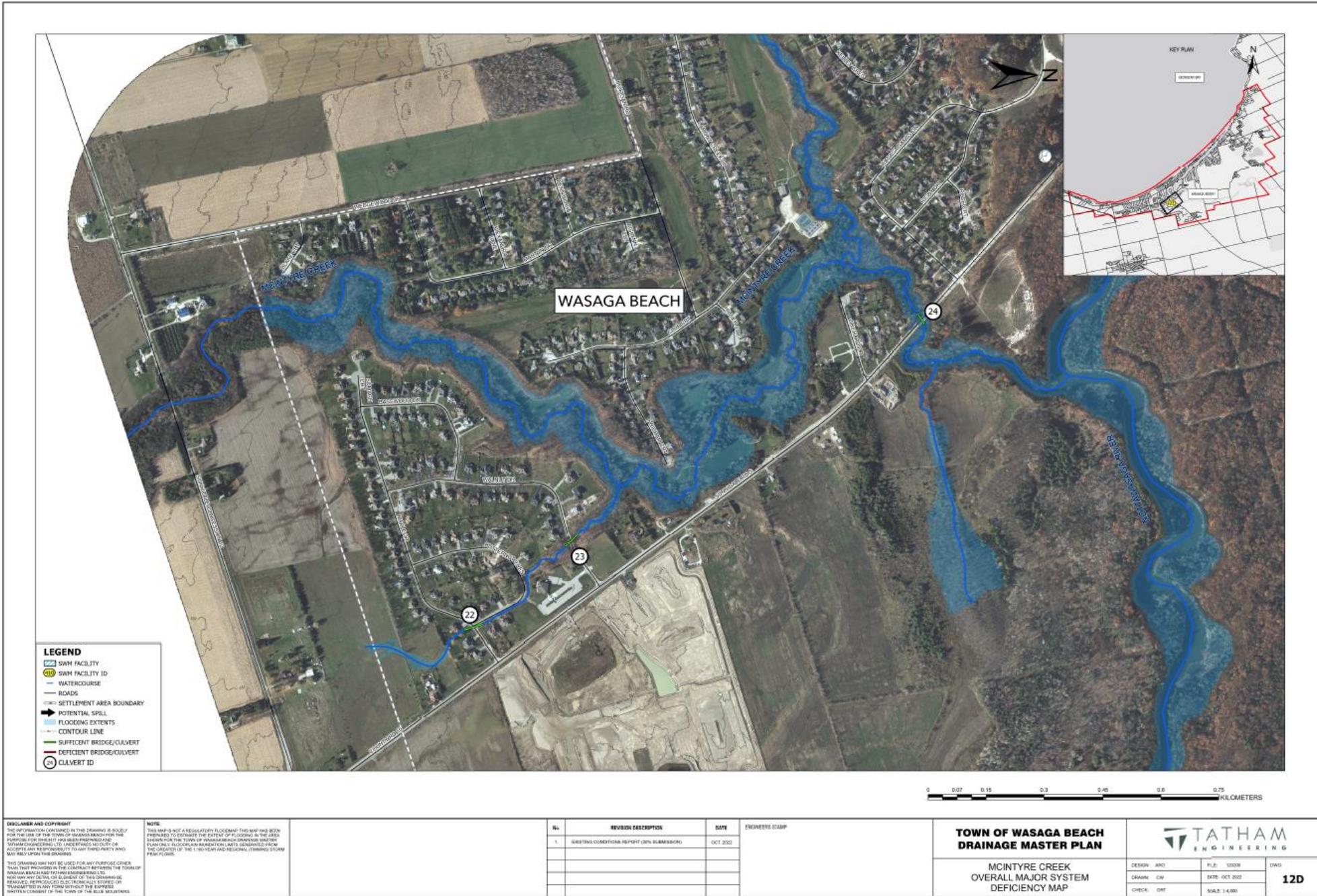
# Existing Flood Inundation Maps



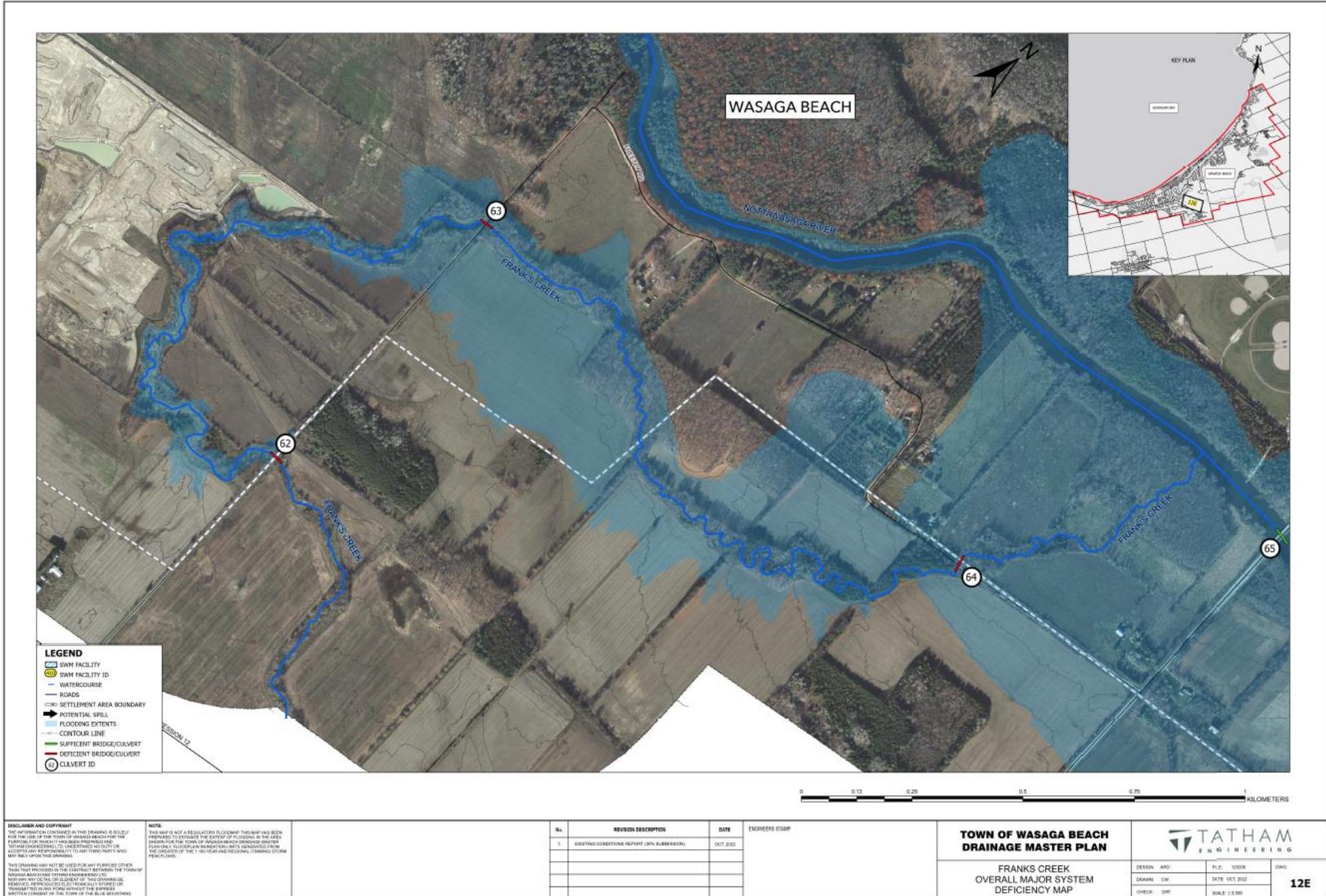
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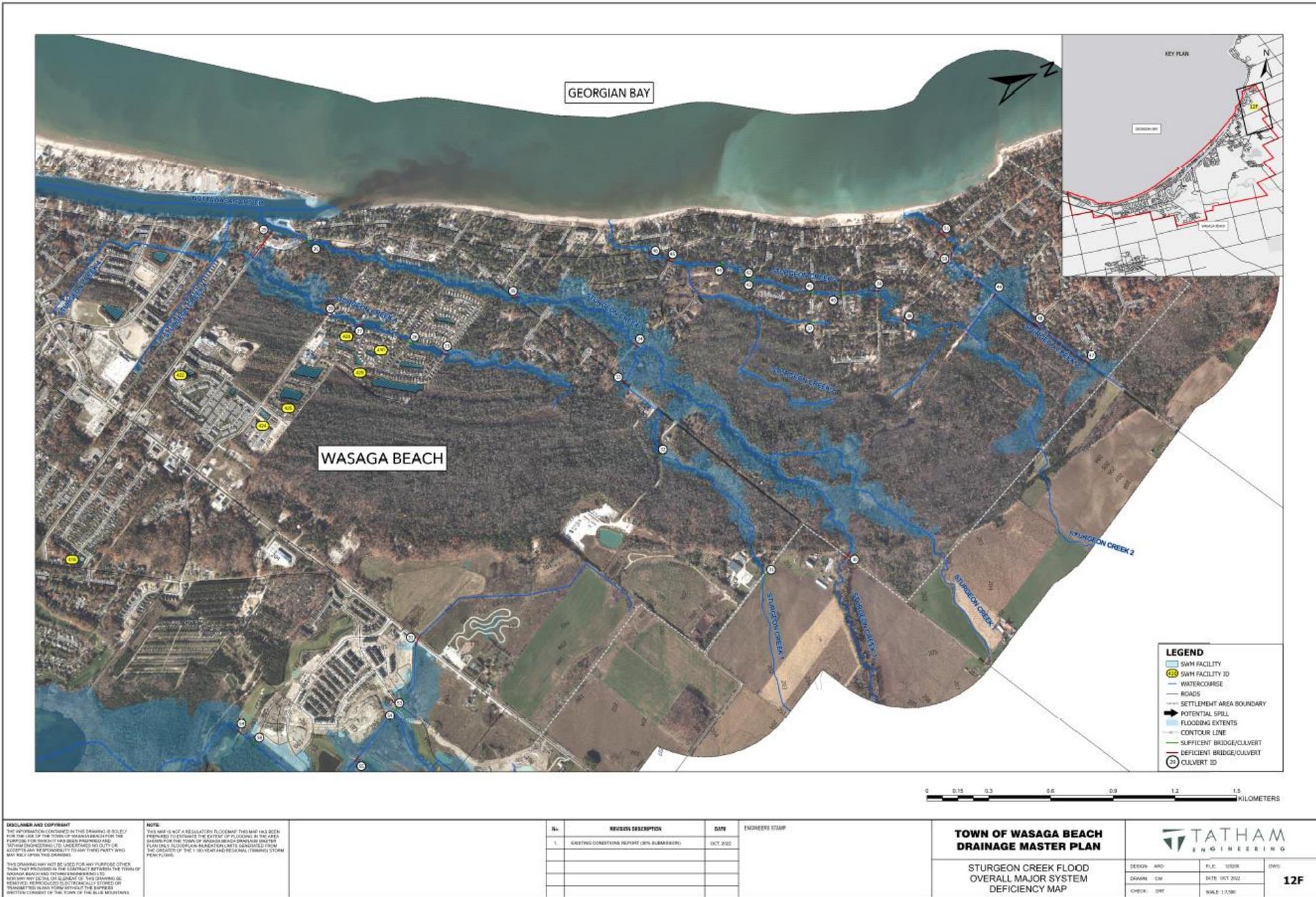
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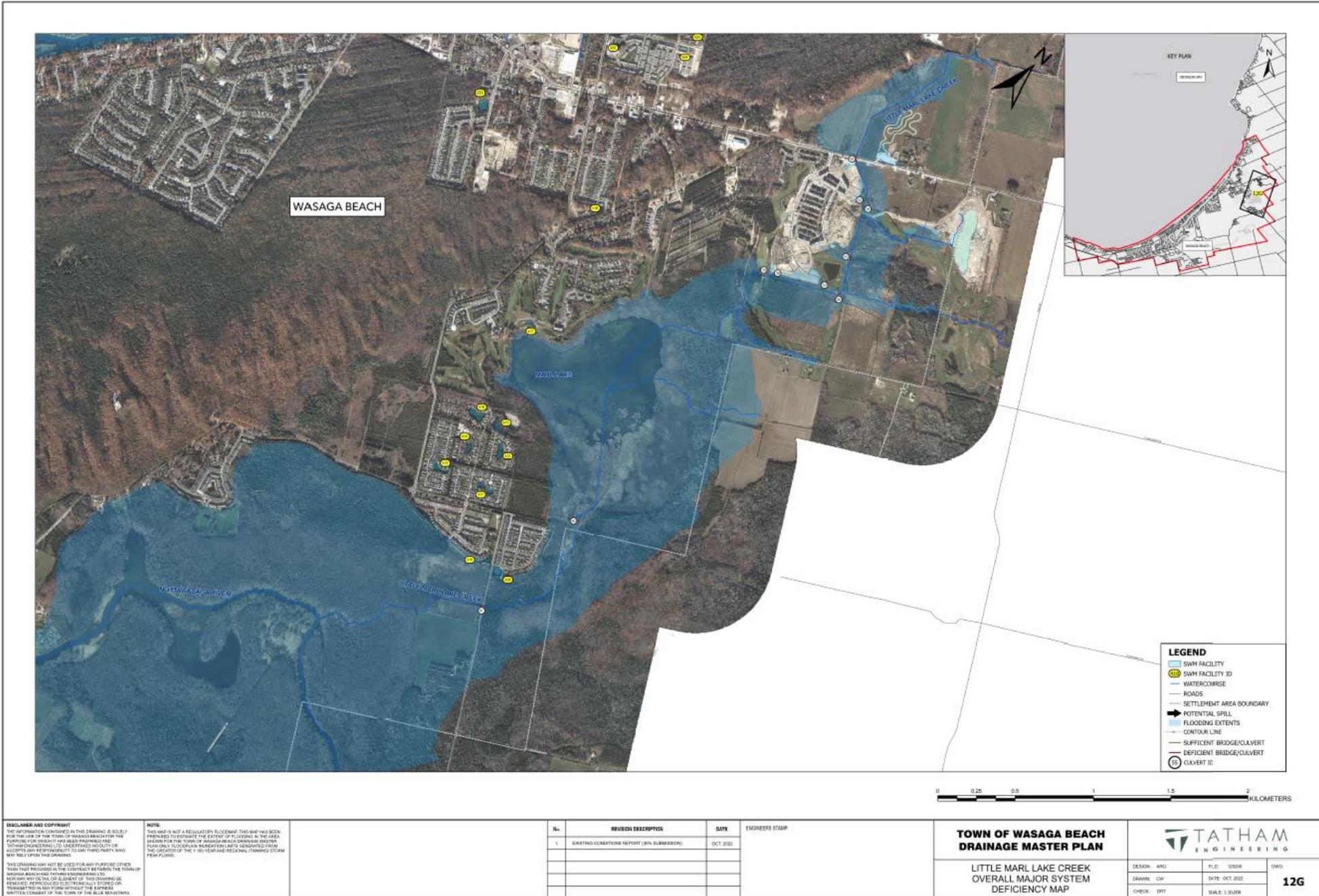
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NO.	REVISION DESCRIPTION	DATE	ENGINEER'S STAMP
1.	SUBMITTING CONDITIONS REPORT (30% SUBMISSION)	OCT 2022	

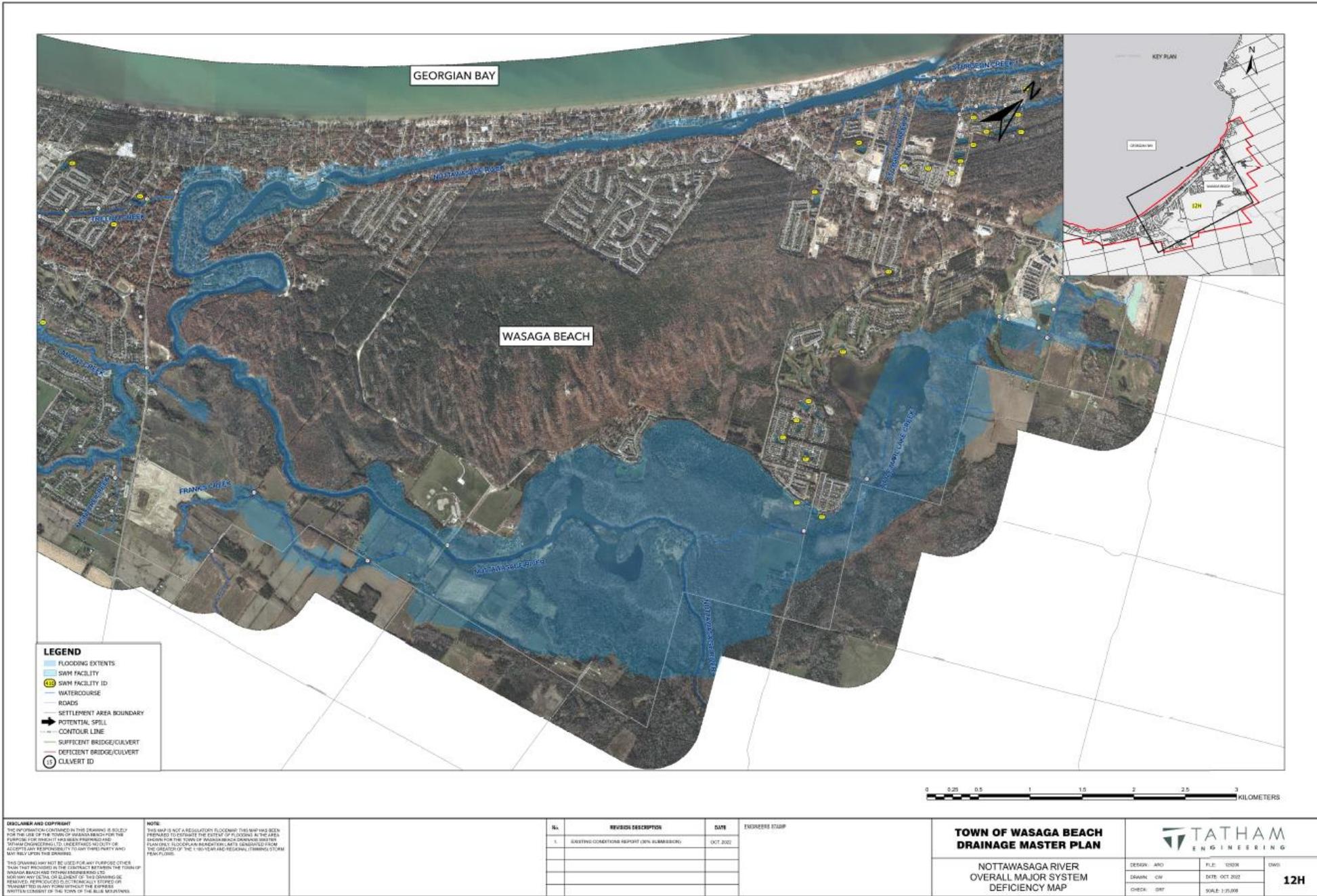
<b>TOWN OF WASAGA BEACH</b>		<b>TATHAM ENGINEERING</b>	
<b>DRAINAGE MASTER PLAN</b>		DESIGN: ARD	FILE: 10208
<b>STURGEON CREEK FLOOD OVERALL MAJOR SYSTEM DEFICIENCY MAP</b>		DRAWN: CSW	DATE: OCT 2022
		CHECK: DMF	SCALE: 1:3300

		<b>12F</b>	
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# Existing Flood Inundation Maps



# Existing Flood Inundation Maps





## Preliminary Improvement Options

# Improvement Options – Alternative Solutions

## 1. “Do Nothing” Alternative

- Baseline condition considered in evaluation of alternative solutions.
- Does not satisfy Town standards.
- Undersized storm sewer, culverts and bridges.
- Municipal infrastructure on private property.
- Areas absent of minor drainage systems.
- Flooding.



## 2. General Recommendations

- Upsize storm sewers to satisfy design standards.
- Relocation of municipal infrastructure from private property to municipally owned lands.
- Construct minor drainage systems in un-serviced, underserved areas.
- Improve overland flow routes.



# Improvement Options – Alternative Solutions

## 3. Flow Reduction/Water Quality Improvements

- Retrofit/Construct New Stormwater Management Facilities



# Improvement Options – Alternative Solutions

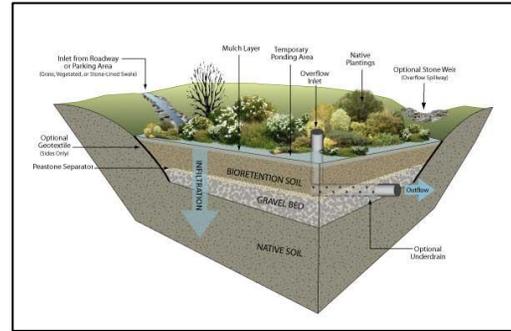
## 3. Flow Reduction/Water Quality Improvements

- Low Impact Development Measures

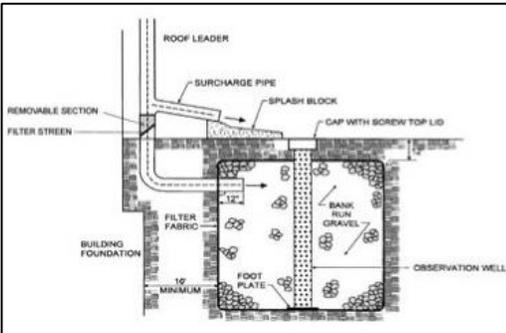
### Rainwater Harvesting



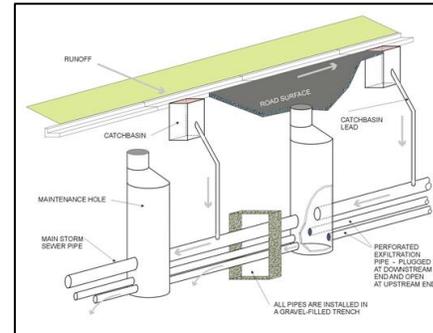
### Bioretention



### Soak away Pits / Infiltration Trenches



### Perforated Pipe Systems / Underground Infiltration Chambers



# Improvements Options – Alternative Solutions

## 4. Conveyance Capacity Improvements

- Constructing trunk storm sewers;
- Upsizing culverts and bridges;
- Watercourse and channel improvements;
- Improving outlet structures; and
- Improving or constructing overland flow routes.





Public Meeting, Comments and Next Steps

# Comments

We encourage the public to provide comments and concerns regarding this project. Public comments will be received between October 20, 2022 and November 3, 2022.

Written comments can be submitted at this public meeting or to Daniel Twigger and/or Jonathan Uylenbroek at the addresses below or by completing the comments sheet available on the project website.

**Consultant Contact**

**Daniel Twigger, B.Sc.Eng., P.Eng.**  
 Manager – Water Resources Engineering  
 Tatham Engineering Limited  
 115 Sandford Fleming Drive, Suite 200  
 Collingwood, ON L9Y 5A6  
 Tel: (705) 444-2565 ext. 2090  
 Email: dtwigger@tathameng.com

**Town Contact**

**Jonathan Uylenbroek, C.E.T., CAN-CISEC**  
 Project Coordinator  
 Town of Wasaga Beach  
 30 Lewis Street  
 Wasaga Beach, ON L9Z 1A1  
 Tel: (705) 429-2540 ext. 2342  
 Email: projects@wasagabeach.com



**TOWN OF WASAGA BEACH DRAINAGE MASTER PLAN  
 PUBLIC INFORMATION CENTRE 1  
 COMMENT SHEET**

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**NAME OF RESPONDENT:** \_\_\_\_\_

**REPRESENTING (Agency, Municipality, Property Owner, Tenant, etc.):** \_\_\_\_\_

**ADDRESS (Including Postal Code & Telephone Number):**

**Street Address:** \_\_\_\_\_ **Unit/Apt:** \_\_\_\_\_

**Postal Code:** \_\_\_\_\_ **Telephone Number:** \_\_\_\_\_

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If so, are you aware of any issues with the drainage infrastructure on your property?	Yes	No
Have you ever had damage caused by runoff on your property?	Yes	No
Have you ever noticed flooding on your street or another roadway in the Town?	Yes	No
If so, what street? _____		
Do you have any concerns regarding the water quality of the storm runoff in the Town?	Yes	No

Please list below any specific drainage concerns you are aware of within the Town of Wasaga Beach:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Public Meeting

Comments and information regarding this project are being collected to ensure a comprehensive approach to the study. These comments will be maintained for reference throughout the project and, with the exception of personal information, may be used in the final documentation and will become a part of the public record.

Personal information provided is collected under the authority of the Environmental Assessment Act, Chap. E18, Section 7, and will be used in the development of the Drainage Master Plan. Questions about this collection should be directed to Jonathan Uylenbroek, Project Coordinator by calling or emailing at the number or email address provided.

The Town of Wasaga Beach continues to enhance accessibility that is inclusive of all ages and abilities. The information presented in this Public Information Centre can be provided in alternative formats upon request. Such a request should be submitted to:

Town  
Contact

**Jonathan Uylenbroek, C.E.T., CAN-CISEC**

Project Coordinator  
Town of Wasaga Beach  
30 Lewis Street  
Wasaga Beach, ON L9Z 1A1  
Tel: (705) 429-2540 ext. 2342  
Email: [projects@wasagabeach.com](mailto:projects@wasagabeach.com)



## Next Steps and Public Information Centre 2

### Following PIC 1 and the Comment Period:

- We will review/address public, agency & stakeholder comments;
- Impacts of the alternative solutions will be identified;
- The alternative solutions will be evaluated;
- The preferred alternative solution will be selected;
- A second PIC will be held to present the evaluation process and selected preferred solution.

### Public Information Centre 2:

- Development, assessment and evaluation of alternative solutions will be presented along with preferred alternative solutions for transparency; and
- Comments/feedback will be elicited from the public, agencies and interested stakeholders.

### Please ensure you:

- Submit comments and concerns regarding this project; and
- Notify the Town if you wish to be kept informed of the staff recommendation regarding the Preferred Alternative Solution.

Please feel free to contact the Town and/or their Consultant any time should you have any further questions or concerns.





Thank you for your interest in this  
study!