



Town of The Blue Mountains Drainage Master Plan

Public Information Centre 2

VIRTUAL PUBLIC MEETING PRESENTATION



Welcome

Tatham Engineering Limited has been retained to prepare this Drainage Master Plan for the Town.



Municipal Class Environmental Assessment (MCEA)

This Drainage Master Plan is a broad level assessment detailing the existing drainage deficiencies identified in the study area. It considers improvement options available to address these deficiencies accounting for both climate change and future growth, and then evaluates these alternatives on their ability to meet the problem statement objectives. A preferred alternative solution is then selected for implementation.

Project
Contact

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Problem Statement:

“Identify drainage deficiencies and recommend solutions to improve the storm drainage systems across the Town of The Blue Mountains in consideration of impacts to the natural, social, physical, cultural and economic environments.”

Project Team:

The project team responsible for input and preparation of the Drainage Master Plan and its supporting documentation is comprised of the following:

- Town of The Blue Mountains
- Tatham Engineering Limited
- Grey Sauble Conservation Authority
- Nottawasaga Valley Conservation Authority
- Birks Natural Heritage Consultants
- Water’s Edge Consulting
- Archeoworks Inc.



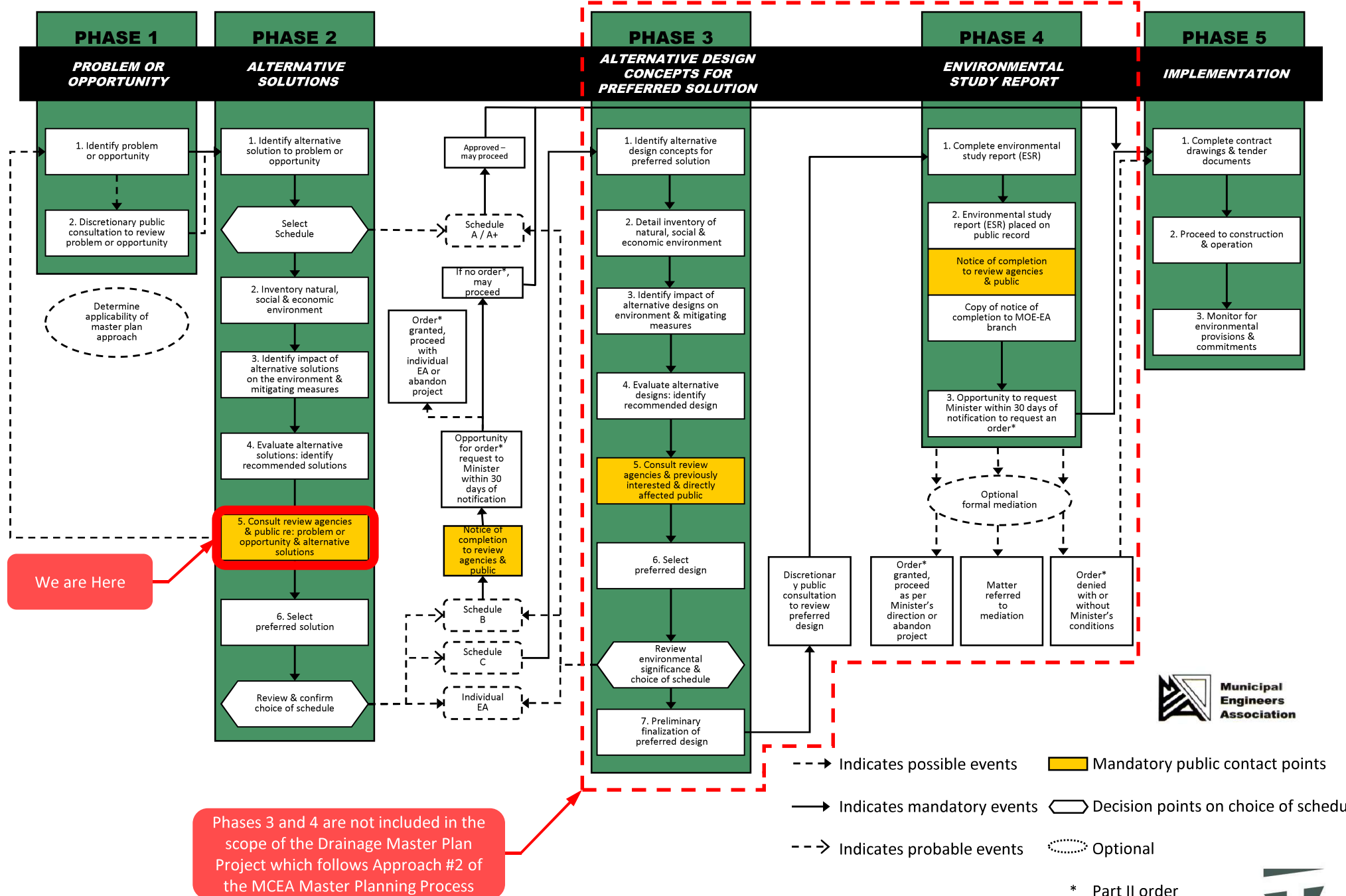


Existing Drainage Systems Analysis and Deficiency Identification (Phase 1 of MCEA)

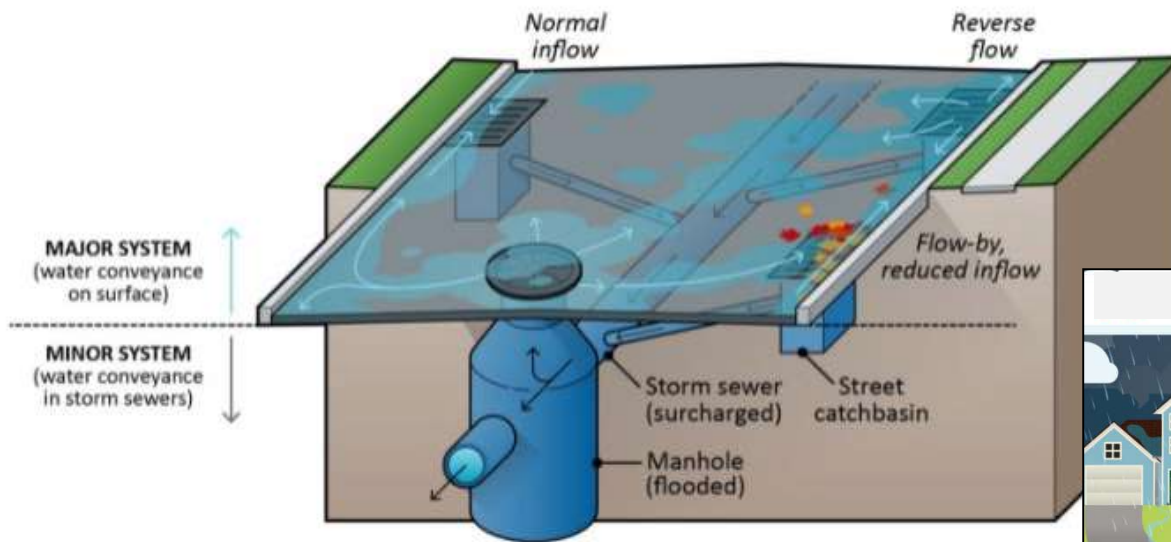
Study Area



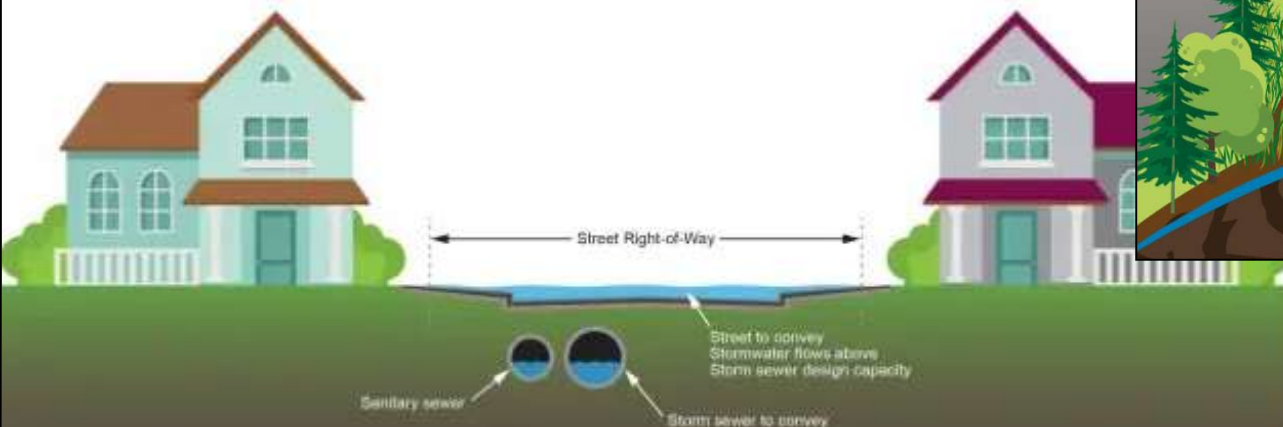
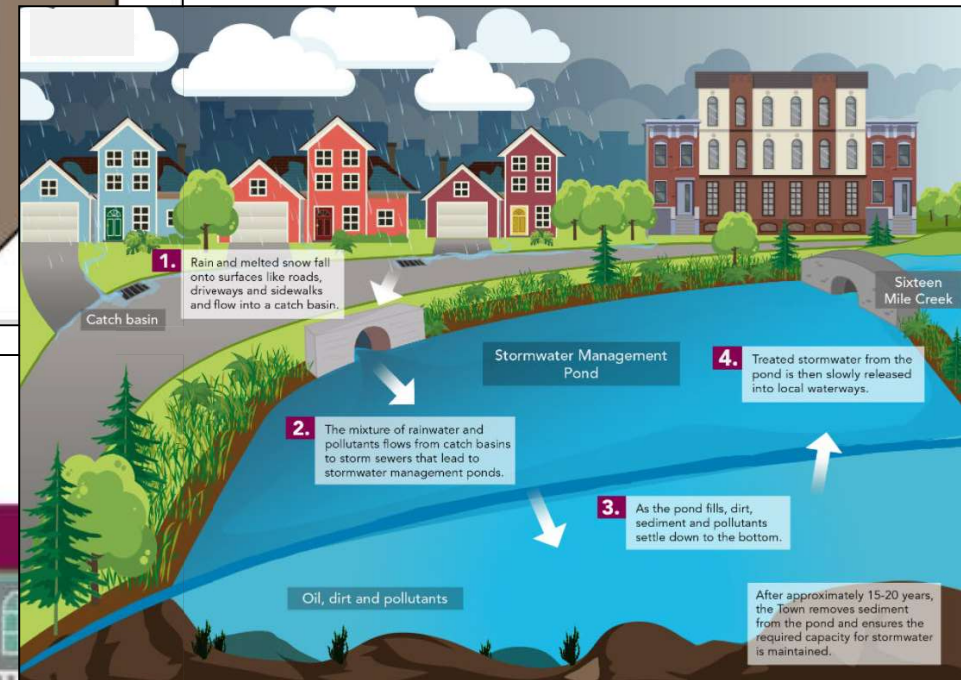
Municipal Class Environmental Assessment and Master Planning Process



Work Completed in Phase 1 of MCEA



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

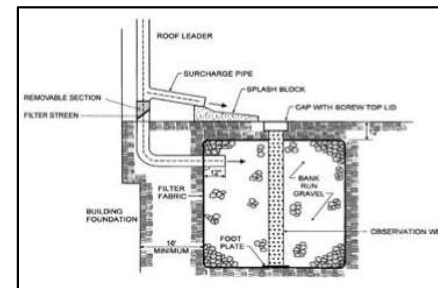


Work Completed in Phase 1 of MCEA

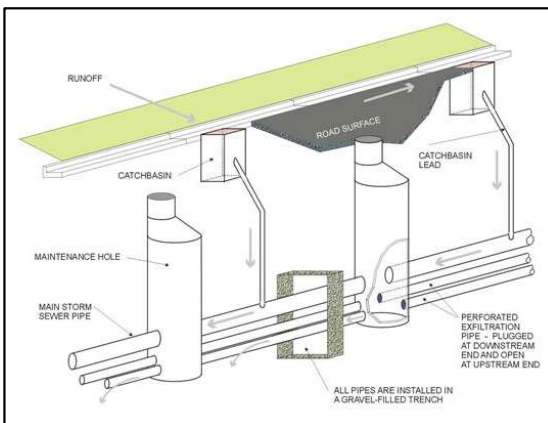
Stormwater Management Pond



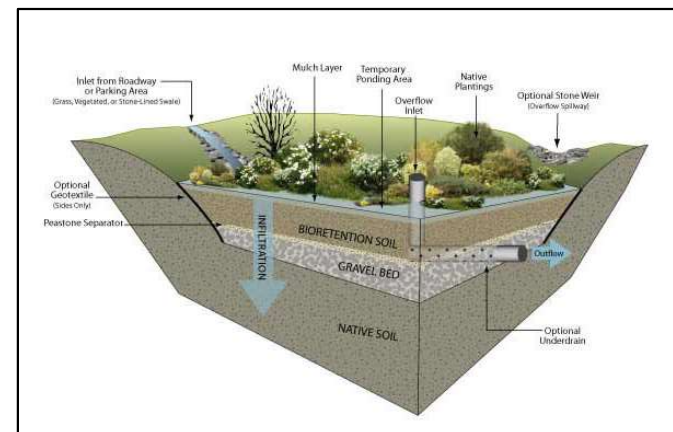
Lot Level LIDs



Linear LIDs



Centralized LIDs

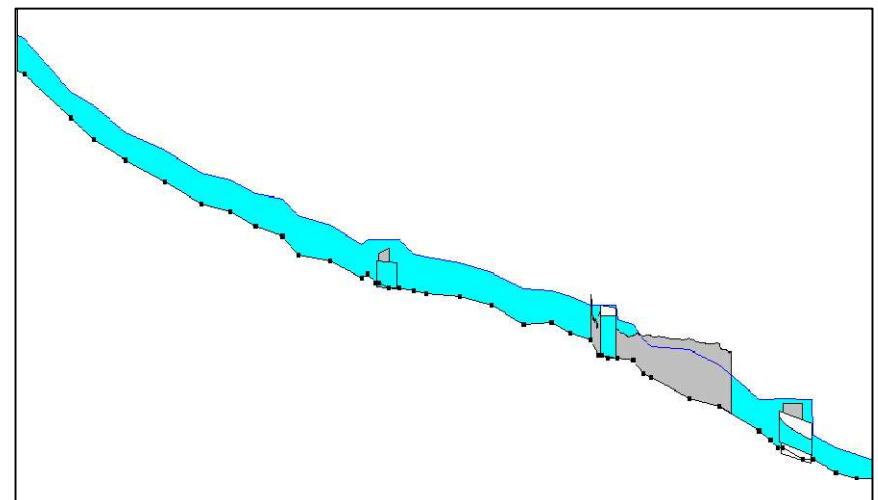
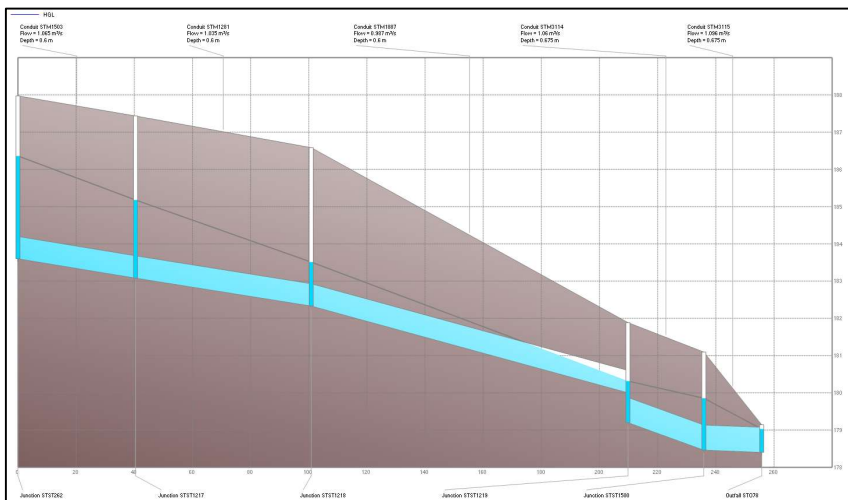


Work Completed in Phase 1 of MCEA: Drainage System Model Development

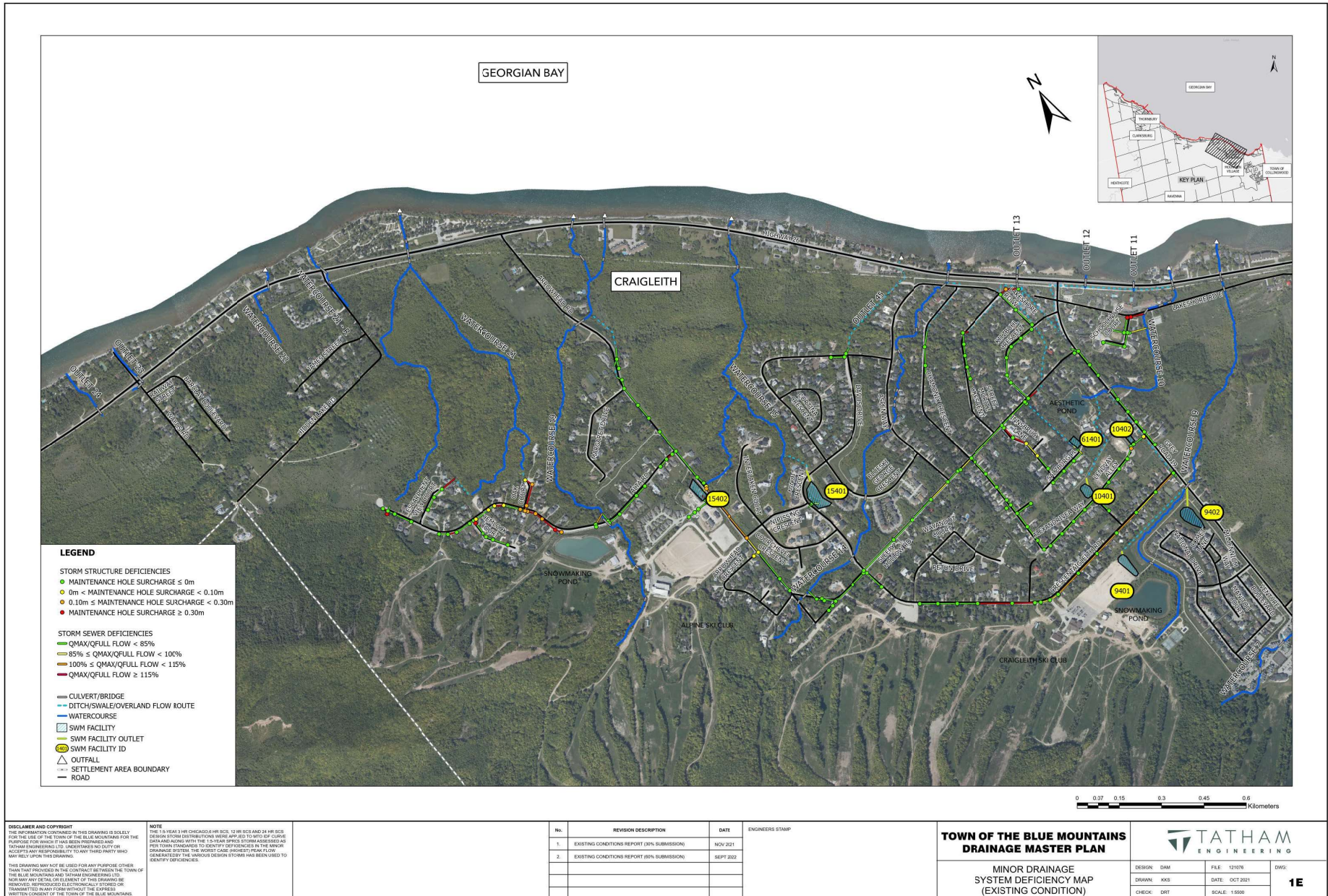
Minor Drainage System Model Excerpt



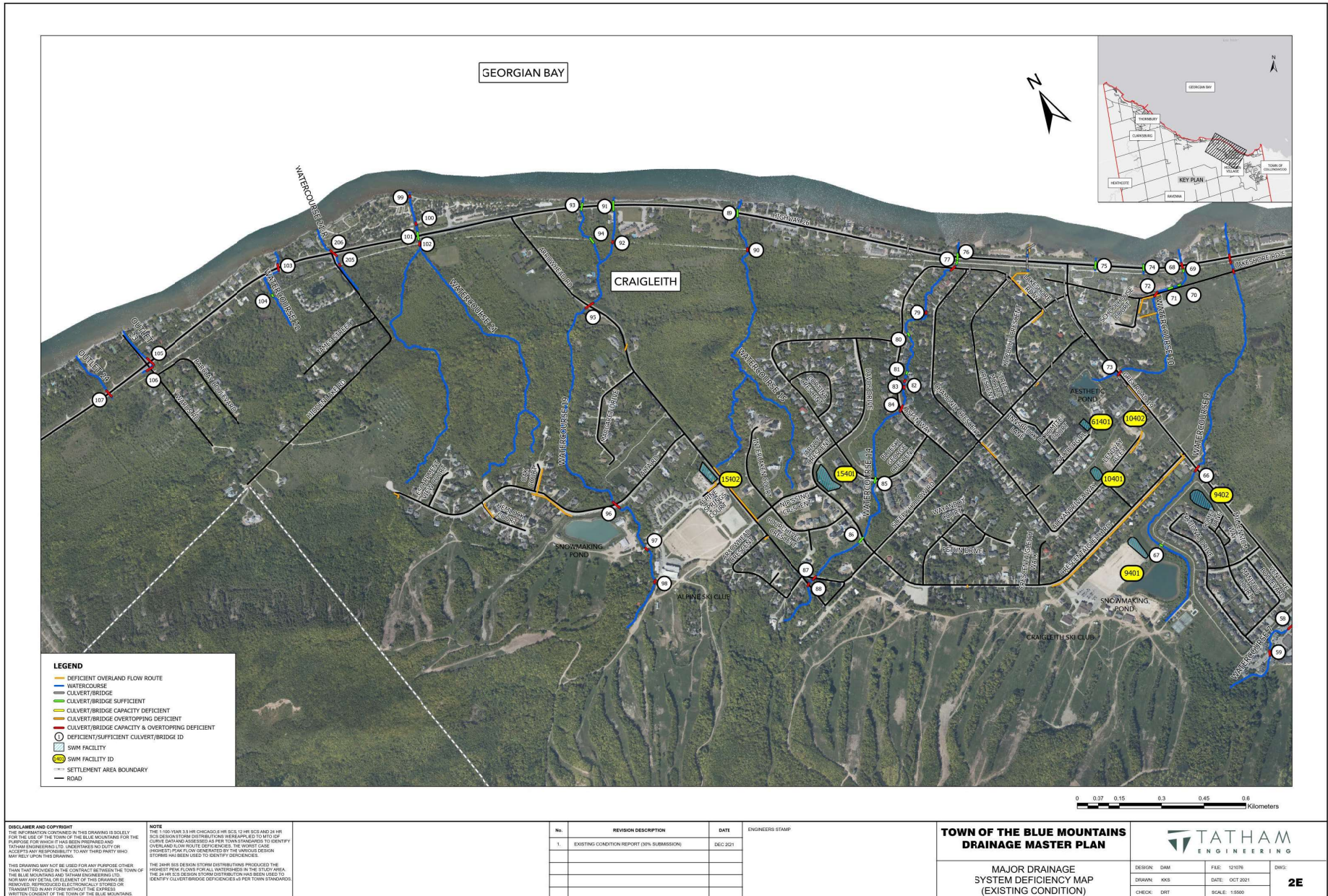
Major Drainage System Model Excerpt



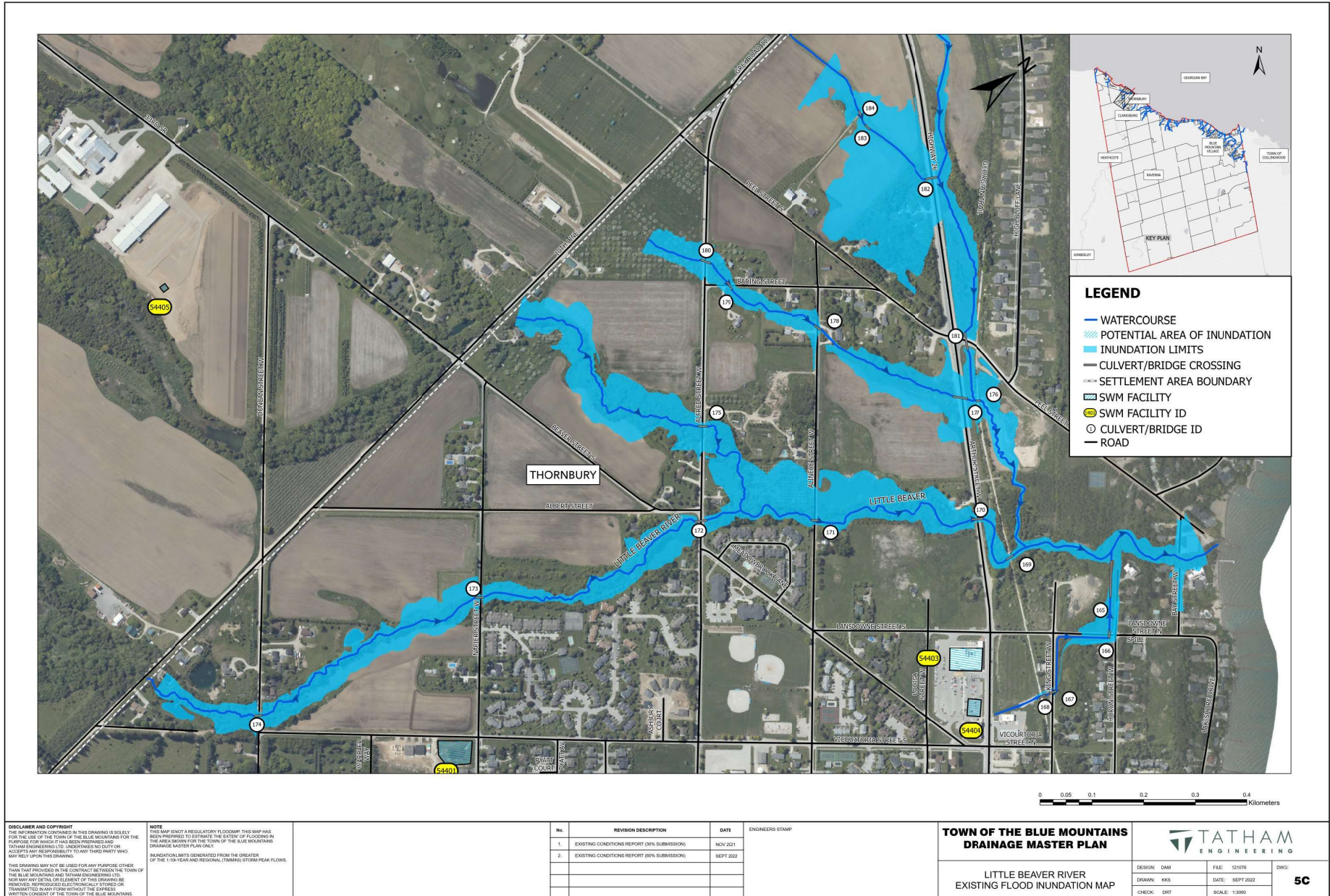
Work Completed in Phase 1 of MCEA: Existing Minor Drainage System Deficiencies



Work Completed in Phase 1 of MCEA: Existing Major Drainage System Deficiencies



Work Completed in Phase 1 of MCEA: Existing Condition Flood Inundation Maps



Public Information Centre 1

The following preliminary improvement options were presented at PIC1 for public input:

1. “Do Nothing” Alternative



2. General Recommendations



3. Flow Reduction/Water Quality Improvements



4. Conveyance Capacity Improvements




Public Information Centre 1

Public Information Centre 1 was held virtually in February 2022 to:

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

IMPROVEMENT OPTION	# OF RESPONDENTS
1. Do Nothing	0 (0%)
2. Storm Sewer Improvements	7 (100%)
3. Water Quality/ Flow Reduction Improvements	3 (43%)
4. Conveyance Improvements	6 (86%)

We appreciate the feedback received from PIC#1 . This feedback has been reviewed and considered when updating the existing condition analysis and when assessing the alternative solutions described later in this presentation.



**TOWN OF THE BLUE MOUNTAINS MASTER DRAINAGE PLAN
COMMENT SHEET**

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 Kevin Verkindt, Senior Infrastructure Capital Project Coordinator at the Town of The Blue Mountains, by calling (519-599-3131 ext. 304) or emailing Kevin (kpc@thebluemountains.ca).

NAME OF RESPONDENT: _____

REPRESENTING (Agency, Municipality, Property Owner, Tenant, etc.): _____

ADDRESS (Including Postal Code & Telephone Number):

Street Address: _____ **Unit/Apt:** _____

Postal Code: _____ **Telephone Number:** _____

Optional Virtual Public Meeting Q&A: ☐ No I did not or will not attend ☐ Yes I have attended or will attend (registration required)

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 The Blue Mountains in consideration of impacts to the natural, social, physical, cultural and economic environments."

A PDF version of the Drainage Master Plan Existing Conditions Report for Public Information Centre 1 is available online on the Town of The Blue Mountains web page at the following link: <https://www.thebluemountains.ca/MasterDrainagePlanEA>. 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

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 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 The Blue Mountains:





Development, Assessment and Evaluation of Alternative Solutions (Phase 2 of MCEA)

Development of Alternative Solutions

Improvement alternatives were developed based on the noted drainage deficiencies and the input received from the public during PIC #1. The following improvement alternatives were considered to address the project problem statement and correct the noted existing drainage deficiencies:

Alt. No.	Description	Alt. No.	Description
1A	“Do Nothing” Minor Drainage Systems	2F	Centralized Low Impact Development Measures
1B	“Do Nothing” Major Drainage Systems	2G	Mechanical Treatment Devices (Oil Grit Separators)
2A	Retrofit/New Stormwater Management Facilities for Quantity Control	3A	Minor Drainage System Improvements
2B	Retrofit New Stormwater Management Facilities for Quality Control	3B	Culvert/Watercourse Major Drainage System Improvements
2C	Expansion of Existing Floodplain Storage Areas	3C	Trunk Storm Sewer/Overland Flow Route Major Drainage System Improvements
2D	Lot Level Low Impact Development Measures	3D	Drainage Outlet Design, Operation and Maintenance
2E	Linear Low Impact Development Measures	3E	Drainage Infrastructure Operation and Maintenance



Assessment of Alternative Solutions

A pre-screening exercise was completed for the improvement alternatives to determine which alternatives would be eliminated from consideration, carried forward as general recommendations, or identified for assessment and evaluation on an individual project basis.

The results of the screening exercise are summarized in the table below. Individual projects for alternatives 2A, 2B, 2C, 3B, and 3C were identified based on existing deficiencies and options for each individual project were evaluated to determine the preliminary preferred solutions.

General Recommendation	Individual Projects	Eliminated
Alternative 2D - Lot Level Low Impact Development Measures	Alternative 2A - Retrofit/New Stormwater Management Facilities for Quantity Control	Alternative 1A - "Do Nothing" Minor Drainage Systems
Alternative 2E - Linear Low Impact Development Measures	Alternative 2B - Retrofit/New Stormwater Management Facilities for Quality Control	Alternative 1B - "Do Nothing" Major Drainage Systems
Alternative 2G - Mechanical Treatment Devices (Oil Grit Separators)	Alternative 2C - Expansion of Existing Floodplain Storage Areas	Alternative 2F - Centralized Low Impact Development Measures
Alternative 3A - Minor Drainage System Improvements	Alternative 3B - Culvert/Watercourse Major Drainage System Improvements	
Alternative 3D - Drainage Outlet Design, Operation and Maintenance	Alternative 3C - Trunk Storm Sewer/Overland Flow Route Major Drainage System Improvements	
Alternative 3E - Drainage Infrastructure Operation and Maintenance		



Evaluation of Alternative Solutions

A total of 117 individual projects were identified for alternatives 2A, 2B, 2C, 3B, and 3C with multiple options being considered for some projects. Preliminary designs and cost estimates were completed for each project to assist with the project evaluations.

Projects were evaluated with respect to their impact on the physical, natural, social/cultural and economic environments.

					Recommended Project					Feasible Project (Conditional)		Not Recommended/Not Feasible	
Watershed	Project No.	Improvement Name/ID	Location	Description	Physical Environment	Economic Environment	Social/Cultural Environment	Natural Environment	Overall Impact				
Watercourse 55	1A	Culvert No. 198 / TOBM Asset ID	Sunset Boulevard	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Moderate capital and minor maintenance/life cycle costs.	Property acquisition required; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	2A	Culvert No. 199 / TOBM Asset ID	39th Sideroad	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Major reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; major improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	2E			Improve culvert crossing to extent possible within municipal road allowance.	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	3A	Culvert No. 200 / TOBM Asset ID	357516 Christie Beach Road	Improve culvert crossing to satisfy design flood frequency criteria.	Minor reduction in flooding and erosion potential.	Minor capital and moderate maintenance/life cycle costs.	Temporary disturbance; minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	3B			Improve culvert crossing to satisfy design flood frequency criteria and safe access/egress criteria.	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	4A	Culvert No. 201 / TOBM Asset ID	357508 Christie Beach Road	Improve culvert crossing to satisfy design flood frequency criteria.	Minor reduction in flooding and erosion potential.	Minor capital and moderate maintenance/life cycle costs.	Temporary disturbance; minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	4B			Improve culvert crossing to satisfy design flood frequency criteria and safe access/egress criteria.	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
Boulder Channel	5A	Culvert No. 203 / TOBM Asset ID	Christie Beach Road	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	5E			Improve culvert crossing to extent possible within municipal road allowance.	Minor reduction in flooding and erosion potential.	Minor capital and moderate maintenance/life cycle costs.	Temporary disturbance; minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	6A	Culvert No. 185 / TOBM Asset ID	Sunset Boulevard	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	7A			Install trunk storm sewer to resolve overland flow (major system) deficiency.	Moderate reduction in flooding.	Major capital cost with minor reduction in maintenance/life cycle costs.	Major disturbance with moderate improvement in public safety.	No impact					
	7B	Trunk Storm Sewer No. 1	East Ridge Drive	Install relief storm sewer through new easement to direct high flows to Lake Drive outlet.	Moderate reduction in flooding with minor increase in erosion potential.	Minor capital cost with minor increase in maintenance/life cycle costs.	Property acquisition with moderate improvement in public safety.	No impact					
	7F			Do Nothing	No net change in water quality; treatment, flooding or erosion potential.	No Capital costs and moderate maintenance/life cycle costs.	No net change in moderate public safety hazard.	No impact					
	7F			Do Nothing	No net change in water quality; treatment, flooding or erosion potential.	No Capital costs and moderate maintenance/life cycle costs.	No net change in moderate public safety hazard.	No impact					
Little Beaver River	8A	Culvert No. 176 / TOBM Asset ID	Georgian Trail	Improve culvert crossing to satisfy design flood frequency criteria.	Minor reduction in flooding and erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	9A			Improve culvert crossing to satisfy design flood frequency criteria.	Potential increase in downstream flooding.	Minor capital and maintenance/life cycle costs.	Temporary disturbance with minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	9F	Culvert No. 178 / TOBM Asset ID	Alice Street West	Do Nothing	No net change in water quality; treatment, flooding or erosion potential.	No capital cost and minor maintenance/life cycle costs.	No Net Change	Impede fish passage; medium sensitivity feature with no tree removal.					
	9G			Improve Alice Street West culvert and downstream driveway culvert to satisfy design flood frequency criteria.	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance with minor improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	10A			Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	10F	Culvert No. 179 / TOBM Asset ID	Baring Street	Do Nothing	No net change in water quality; treatment, flooding or erosion potential.	No capital and moderate maintenance/life cycle costs.	No net change in moderate public safety hazard.	Medium sensitivity feature with no tree removal.					
	11A			Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	11F	Culvert No. 180 / TOBM Asset ID	Alfred Street West	Do Nothing	No net change in water quality; treatment, flooding or erosion potential.	No capital and moderate maintenance/life cycle costs.	No net change in moderate public safety hazard.	Medium sensitivity feature with no tree removal.					
	12A	Culvert No. 171 / TOBM Asset ID	Alice Street West	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Moderate capital and minor maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with no tree removal.					
	13A	Culvert No. 173 / TOBM Asset ID	Napier Street West	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	14A	Culvert No. 174 / TOBM Asset ID	Duncan Street West	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Moderate reduction in flooding and minor reduction in erosion potential.	Minor capital and maintenance/life cycle costs.	Temporary disturbance; moderate improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					
	113A	Culvert No. 175 / TOBM Asset ID	Alfred Street West	Improve culvert crossing to satisfy design flood frequency criteria (consequently satisfies safe access/egress criteria).	Major reduction in flooding and minor reduction in erosion potential.	Moderate capital cost and moderate maintenance/life cycle costs.	Major disturbance; major improvement in public safety.	Improve fish passage; medium sensitivity feature with minor tree removal.					





Preliminary Preferred Solution

General Recommendations

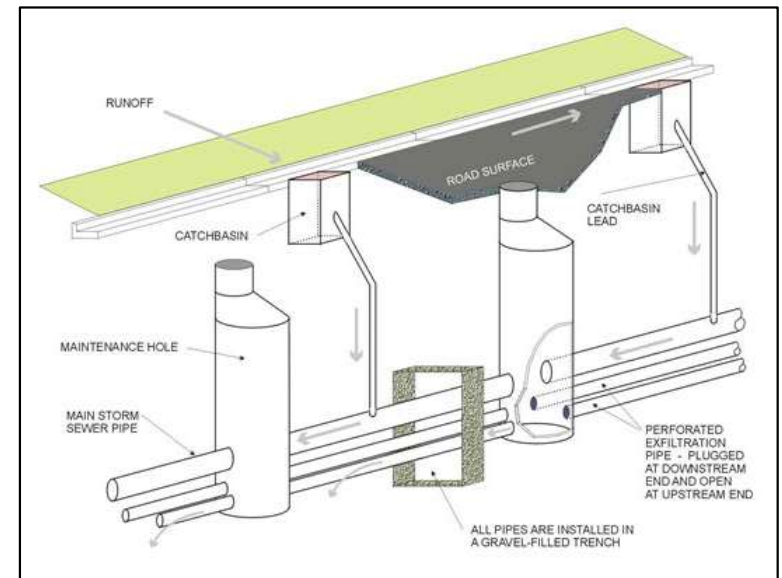
Minor Drainage System Improvements (Alt. 3A)

- Upsize storm sewer to satisfy current design standards;
- Relocate drainage infrastructure from private property to municipal lands; and
- Improve areas absent of minor drainage systems to include storm sewers or roadside ditches.



Water Quality Improvements (Alts. 2D, 2E & 2G)

- Encourage residents to implement Lot Level LIDs;
- Implement Linear LIDs as part of future road reconstruction projects; and
- Install Mechanical Treatment Devices within the storm sewer network.



General Recommendations

Drainage Outlet Design, Operation and Maintenance (Alt. 3D)

- Implement design criteria for drainage outlets to Georgian Bay;
- Establish a formal procedure for the inspection, operation and maintenance of Town-owned drainage outlets; and
- Progressively purchase property or easements for drainage outlets where it is in the Town's interest to do so.



Drainage System Operation and Maintenance (Alt. 3E)

- Formalize procedure for the inspection, operation and maintenance of culvert crossings;
- Formalize procedure for the inspection, operation and maintenance of stormwater management facilities; and
- Formalize procedure for the inspection, operation and maintenance of mechanical treatment devices.



General Recommendations

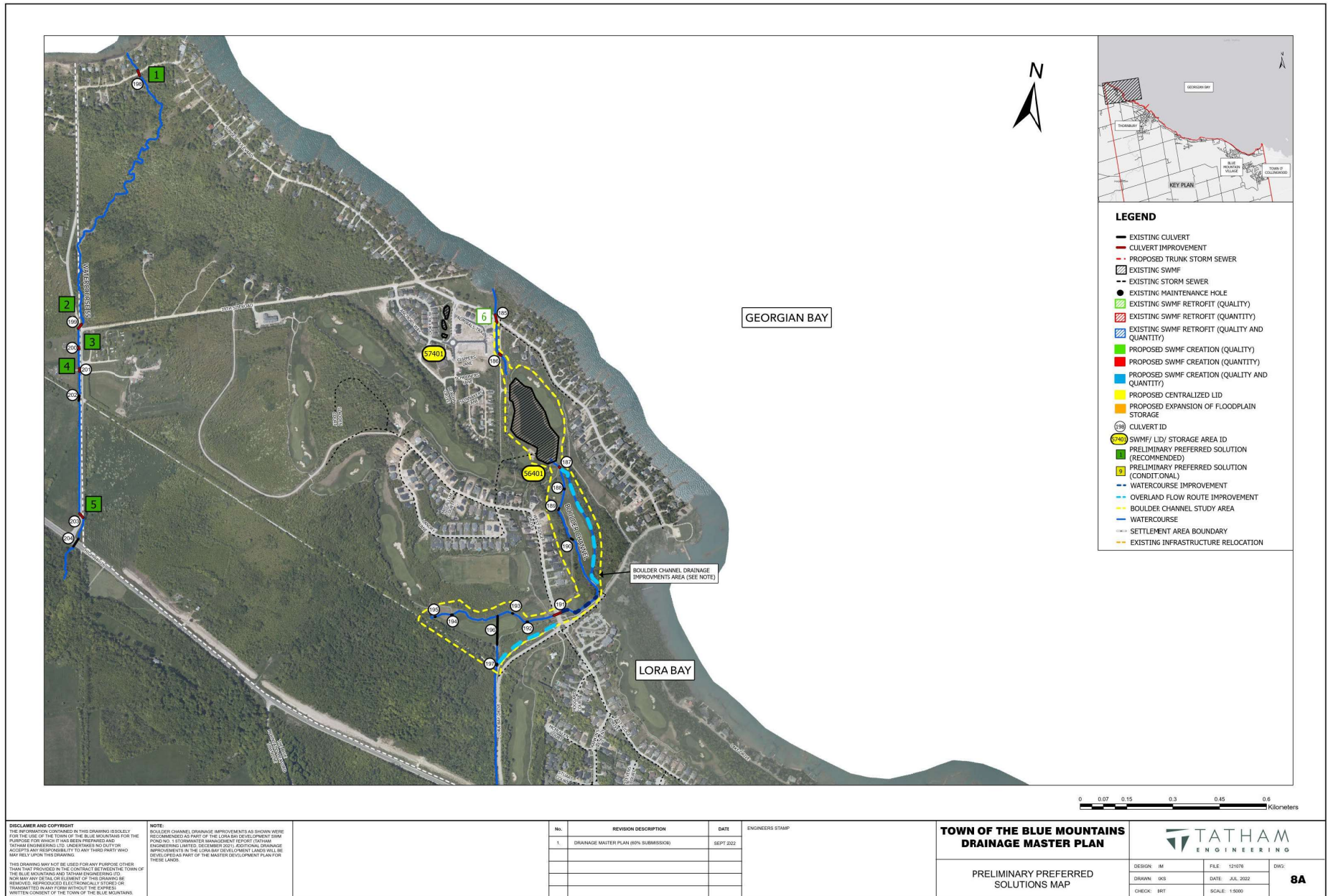
The estimated costs to implement the general recommendations included in the preliminary preferred solution are summarized in the table below.

Alternative	Estimated Cost
Alternative 2D - Lot Level Low Impact Development Measures	\$0
Alternative 2E - Linear Low Impact Development Measures	\$25,910,000 ¹
Alternative 2G - Mechanical Treatment Devices (Oil Grit Separators)	\$9,950,000 ²
Alternative 3A - Minor Drainage System Improvements	\$8,250,000 ³
Alternative 3D - Drainage Outlets Design, Operation and Maintenance	\$60,000 ⁴
Total	\$18,260,000 - \$34,220,000

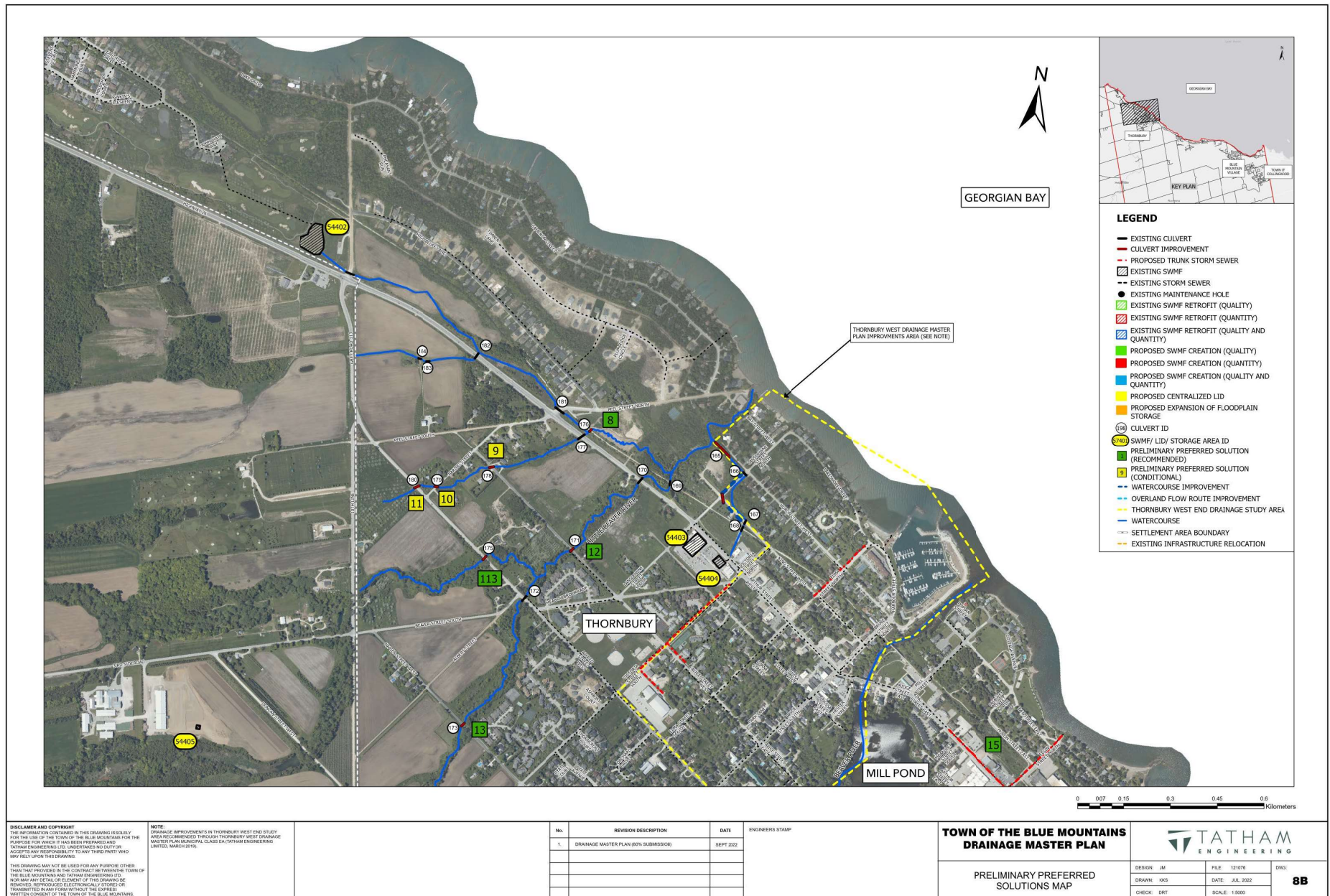
1. The estimated cost for Alternative 2E assumes full implementation of Linear LID measures on all eligible roads in the study area.
2. The estimated cost for Alternative 2G assumes full implementation of Mechanical Treatment Devices on all eligible storm sewer systems in the study area which are currently untreated.
3. The estimated cost for Alternative 3A is the difference in cost between improving storm sewers to satisfy Town standards and replacing existing storm sewers at their current sizes.
4. Estimated cost for Alternative 3D includes design standards update and one year of operation and maintenance.
5. The General Recommendations are to be implemented at the discretion of the Town as deemed feasible in conjunction with regular planned infrastructure renewal and road reconstruction projects. Therefore, it is noted the full estimated cost presented above may not be realized.



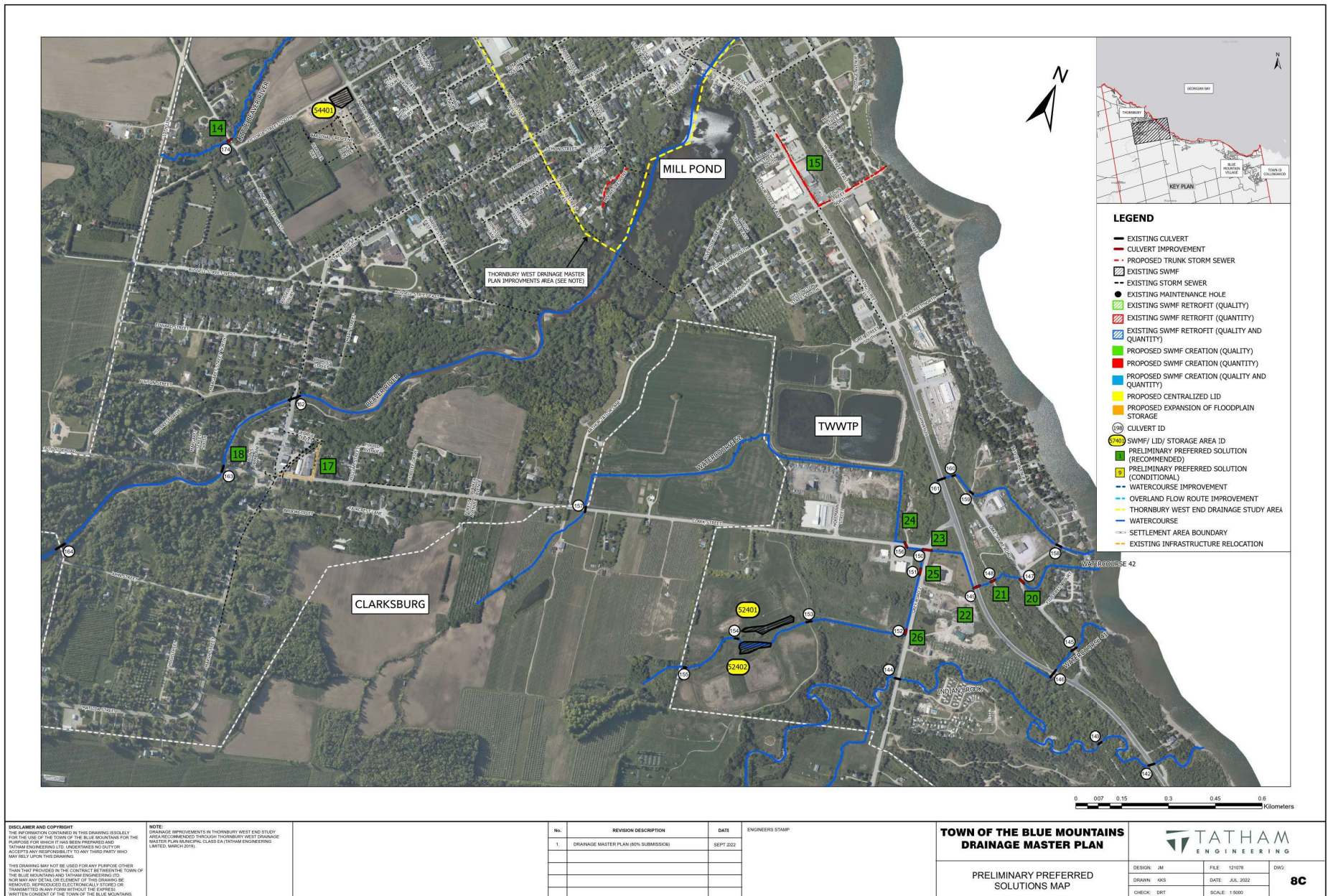
Individual Drainage Projects Overview



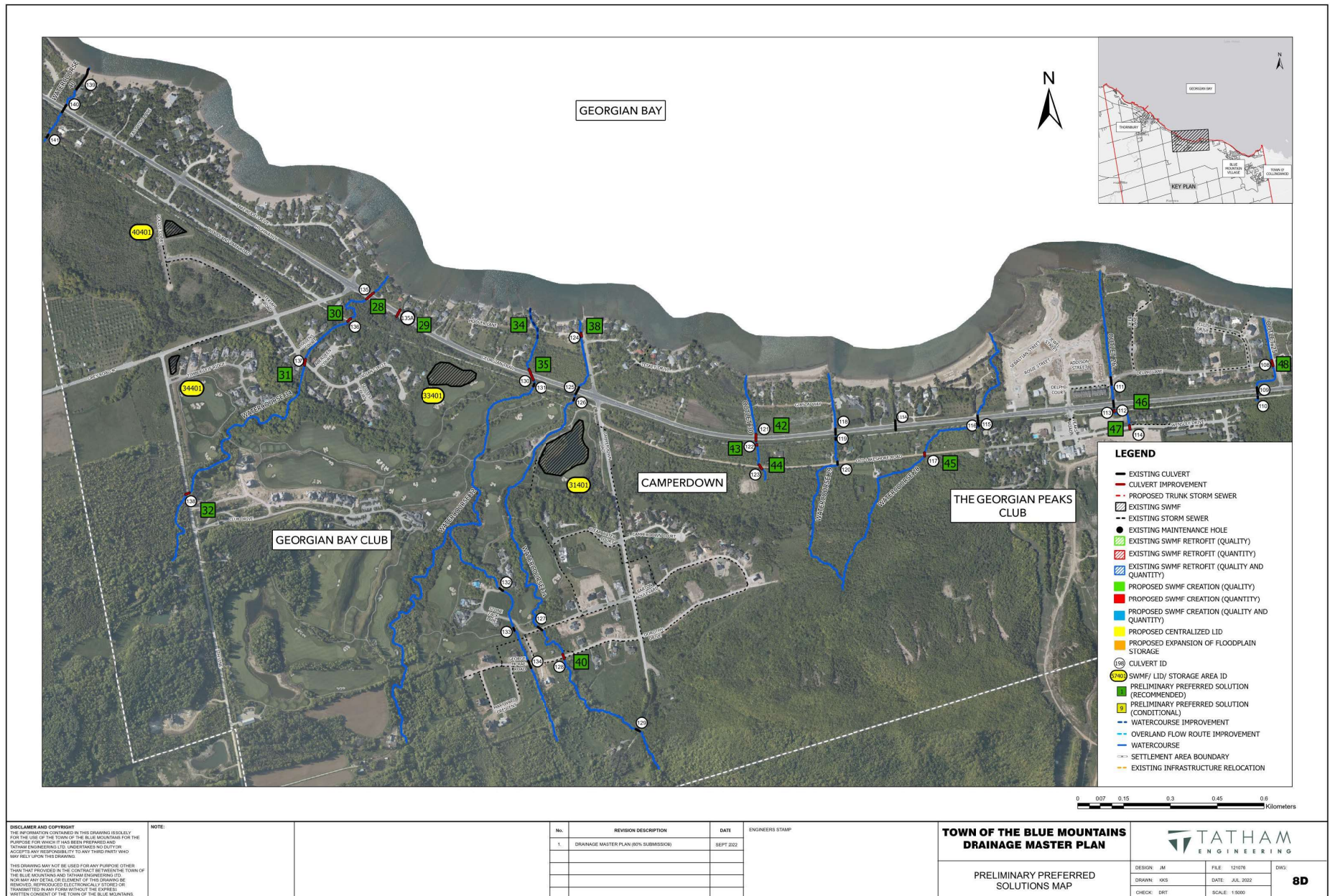
Individual Drainage Projects Overview



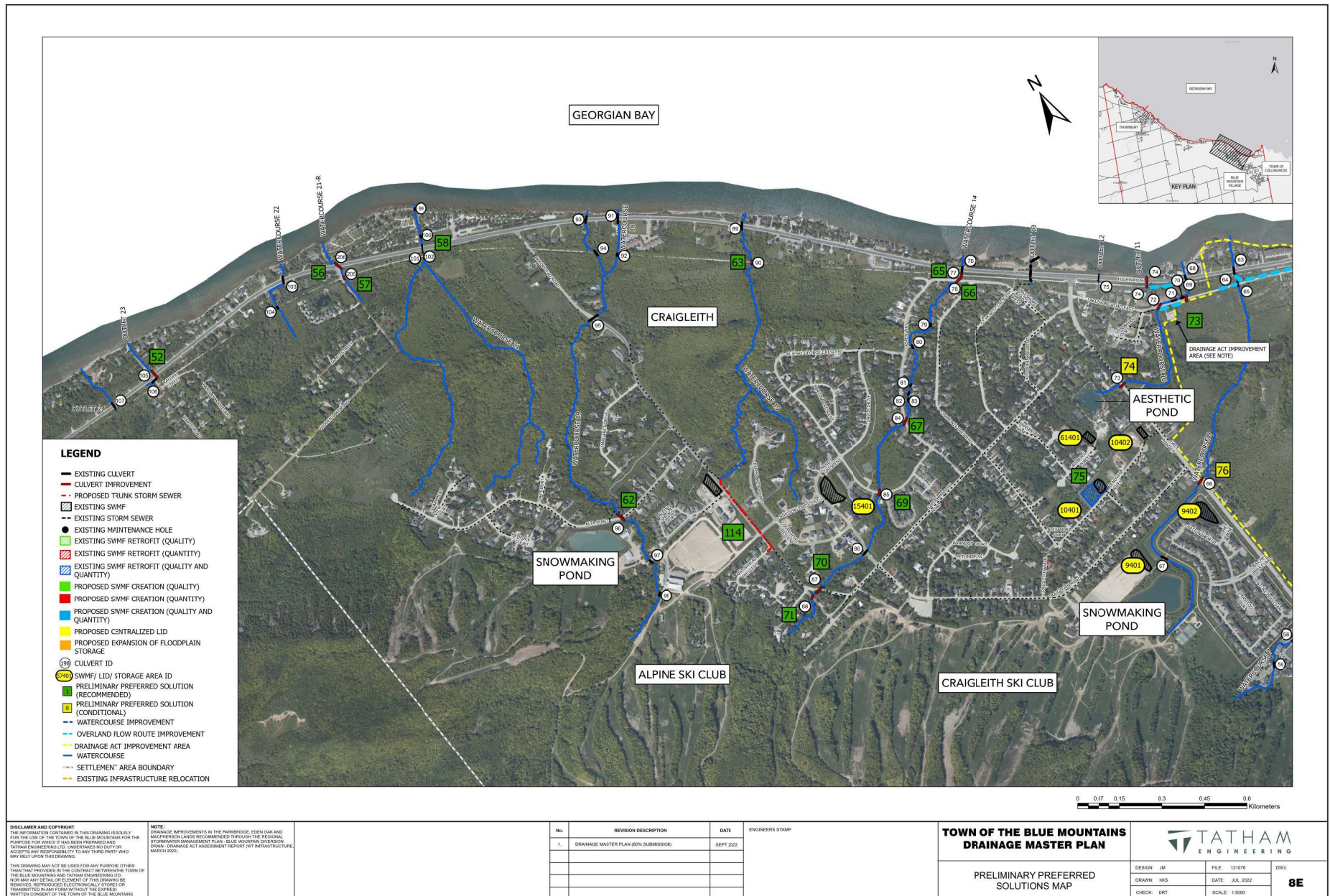
Individual Drainage Projects Overview



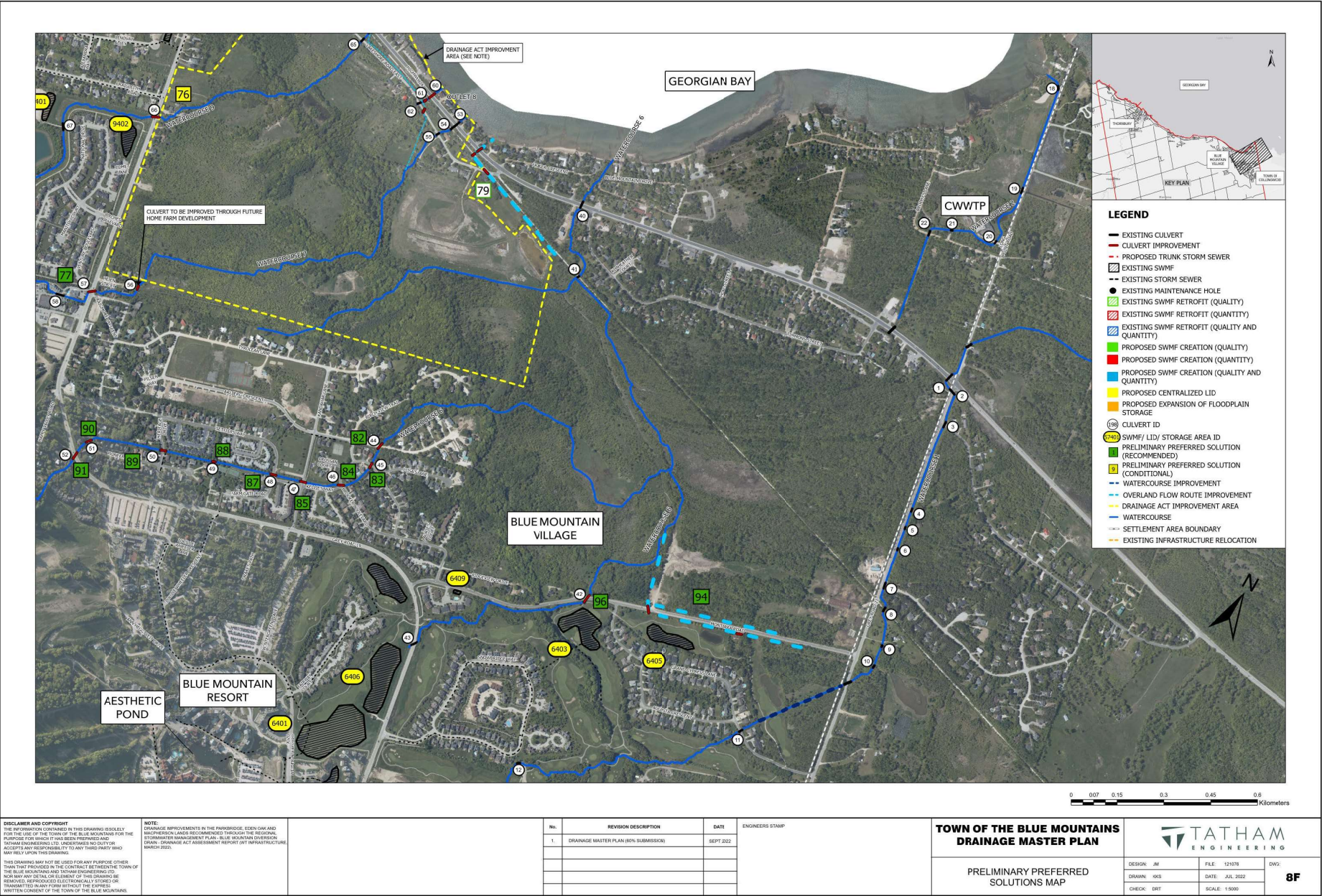
Individual Drainage Projects Overview



Individual Drainage Projects Overview



Individual Drainage Projects Overview



Individual Drainage Projects Overview



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NOTE:

NO.	REVISION DESCRIPTION	DATE
1.	DRAINAGE MASTER PLAN (80% SUBMISSION)	SEPT 2022

ENGINEERS STAMP

**TOWN OF THE BLUE MOUNTAINS
DRAINAGE MASTER PLAN**

PRELIMINARY PREFERRED
SOLUTIONS MAP

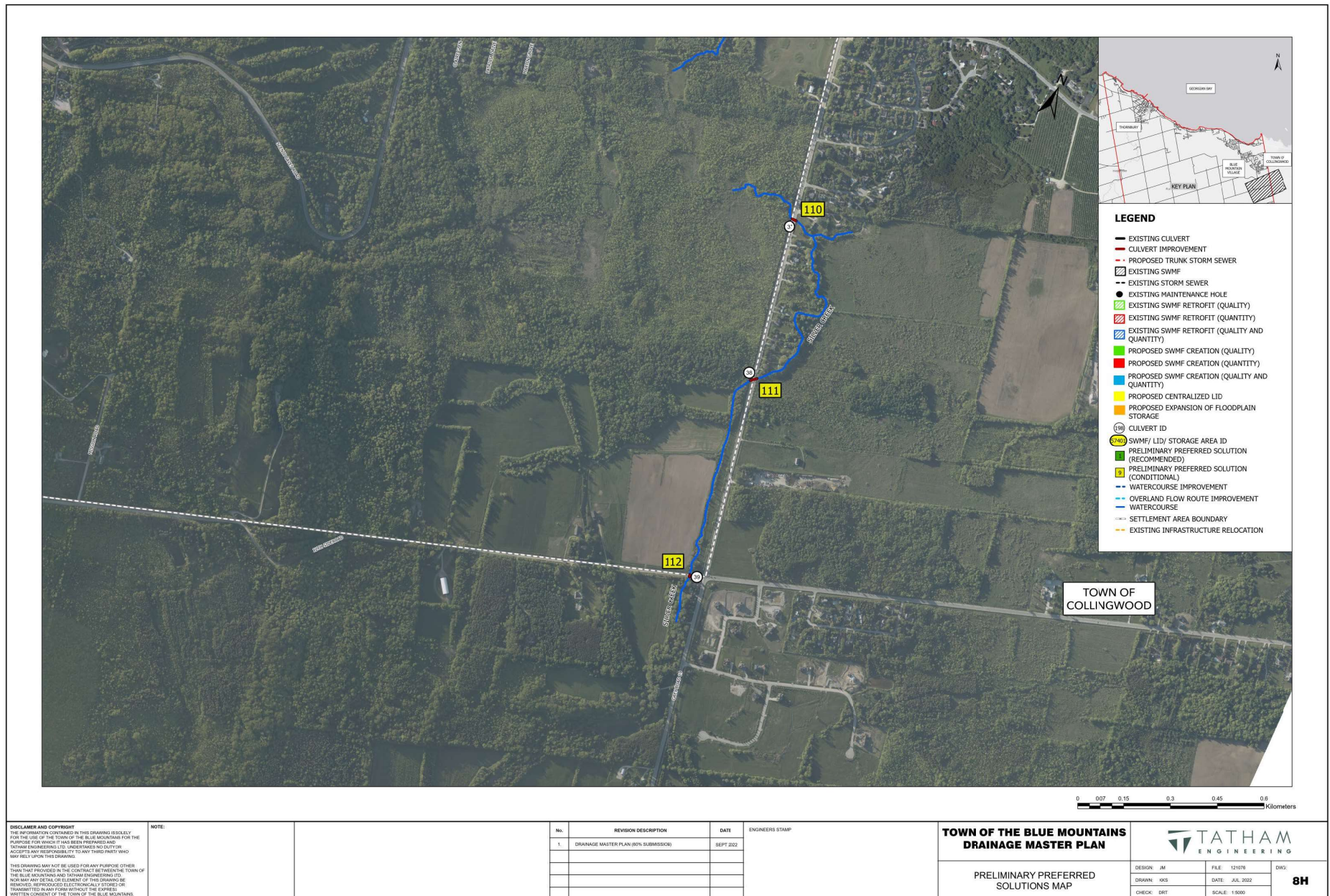
**TATHAM
ENGINEERING**

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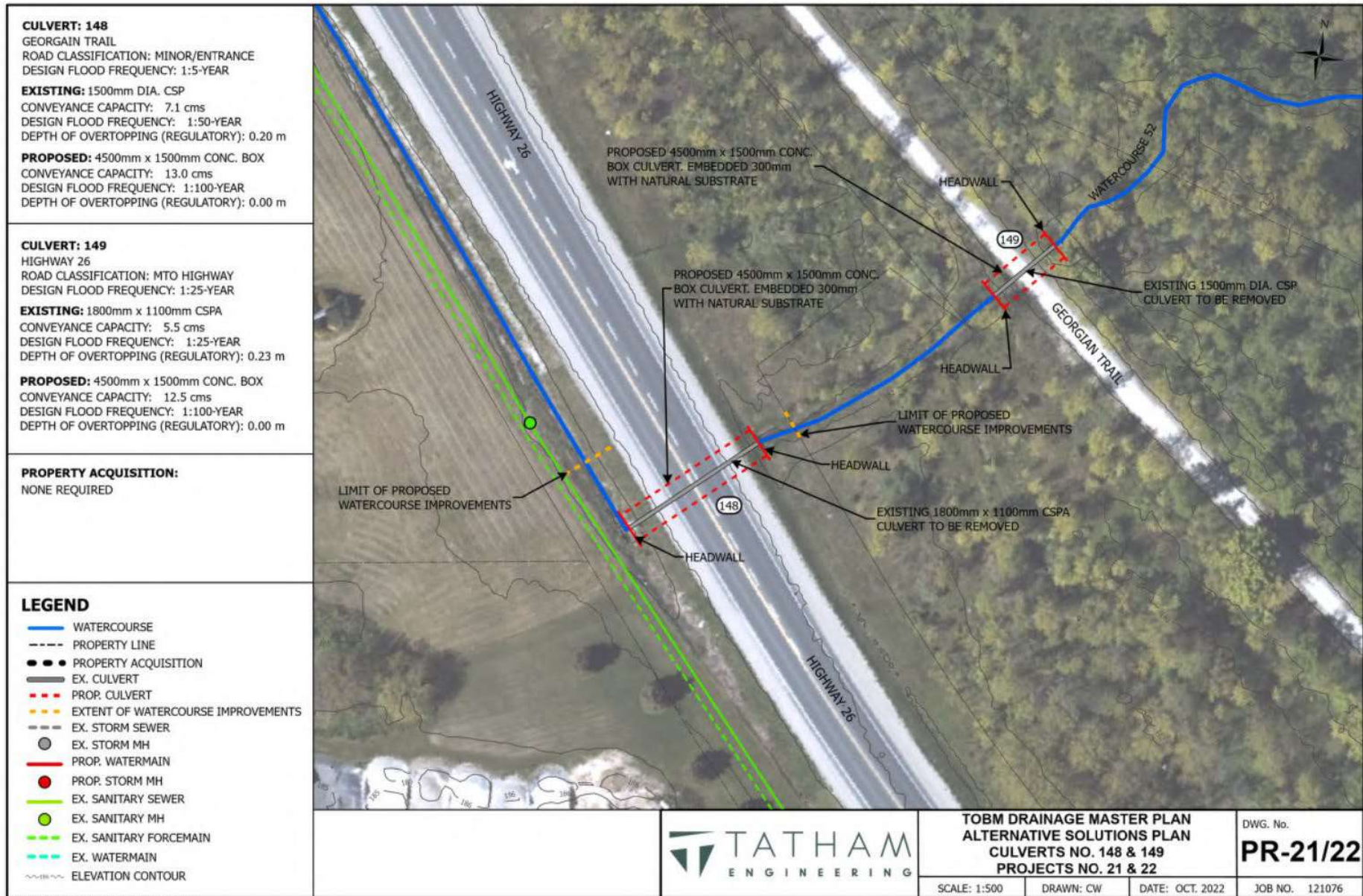
8G



Individual Drainage Projects Overview



Individual Drainage Projects Overview



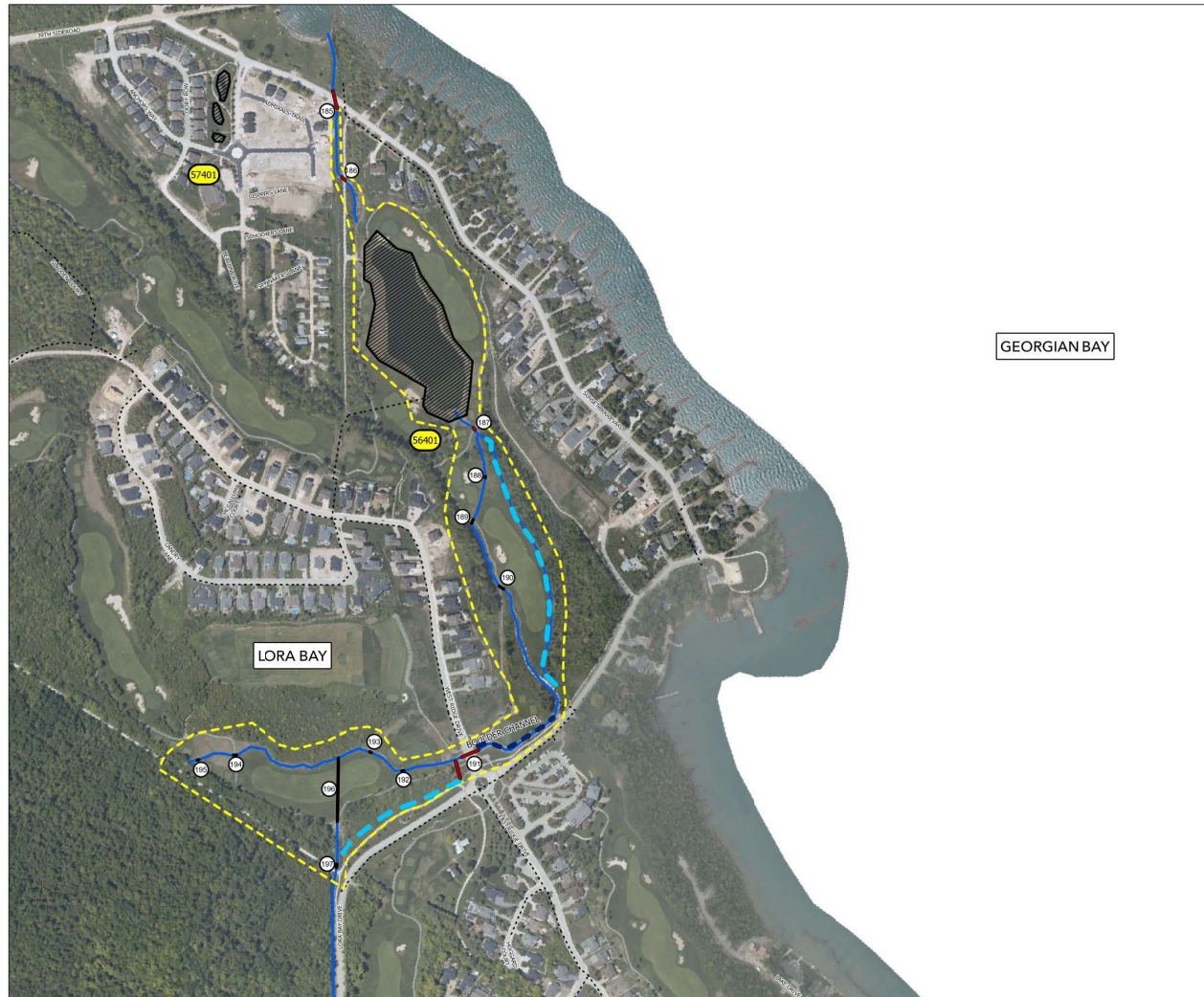
Individual Drainage Projects Overview

Summary of individual drainage projects included in preliminary preferred solution.

Alternative	No. Individual Projects Evaluated	No. Individual Projects Recommended	Estimated Cost
Alternative 2A – Retrofit/New Stormwater Management Facilities for Quantity Control	1	0	-
Alternative 2B – Retrofit/New Stormwater Management Facilities for Quality Control	7	1	\$1,980,000
Alternative 2C – Expansion of Existing Floodplain Storage Areas	5	0	-
Alternative 3A – Minor Drainage System Improvements	2	2	\$1,830,000
Alternative 3B – Culvert/Watercourse Major Drainage System Improvements	97	74	\$79,930,000
Alternative 3C – Trunk Storm Sewer/Overland Flow Route Major Drainage System Improvements	5	2	\$3,720,000
Total Preferred Solution	117	79	\$87,460,000
Total Cost to TOBM			\$56,815,000
Replacement Cost (TOBM Only)			\$19,641,000
Cost Increase for Improvements			\$37,174,000



Lora Bay Development Area



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TOWN OF THE BLUE MOUNTAINS DRAINAGE MASTER PLAN

BOULDER CHANNEL DRAINAGE IMPROVEMENTS AREA

LEGEND

- EXISTING CULVERT
- CULVERT IMPROVEMENT
- ▨ EXISTING SWMF
- EXISTING STORM SEWER
- EXISTING MAINTENANCE HOLE
- Ⓢ CULVERT ID
- Ⓢ SWMF/ LID/ STORAGE AREA ID
- WATERCOURSE IMPROVEMENT
- OVERLAND FLOW ROUTE IMPROVEMENT
- BOULDER CHANNEL IMPROVEMENT AREA
- WATERCOURSE



Thornbury West Drainage Master Plan Area



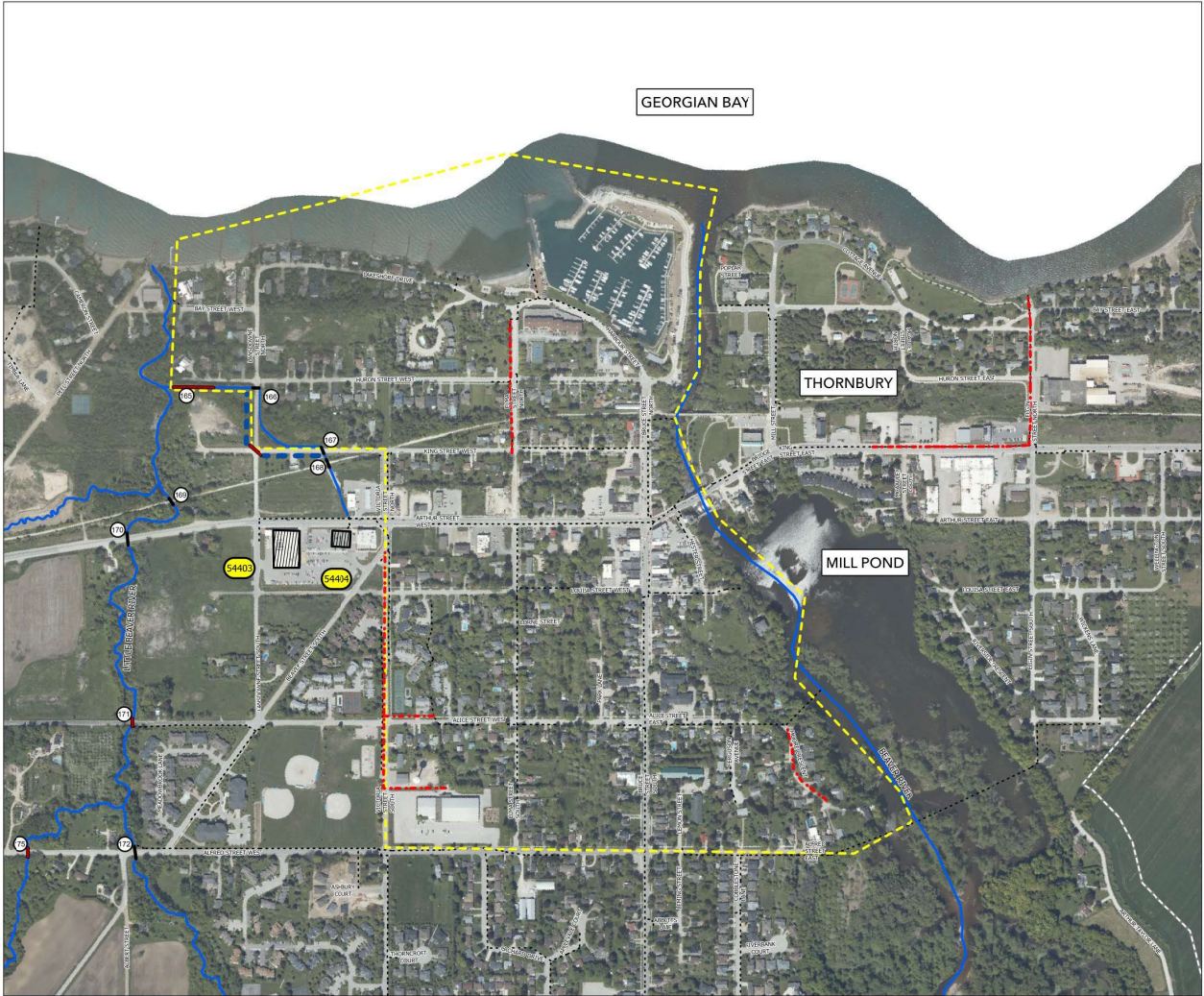
TOWN OF THE BLUE MOUNTAINS DRAINAGE MASTER PLAN

THORNBURY WEST END DRAINAGE
IMPROVEMENT AREA



LEGEND

- EXISTING CULVERT
- CULVERT IMPROVEMENT
- - - PROPOSED TRUNK STORM SEWER
- ▨ EXISTING SWMF
- - - EXISTING STORM SEWER
- EXISTING MAINTENANCE HOLE
- (100) CULVERT ID
- (740) SWMF/ LID/ STORAGE AREA ID
- - - WATERCOURSE IMPROVEMENT
- - - OVERLAND FLOW ROUTE IMPROVEMENT
- - - THORNBURY WEST END IMPROVEMENT AREA
- WATERCOURSE



Drainage Act Assessment – Background



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TOWN OF THE BLUE MOUNTAINS
DRAINAGE MASTER PLAN

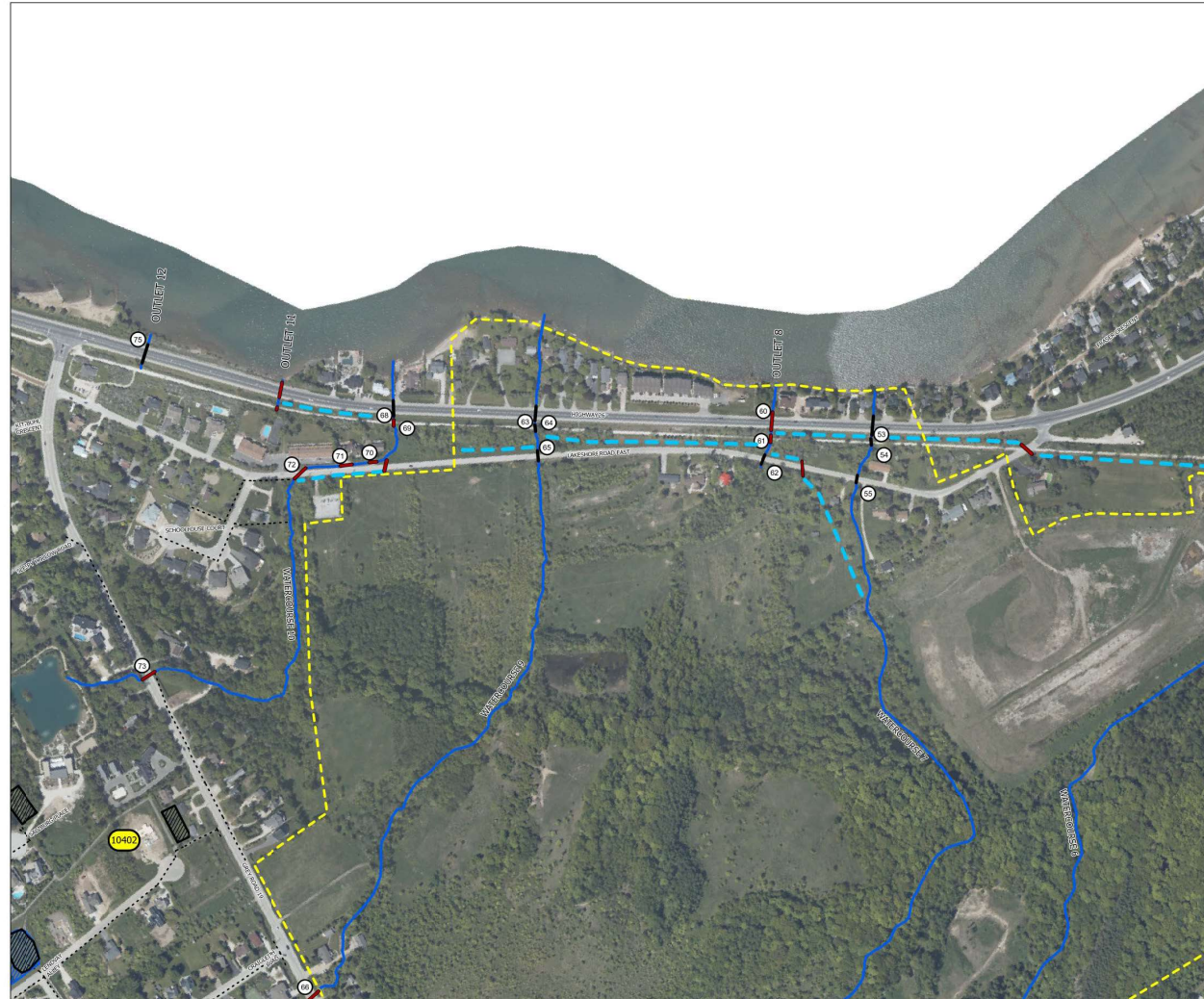
DRAINAGE ACT AREA
FLOOD INUNDATION LIMITS

LEGEND

- WATERCOURSE
- /// POTENTIAL AREA OF INUNDATION
- INUNDATION LIMITS
- CULVERT/BRIDGE CROSSING
- SETTLEMENT AREA BOUNDARY
- SWM FACILITY
- SWM FACILITY ID
- CULVERT/BRIDGE ID
- ROAD



Drainage Act Assessment – Proposed Solution



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**TOWN OF THE BLUE MOUNTAINS
DRAINAGE MASTER PLAN**

DRAINAGE ACT IMPROVEMENT AREA

LEGEND

- EXISTING CULVERT
- CULVERT IMPROVEMENT
- ▨ EXISTING SWMF
- - - EXISTING STORM SEWER
- EXISTING MAINTENANCE HOLE
- CULVERT ID
- ① SWMF/ LID/ STORAGE AREA ID
- WATERCOURSE IMPROVEMENT
- OVERLAND FLOW ROUTE IMPROVEMENT
- DRAINAGE ACT IMPROVEMENT AREA
- WATERCOURSE

0 125 250 500 750 METERS



Drainage Act Assessment – Current Status & Next Steps

Previously

- September 27, 2022 – Council received the staff report regarding “Regional Stormwater Management Plan Drainage Act Assessment – Other Agency Approvals and Draft By-Law”
- October 11, 2022 – Council enacted provisional By-Law 2022-74 being a by-law to provide for the maintenance and extension of the Blue Mountain Outlet Diversion Drain and Ford Outlet Drain in the Town of The Blue Mountains. 30 day appeal period ended November 10, 2022.
- November 1, 2022 – Council directed Town staff to broaden the consultation regarding the Regional Stormwater Management Plan Drainage Act Assessment to properties within the watershed of Watercourses #6, #7, #8, #9 and #10 and report back to the Committee of the Whole with comments received.

Now

- The consultation required by the Drainage Act requisition, barring appeals by assessed parties to the Court of Revision following passage of the Bylaw, has been concluded. As requested by Council, additional public consultation is being completed as part of this PIC as Staff hope to gain an understanding as to whether the owners of 60% of lands on Watercourse 6, and/or Watercourse 10, would be interested in petitioning (and paying for) drainage improvements on Watercourses 6 and 10 respectively. Although there was an opportunity for these landowners to add their names to the Developer’s current petition, this PIC provides an additional opportunity to assess the appetite to undertake additional works under the Drainage Act.
- Town staff will be available to answer questions and receive comments regarding the works proposed under Drainage Act at the Virtual and In-Person Q&A Sessions. Written comments can be submitted to Brian Worsley at the address below.

Town
Contact

Brian Worsley, P.Eng., MSc., PMP

Manager, Development Engineering

Town of The Blue Mountains

32 Mill Street

The Blue Mountains, ON N0H 2P0

Tel: (519) 599-3131 ext. 224

Email: bworsley@thebluemountains.ca





Q&A Sessions, Comments and Next Steps

Virtual & In-Person Q&A Sessions

Following this public information centre, virtual and in-person Public Meeting Q&A sessions are being held to allow participants to ask questions and provide comments regarding this study.

The virtual Q&A session will be held on Wednesday March 29, 2023 from 5:00 to 7:00 p.m.

The in-person Q&A Session will be held at Town Hall on Thursday, March 30, 2023 from 5:00 to 7:00 p.m.

To register for the virtual Q&A session, visit the project webpage on the Town's website or email Kevin Verkindt, Senior Infrastructure Capital Project Coordinator for the Town.

Town
Contact

Kevin Verkindt, C.E.T.

Senior Infrastructure Capital Project Coordinator
Town of The Blue Mountains
32 Mill Street
The Blue Mountains, ON N0H 2P0
Tel: (519) 599-3131 ext. 304
Email: icpc@thebluemountains.ca

The screenshot displays the Town of The Blue Mountains website. The top navigation bar includes links for 'Contact the Town', 'Assisted Browsing', and 'What can we help you find?'. The main header features categories: 'Resident Services', 'Recreation & Culture', 'Planning, Building & Construction', 'Business & Economy', and 'Town Hall'. The left sidebar contains a 'Back to Municipal Infrastructure Projects' link, a 'Who's Listening' section for Tatham Engineering Ltd. (Daniel Twigger, B.Sc.Eng., P.Eng., Senior Engineer, Group Leader, (705) 444-2565 ext. 2090, Send Email), a 'Follow This Project' section with a 'Subscribe' button, and a 'Project Timeline' section with a 'Show full timeline details' link. The main content area features a large image of a landscape with a pond and mountains, followed by the title 'Town-Wide Master Drainage Plan Environmental Assessment'. Below this is a 'Please Note' section stating that if users are experiencing imminent flooding, they should create a new Service Request through the Town's Online Services Portal. The 'On this page' section lists '1. Project Updates' and '2. Public Meetings & Information Centres'. The 'Project Updates' section includes a list of updates: 'May 31, 2022 - PIC Follow-up Staff Report', 'January 20, 2022 - Notice of Public Information Centre', and 'December 15, 2021 - Notice of Commencement'. The 'Public Meetings and Information Centres' section includes 'Public Information Centre #1 - February 2022'. The 'Why Now?' section explains that the Town is completing this assessment now to create a long-term strategy for the management of stormwater in existing and new-growth areas. The bottom of the page features a footer with contact information, a 'Subscribe for email updates to your inbox' button, a 'Submit Online Service Requests 24/7 for a variety of Town services' button, a 'Connect with the Town on social media' button, and a 'Visit Explore Blue for tourism and recreation information' button. The footer also includes links for 'Employment Opportunities', 'Accessibility', 'Privacy Policy', 'Contact the Town', and 'Website by Upam'. The 'Explore Blue' logo is visible in the bottom right corner.



Comments

We encourage the public to provide comments and concerns regarding this project. Public comments will be received between March 6 and March 31, 2023.

Written comments can be submitted to Daniel Twigger and/or Kevin Verkindt at the addresses below or by completing the comment sheet available on the project website.

Project
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

Kevin Verkindt, C.E.T.
Senior Infrastructure Capital Project Coordinator
Town of The Blue Mountains
32 Mill Street
The Blue Mountains, ON N0H 2P0
Tel: (519) 599-3131 ext. 304
Email: icpc@thebluemountains.ca



TOWN OF THE BLUE MOUNTAINS MASTER DRAINAGE PLAN COMMENT SHEET

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 Kevin Verkindt, Senior Infrastructure Capital Project Coordinator at the Town of The Blue Mountains, by calling (519-599-3131 ext. 304) or emailing Kevin (icpc@thebluemountains.ca).

NAME OF RESPONDENT: _____

REPRESENTING (Agency, Municipality, Property Owner, Tenant, etc.): _____

ADDRESS (Including Postal Code & Telephone Number):

Street Address: _____	Unit/Apt: _____
Postal Code: _____	Telephone Number: _____

Optional Virtual Public Meeting Q&A:	No I did not or will not attend	Yes I have attended or will attend (registration required)
Optional Open-House Public Meeting Q&A:	No I did not or will not attend	Yes I have attended or will attend (registration required)

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 The Blue Mountains in consideration of impacts to the natural, social, physical, cultural and economic environments."

A PDF version of the Drainage Master Plan 60% Report for Public Information Centre 2 is available online on the Town of The Blue Mountains web page at the following link: <https://www.thebluemountains.ca/MasterDrainagePlanEA>. A paper copy of the report is available for review upon request.

Following a comprehensive review of all the alternatives, receipt of comments from interested stakeholders and agencies, and completion of the improvement alternatives evaluation the preliminary preferred solution has been selected and is presented in the PIC material.

The preliminary preferred alternative drainage solutions will be further evaluated and finalized following Public Information Center #2 in consideration of the feedback received on these comment sheets and as part of the Public Information Centre process. Questions, prompts, and spaces for comments regarding the preliminary preferred drainage solutions are provided on the following pages.



Collection of Information

Comments and information regarding this project are being collected to ensure a comprehensive approach to the study. These comments will be recorded for reference throughout the project and, with the exception of personal information, may be used in the final project 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 of information should be directed to Kevin Verkindt, Senior Infrastructure Capital Project Coordinator by calling (519) 599-3131 ext. 304 or emailing icpc@thebluemountains.ca

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

Town
Contact

Kevin Verkindt, C.E.T,

Senior Infrastructure Capital Project Coordinator
Town of The Blue Mountains
32 Mill Street
The Blue Mountains, ON N0H 2P0
Tel: (519) 599-3131 ext. 304
Email: icpc@thebluemountains.ca



Next Steps

Following PIC 2 and the Q&A Sessions:

- We will review public, agency & stakeholder comments;
- We will update and finalize the evaluation of the alternative solutions based on comments received;
- The preferred alternative solution will be selected;
- An implementation plan will be prepared to prioritize and plan the projects recommended as part of the preferred solution;
- Development Framework and Policy Framework will be prepared, and a review will be completed to identify potential sources of funding for drainage projects;
- We will prepare the Class EA report for Council review/endorsement;
- The final report will be placed on public record for the 30-day review period; and
- We will issue a Notice of Study Completion

Implementation Plan

- The individual drainage projects will be evaluated in order of importance through an impact and risk assessment.
- Projects will be prioritized based on impact and risk as well as in consideration of the Town's current capital plan.

Development Framework

- A framework for the stormwater management approvals process for new development will be produced.
- Recommendations will be included for use of the Drainage Master Plan models in future development applications.

Policy Framework

- A policy framework for stormwater management in future growth areas will be developed for incorporation into the Town's Official Plan.



How to Participate

Please ensure you:

- Register for the virtual Public Meeting Q&A session if you wish to participate;
- Attend the In-Person Q&A Session if you wish to participate;
- Fill out and submit a PIC2 Comment Sheet with your 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.

Project Contact

Daniel Twigger, B.Sc.Eng., P.Eng.

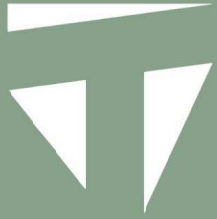
Manager – Water Resources Engineering
Tatham Engineering Limited
115 Sandford Fleming Drive, Suite 200
Collingwood, ON L9Y 5A6
Tel: (705) 444-2565 ext. 2090
Email: dtwigger@tathameng.com

Town Contact

Kevin Verkindt, C.E.T,

Senior Infrastructure Capital Project Coordinator
Town of The Blue Mountains
32 Mill Street
The Blue Mountains, ON N0H 2P0
Tel: (519) 599-3131 ext. 304
Email: icpc@thebluemountains.ca





Thank you for your interest in this
study!