



Council Meeting Agenda

Monday, November 8, 2021

Special Council Meeting

6:00 P.M.

Regular Council Meeting

Virtual

7:00 P.M.

This meeting is open to the public and is available through an online platform. Please subscribe to the [Township of Wilmot You Tube Channel](#) to watch the live stream or view after the meeting.

Delegations must register with the [Information and Legislative Services Department](#). The only matters being discussed at this meeting will be those on the Agenda.

1. MOTION TO CONVENE INTO CLOSED MEETING

RECOMMENDATION

THAT a Closed Meeting of Council be held on Monday, November 8, 2021, at 6:00 P.M. in accordance with Section 239(2), for the purposes of:

- b) personal matters about an identifiable individual, including municipal employees; and
- d) employee negotiations.

2. MOTION TO RECONVENE IN OPEN MEETING

RECOMMENDATION

THAT Council reconvene in Open Session at 7:00 P.M.

- 3. MOMENT OF SILENCE**
- 4. LAND ACKNOWLEDGEMENT – Councillor A. Hallman**
- 5. ADDITIONS TO THE AGENDA**
- 6. ADOPTION OF THE AGENDA**

RECOMMENDATION

THAT the Agenda, as presented, for November 8, 2021, be adopted.

- 7. DISCLOSURE OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT**
- 8. MINUTES OF PREVIOUS MEETINGS**

8.1 Council Meetings Minutes Monday October 18, 2021

RECOMMENDATION

THAT the minutes of the following meetings be adopted as presented:

Regular Council Meeting October 18, 2021.

- 9. PUBLIC MEETINGS**
- 10. PRESENTATIONS**

10.1 Third Ice Pad Location Study – Preliminary Findings Summary Report
Anand Desai
Monteith Brown Planning Consultants Ltd

10.1.1 REPORT NO. PFRS 2021-018

RECOMMENDATION

THAT the Third Ice Pad Location Study – Preliminary Findings Summary Report be received;

AND FURTHER THAT staff be directed to initiate a public consultation process to seek comments on the recommended location of the Wilmot Recreation Complex for the third rink site;

AND FURTHER THAT staff be directed to present the public consultation results to Council with a recommendation regarding the preferred site.

11. CONSENT AGENDA

11.1 REPORT NO. ILS 2021-39

Consideration of Drainage Engineer's Report

For the Snyder Drain, South Part of Lot 18, Concession North of Bleams Road, Township of Wilmot

11.2 REPORT NO. ILS 2021-40

Combined Quarterly Activity Report

11.3 REPORT NO. PFRS 2021-017

Parks, Facilities and Recreation Services Third Quarter Activity Report

RECOMMENDATION

THAT Report Nos. ILS 2021-39, ILS 2021-40 and PFRS 2021-017 be approved.

12. REPORTS

12.1 INFORMATION AND LEGISLATIVE SERVICES

12.1.1 REPORT NO. ILS 2021-41

Procedural By-law

RECOMMENDATION

THAT Report No. ILS 2021-41 be received for information.

13. CORRESPONDENCE

13.1 Integrity Commissioner Report Nos. IC-2021-05

13.2 2020 ROMA Annual Report

RECOMMENDATION

That Correspondence Item No. 13.1 and 13.2 be received for information.

14. BY-LAWS

14.1 By-law No. 2021-50 Procedural By-law Amendment

RECOMMENDATION

THAT By-law No. 2021-50 be introduced, read a first, second, and third time and finally passed in Open Council.

15. NOTICE OF MOTIONS

16. ANNOUNCEMENTS

17. BUSINESS ARISING FROM CLOSED SESSION

18. CONFIRMATORY BY-LAW

18.1 By-law No. 2021-51

RECOMMENDATION

THAT By-law No. 2021-51 to Confirm the Proceedings of Council at its Meeting held on November 8, 2021 be introduced, read a first, second, and third time and finally passed in Open Council.

19. ADJOURNMENT

RECOMMENDATION

THAT we do now adjourn to meet again at the call of the Mayor.



Council Meeting Minutes

Monday, October 18, 2021

Regular Council Meeting

Virtual

7:00 P.M.

Members Present: Mayor L. Armstrong, Councillors A. Hallman, C. Gordijk, B. Fisher, J. Gerber and J. Pfenning

Staff Present: Chief Administrative Officer S. Chambers, Acting Chief Administrative Officer / Director of Parks, Facilities and Recreation S. Jackson, Director of Information and Legislative Services / Municipal Clerk D. Mittelholtz, Director of Public Works and Engineering J. Molenhuis, Director of Development Services H. O'Kafka, Director of Corporate Services / Treasurer P. Kelly, Fire Chief R. Leeson, Curator / Director Castle Kilbride T. Loch, Manager of Information and Legislative Services / Deputy Clerk T. Murray, Manager of Planning / EDO A. Martin, Manager of Finance / Deputy Treasury A. Romany.

- 1. MOTION TO CONVENE INTO CLOSED MEETING (IF NECESSARY)**
- 2. MOTION TO RECONVENE IN OPEN MEETING (IF NECESSARY)**
- 3. MOMENT OF SILENCE**
- 4. LAND ACKNOWLEDGEMENT**
 - 4.1 Councillor J. Gerber read the Land Acknowledgement.**
- 5. ADDITIONS TO THE AGENDA**
- 6. ADOPTION OF THE AGENDA**

Resolution No. 2021-219

Moved by: Councillor C. Gordijk

Seconded by: Councillor A. Hallman

THAT the Agenda be amended to move Item 14. By-laws, to immediately following the adoption of the Agenda; and, that the numbering of the Agenda items be amended accordingly,

AND THAT the Agenda for October 18, 2021, as amended, be adopted.

CARRIED, AS AMENDED.

7. BY-LAWS

7.1 By-law No. 2021-48 By-law to appoint a Chief Administrative Officer

Resolution No. 2021-220

Moved by: Councillor J. Gerber

Seconded by: Councillor B. Fisher

THAT By-law No. 2021-48 be introduced, read a first, second, and third time and finally passed in Open Council.

CARRIED.

8. DISCLOSURE OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

9. MINUTES OF PREVIOUS MEETINGS

9.1 Council Meetings Minutes Monday October 4, 2021

Resolution No. 2021-221

Moved by: Councillor B. Fisher

Seconded by: Councillor C. Gordijk

THAT the minutes of the following meetings be adopted as presented:

Regular Council Meeting October 4, 2021.

CARRIED.

10. PUBLIC MEETINGS

10.1 REPORT NO. ILS 2021-38

Proposed Procedural By-law Amendment

Resolution No. 2021-222**Moved by: Councillor C. Gordijk****Seconded by: Councillor B. Fisher**

THAT Report No. ILS 2021-38 be received for information.

CARRIED.

Mayor Armstrong declared the public meeting open and stated that Council would hear all interested parties who wished to speak. Mayor Armstrong stated that persons attending as delegations at this meeting are required to leave their names and addresses which will become part of the public record and advised that this information may be posted on the Township's official website along with email addresses, if provided.

The Director of Information and Legislative Services / Municipal Clerk highlighted the report and noted that there were no registered delegations for the public meeting.

The Director of Information and Legislative Services / Municipal Clerk clarified who is considered an applicant vs. a delegation.

Mayor Armstrong advised that no registered delegations were present and declared the public meeting closed.

11. PRESENTATIONS**12. CONSENT AGENDA****12.2 REPORT NO. FD 2021-05****Third Quarter Activity Report****12.3 REPORT NO. CK 2021-005****Castle Kilbride Quarterly Report Q3****12.4 REPORT NO. DS 2021-028****3rd Quarter Building Stats****12.5 REPORT NO. ILS 2021-37**

**Lottery License Request
Optimist Club of New Hamburg
Moparfest Car Raffle**

Resolution No. 2021-223

Moved by: Councillor A. Hallman Seconded by: Councillor C. Gordijk

THAT Report Nos. FD 2021-05, CK 2021-005, DS 2021-28, and ILS 2021-37 be approved.

CARRIED, AS AMENDED.

Item 12.1 was removed from the Consent Agenda.

**12.1 REPORT NO. PW 2021-020
3rd Quarter 2021 Operations Activity Report
July – September 2021**

Resolution No. 2021-224

Moved by: Councillor A. Hallman Seconded by: Councillor C. Gordijk

THAT the Public Works and Engineering Operations 3rd Quarter Activity Report for the months of July, August and September be received for information.

CARRIED.

The Director of Public Works and Engineering clarified that the regulatory sign reflectivity testing is done annually to determine if a sign needs to be replaced, it was advised that signage sizing is determined by location. It was also advised that if residents have questions regarding signs in particular areas to reach out to staff at publicworks@wilmot.ca for timely responses.

The Director of Public Works and Engineering noted that the water system pressure testing was done and the colours of the hydrants identifies the pressure at those hydrants, it was noted that colours of the hydrants also identify if a hydrant is public or private.

The Director of Public Works and Engineering advised that at this time, utility telecom applications listed in the report are the only active applications. It was also noted that waving of fees is not a typical practice.

13. REPORTS

13.1 CORPORATE SERVICES

13.1.1 REPORT NO. COR 2021-036

Statement of Operations as of September 20, 2021 (un-audited)

Resolution No. 2021-225

Moved by: Councillor J. Gerber

Seconded by: Councillor J. Pfenning

THAT report COR 2021-036, Statement of Operations (un-audited) as of September 30, 2021, as prepared by the Manager of Finance / Deputy Treasurer, be received for information purposes.

CARRIED.

The Manager of Finance / Deputy Treasure outlined the report.

13.1.2 REPORT NO. COR 2021-037

Capital Program Review as of September 30, 2021 (un-audited)

Resolution No. 2021-226

Moved by: Councillor A. Hallman

Seconded by: Councillor B. Fisher

THAT report COR 2021-037, Capital Program Review as of September 30, 2021 (un-audited), as prepared by the Manager of Finance / Deputy Treasurer, be received for information purposes.

CARRIED.

The Manager of Finance / Deputy Treasure outlined the report.

The Director of Public Works and Engineering clarified that the Morningside Trunk Sewer project is a Regional Master Plan Project and a public information centre is expected in November. Completion of that project is expected in 2022.

The Director of Corporate Services / Treasurer advised that the renovation of the Administration Complex is currently being reviewed by the Corporate Leadership Team and a request for a design consultant will be completed to accommodate growth and the working from home environment to allow for the best use of space.

14. CORRESPONDENCE

15. NOTICE OF MOTIONS

Resolution No. 2021-227

Moved by: Councillor A. Hallman

Seconded by: Councillor C. Gordijk

- 15.1** Councillor A. Hallman brought forward the following Notice of Motion for consideration.

WHEREAS telecommunications towers and antennas are an important means of providing satellite service for cell phones and other electronic devices;

AND WHEREAS the Township Zoning Bylaw #83-38, as amended by 2020-026, permits the installation of telecommunications towers and antennas in all zones;

AND WHEREAS requests for telecommunication towers and antennas are increasing in the Township;

NOW THEREFORE, BE IT RESOLVED THAT, the Council of the Township of Wilmot direct staff to provide a report examining possible policies, procedures and bylaws regarding telecommunications infrastructure within Wilmot Township including but not limited to the following: a public consultation process regarding any proposed telecommunication and antenna installations and protocols, a consistent and timely process for the review of telecommunication installations within the Township of Wilmot, examination of potential protocols to address locations and siting of telecommunication facilities in a manner which minimizes the effects on residents, visual impact, and respects natural and human heritage features and sensitive lands, while recognizing the jurisdiction of Industry Canada with respect to the implementation of health, safety, and environmental standards in exercising its authority to approve the location of telecommunication towers and antennas.

Damien McDonald appeared as a delegation, his presentation is attached as Appendix A.

The Director of Development Services clarified that the process in place is to default to the current standards from Industry Canada and that a report will come forward for Council consideration at the December meeting, once a full review of potential policies is completed.

16. ANNOUNCEMENTS

- 16.1** Councillor C. Gordijk advised that October 17 to 23 is Small Business Week and encouraged residents support local small businesses. She advised local businesses are listed on wilmotstrongertogether.ca
- 16.2** Councillor C. Gordijk Wednesday October 27 is Dress Purple Day and encouraged everyone to participate. She noted that resources are available if anyone needs support.
- 16.3** Councillor C. Gordijk advised that October 23, 9:00 AM to Noon is a tree planting event at Petersburg Park.
- 16.4** Councillor A. Hallman advised that there was a good turn out at the Mannheim Park for the tree planting and thanked all that volunteered.
- 16.5** Councillor A. Hallman recognized that October is Breast Cancer Awareness Month and encouraged people to show their support.
- 16.6** Councillor A. Hallman recognized that October is Women's History Month and encouraged people to show their support for local contributions in the community.
- 16.7** Councillor J. Pfenning thanked staff for the support they have had for the small businesses within the Township as part of Wilmot Stronger Together.
- 16.8** The Director of Parks, Facilities and Recreation welcomed the new CAO, Sharon Chambers, to the Township on behalf of all staff.

17. BUSINESS ARISING FROM CLOSED SESSION

18. CONFIRMATORY BY-LAW

18.1 By-law No. 2021-49

Resolution No. 2021-228

Moved by: Councillor C. Gordijk

Seconded by: Councillor J. Pfenning

THAT By-law No. 2021-49 to Confirm the Proceedings of Council at its Meeting held on October 18, 2021 be introduced, read a first, second, and third time and finally passed in Open Council.

CARRIED.

19. ADJOURNMENT (7:56 PM)

Resolution No. 2021-229

Moved by: Councillor J. Pfenning

Seconded by: Councillor J. Gerber

THAT we do now adjourn to meet again at the call of the Mayor.

CARRIED.



Siting Protocol for Telecommunication Towers

Recommendation Report

Background

The Issue

- Telecommunication towers are regulated by the federal government and are exempt from local zoning by-laws and building permit requirements.
- As such, new towers can be proposed almost anywhere, including residential zones, environmentally sensitive areas, heritage corridors, and on prime agricultural land -- all without the standard level of municipal oversight that would typically apply to a project of its size.
- Where the local land use authority has not established its own telecommunications siting protocol, such proposals default to a streamlined federal approvals process characterized by limited municipal involvement and minimal public consultation.
- With the encouragement and guidance of the federal authority, hundreds of municipalities across the country have filled this gap by developing their own protocol, thus giving them more control over the process and influence in siting decisions.
- The Township of Wilmot lags its peers in this respect, as it has not developed its own siting protocol and largely plays a passive role under the federal default process.
- Consequently, constituent interests and land use priorities are not being adequately represented or protected from the proliferation of these often unsightly and intrusive structures.

Background

An Immediate Concern

- There are at least two active proposals in the Township of Wilmot to construct new telecommunication towers.
- It is likely there will be more to come in the near future, driven by:
 - 1) mobile phone carriers adding capacity to 4G/LTE networks and rolling out 5G networks;
 - 2) increased activity from independent tower operators jockeying for strategic locations; and
 - 3) the federal government's push to deliver high-speed Internet to rural areas
- The active proposals under consideration include:
 - 65m tower proposed by Signum Wireless on Huron Road in Petersburg; and
 - 45m tower proposed by Xplornet on Nafziger Road in New Hamburg
- Both proposals will reach the end of their 30-day public notification period in the first week of October, after which the Township will be required to issue a letter to the federal authority indicating its support (or otherwise) for the project.
- A detailed review of the project on Huron Road has uncovered some serious concerns, highlighting the need for the Township of Wilmot to establish its own protocol and take a more hands-on approach with respect to such proposals.

Background

Stated Purpose

- The purpose of this presentation is to recommend that the Township of Wilmot establish its own telecommunications siting protocol that allows it (and its constituents) to effectively participate in, and influence, the placement of telecommunication towers proposed within township boundaries.
- The main objective of the protocol would be to fill the gap left by the federal process, which, by design, does not attempt to address local needs or sensitivities.
- A fundamental component would be the development of a clear process for assessing and approving proposals; one that involves early and active engagement with the project proponent and gives due to consideration community preferences and land use priorities.

Background

Policy Goals Inform Protocol

- The development of a protocol should flow naturally from broad policy goals:
 - development of a reliable telecommunications network for residents and businesses;
 - minimization of tower proliferation through use of co-location and existing structures;
 - preference for stealth designs, where possible, that integrate with the surrounding land;
 - implementation of a collaborative process that can influence siting and design decisions;
 - preservation of the natural landscape and minimization of community impact; and
 - protection of environmentally sensitive and culturally significant lands
- Fortunately, the Township of Wilmot does not need to start from scratch should it choose to develop its own protocol. There are dozens of publicly available examples online from municipalities across the country.
- In particular, the Town of Caledon and the Town of Niagara-On-The-Lake have developed some of the more thoughtful protocols that would be worthy of review.

Jurisdiction and Roles

The Integral Role of the Township

Jurisdiction and Roles

Federal Jurisdiction. Municipal Influence.

- The regulation of telecommunication towers, antennas and related facilities falls under federal jurisdiction and is governed by the *Radiocommunication Act*, administered by Industry Canada¹.
- Federal jurisdiction means that municipal and provincial land-use legislation does not apply, including the *Ontario Planning Act* and any municipal zoning by-laws or building permit requirements.
- Industry Canada has outlined the process that must be followed by proponents seeking to install or modify antenna systems in *Client Procedure Circular 2-0-03 “Radiocommunication and Broadcasting Antenna Systems” (CPC-2-0-03)*.
- While Industry Canada has the final authority to approve or reject proposals for new towers, they not only seek, but mandate the participation of the local land use authority.
- Importantly, where a new telecommunications tower is proposed, Industry Canada requires the proponent to consult with the local land use authority and obtain a letter of concurrence indicating the authority’s support for the proposal. Should the land use authority oppose the proposal, a letter of non-concurrence is issued instead, detailing any objections.
- **The letter of concurrence (or non-concurrence) forms the basis upon which Industry Canada makes its final determination and underscores the vital role played by the land use authority.**

1) Industry Canada is now known as “Innovation, Science and Economic Development Canada”.
Its original name is used throughout this presentation for ease of reference

Jurisdiction and Roles

Industry Canada's Position

- The argument that the Township of Wilmot does not need a telecommunications siting protocol because Industry Canada has final approval authority is misguided.
- Industry Canada not only encourages municipalities to develop their own siting protocol, but has published a guide to assist land use authorities with this specific endeavor. Further, Industry Canada requires proponents to follow the local protocol where one exists.
- The reason is simple. While the federal government has jurisdiction over radio and telecommunications as a matter of national interest, it does not have the staffing, local knowledge, or political desire to effectively review all infrastructure proposals nationwide.
- Industry Canada's position on this matter is clearly articulated in Section 4.1 of CPC-2-0-03 which states the following:

Land-use authorities are encouraged to establish reasonable, relevant, and predictable consultation processes specific to antenna systems that consider such things as:

- *the designation of suitable contacts or responsible officials;*
- *proposal submission requirements;*
- *public consultation;*
- *documentation of the concurrence process; and*
- *the establishment of milestones to ensure consultation process completion within 120 days*

Jurisdiction and Roles

Role of the Township

- The federal regulatory framework expects the local land use authority to play an active role throughout the process, from consulting with proponents, to ensuring procedural compliance, and finally, opining on the proposal by issuing a letter of concurrence.
- The spirit of the framework is best captured by the following statements:

“As part of their community planning processes, land-use authorities should facilitate the implementation of local radiocommunication services by establishing consultation processes for the siting of antenna systems.” – CPC-2-0-03 Section 4.1

“Communities are the ones directly affected by tower locations. They are best positioned to work with wireless providers to ensure effective delivery of services, while also ensuring respect for local land-use considerations.” – Industry Canada website

“Industry Canada believes that any concerns or suggestions expressed by land-use authorities are important elements to be considered by proponents regarding proposals to install, or make changes to, antenna systems.” – CPC-2-0-03 Section 4.1

Letter of Concurrence

- The final and most important step in the approvals process occurs when the land use authority issues a letter of concurrence or a letter of non-concurrence to Industry Canada and the project proponent.
- This letter gives the municipality an opportunity to provide input and comments to Industry Canada regarding the proposal and can take one of three forms:

1) Concurrence

Issued where there are no major objections and/or all concerns raised during the consultation process have been adequately addressed by the proponent.

2) Concurrence With Conditions

Issued where there are objections to the proposal, but the proponent has agreed to satisfy the conditions stipulated. In this situation, it would be customary for the municipality to obtain a Letter of Undertaking from the proponent confirming their agreement to the specified conditions.

3) Non-Concurrence

Issued where there are objections to the proposal that the proponent has not adequately addressed.

Concurrence Carries Weight

- Industry Canada's final decision is heavily influenced by the municipality's recommendation.
- A letter of concurrence is practically a prerequisite to obtaining approval. It is almost unheard of for Industry Canada to hand down a final decision where an impasse has been reached between the project proponent and the municipality (non-concurrence).
- According to Industry Canada's website, impasses are rare, and intervention is only required in less than 0.1% of cases. In other words, they adjudicate fewer than one out of every thousand proposals.
- What is interesting about this statistic is that letters of non-concurrence are not rare. A regional representative from Industry Canada's Burlington office recently estimated that 20% of proposals receive a letter of non-concurrence from the municipality.
- The disconnect between these two figures is accounted for by the dispute resolution process which is discussed on the next slide.

Jurisdiction and Roles

Dispute Resolution Process

- Proposals that receive a letter of non-concurrence enter a dispute resolution process where there are three possible outcomes:
 - 1) The proponent and municipality come to an agreement and the project proceeds;
 - 2) The parties fail to reach an agreement and Industry Canada is asked to make a final decision; or
 - 3) The proponent abandons the project
- The first of these outcomes is unlikely, as proposals that get this far have typically passed the point of no return and finding a mutually acceptable outcome is no longer feasible.
- The second outcome almost never happens according to Industry Canada, which leaves project abandonment as the most likely outcome.
- This makes sense given that a) proponents don't want to risk their relationships with municipalities by steamrolling them at the federal level; and b) proponents are likely to discount their chances of success given the importance that Industry Canada places on the letter issued by the municipality.
- Only in situations where the municipality is acting unreasonably does it make sense for a proponent to escalate an impasse to Industry Canada for a final decision

Protocol Review

Summary of Best Practice

Protocol Review

Protocol Review and Best Practices

- A review of municipal telecommunication siting protocols was undertaken to evaluate common themes and identify best practices.
- A vast majority of the protocols reviewed were developed by municipalities in the Province of Ontario -- all of which adopted their own protocol to improve upon the federal default process.
- The following slides present some of the best ideas from other jurisdictions, which the Township of Wilmot may want to consider should it develop its own protocol.

Application Fees

- The municipality should charge an application fee for all proposals submitted to the Department of Planning for review.
- While both the proponent and landowner stand to benefit financially from these projects, the municipality does not (not even in the form of property taxes). Instead, it incurs staffing and incidental costs related to proposal reviews.
- Charging an application fee would help offset these costs and provide a budget for independent contractors where necessary.
- A secondary benefit is that an application fee would discourage speculative proposals. With the rollout of 5G networks, increased activity from third-party tower operators, and the lengthy validity period for approvals, the environment is ripe for opportunistic, strategic, and speculative behaviour. This is even more true where the municipality does not have a telecommunications protocol in place and does not charge an application fee.
- The application fee schedule for the Township of Clearview is presented in the table to the right as an example.

Township of Clearview – Application Fee Schedule

	Minor Application Fees	Major Application Fees
Pre-consultation	\$250	\$250
Application	\$2500	\$5000
Deposit*	--	\$3000

** The deposit is a security that is refundable upon process completion provided all application processing costs have been paid by the proponent. The applicant is responsible for paying any and all costs incurred as a result of their application/project being processed.*

Municipal Property Fees

- The protocol may attempt incentivize market participants to site their telecommunications equipment on municipally owned lands or buildings by providing attractive lease terms.
- York Region's protocol provides an excellent example of this, with detailed fee schedules specified for various types of installations on municipal properties (water towers, buildings, regional rights-of-way, owned lands, etc).
- The underlying idea here is to generate revenue by offering site access at rates that are potentially more attractive than what might be available from private landowners.
- Another possible way to generate revenue could be to require the terms of privately negotiated leases to be disclosed and implement a revenue share component in favour of the municipality.

York Region – Fees Schedules For Siting On Municipal Properties

Installations On/In Buildings

No.	Description of Fees and Charges	Year 2018
1	Building application fee for Macro Cell, Small Cell and In-Building – per application	\$2,000
2	Macro Cell annual site licence fee per building	\$16,500
3	Macro Cell annual licence fee per antenna	\$1,000
4	Small Cell annual site licence fee per building	Nil
5	Small Cell annual licence fee per attachment	\$300
6	In-Building annual site licence fee per building	Nil
7	In-Building annual licence fee per attachment	Nil

Installations of Tower Consolidator and Carrier Towers

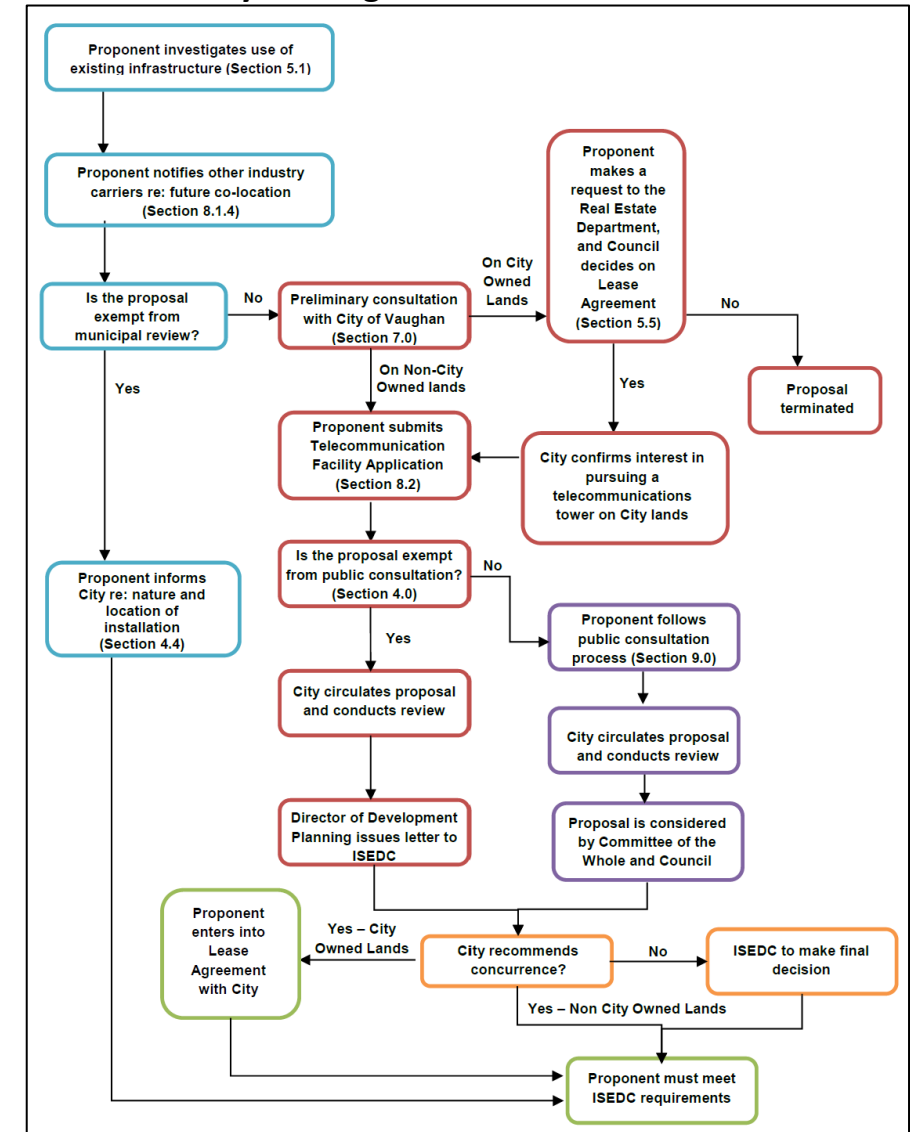
No.	Description of Fees and Charges	Year 2018
1	Carrier/tower consolidator tower installation application fee – per application	\$2,000
2	Annual site licence fee for tower and compound installation for first carrier in urban designated area	\$20,000
3	Annual site licence fee for tower and compound installation for first carrier in rural designated area	\$17,000
4	Annual co-location licence fee for each co-located carrier after first carrier	15% of rent payable to Licensee by co-locating carrier

Protocol Review

Procedural Framework

- The best protocols have a well-defined procedural framework that governs every step of the consultation process.
- Often summarized in the form of a process flow-chart, the information required at each stage is detailed in the body of the protocol.
- The framework is used to delegate authority, allocate responsibilities, establish a path for concurrence, and provide timeline extensions where necessary.
- Streamlined consultation tracks may be offered to incentivize certain siting objectives (i.e. industrial zones, use of existing structures, installations on municipally owned land, etc.)
- Information checklists, application form templates, and fixed fee schedules are common features of a good procedural framework.

City of Vaughn – Process Flow Chart



Protocol Review

Pre-consultation Process

- Establishing a pre-consultation process that begins well before the formal submission of a proposal is the best way to avoid situations where stakeholder interests conflict.
- The pre-consultation phase is designed to give the land use authority and affected residents an opportunity to provide early input and influence siting decisions -- before the proponent is committed to a particular site or design.
- It becomes much more difficult to influence a proposal when the proponent shows up with a fully scoped project complete with lease agreements, engineering plans and land surveys.
- The pre-consultation phase doesn't just serve to give the municipality a heads up about an upcoming proposal, but it presents an opportunity to communicate stakeholder obligations under the municipality's siting protocol, identify the consultation track that would apply to the proposal (or any exemptions), and provide initial feedback on the proposed design/location.
- Some protocols take the concept of pre-consultation even further, by calling on the telecommunications industry to meet annually with the Director of Planning to discuss town-wide coverage requirements before commencing site acquisition activities.

Protocol Review

Needs Assessment

- The protocol should require all projects to undergo a thorough a needs assessment.
- Ideally, this would involve an independent analysis supported by network coverage data and usage statistics.
- The intent would be to establish sufficient justification for any new structures, taking into consideration community needs and benefits.
- Simply accepting that a new telecommunications tower is needed because the proponent says so is not good enough.
- This is especially true in the current environment, where independent tower operators have a tendency to over-build their installations with the hope of leasing the excess space for profit in the future.
- The cost of conducting a needs assessment could be reimbursed by the proponent directly or funded from their application fee.

Existing Structures and Co-Location

- To minimize tower proliferation, the protocol should require proponents to consider all existing structures above a pre-defined height within a certain radius of the proposed site.
- The proponent should then be required to provide a technical justification for each structure, explaining why it is not a suitable alternative to installing a new tower.
- The parameters of this requirement should be informed by the technology being deployed as one size doesn't fit all:
 - In the case of 4G/LTE technology, which has a transmission range up to 15km, there is considerable flexibility in terms of site selection. It may therefore be reasonable to require the proponent to consider all existing structures within a 5km radius of the proposed site.
 - On the other hand, 5G technology has a limited transmission range of 500m, which significantly reduces the siting radius that would be suitable to meet project objectives.
- Where a new tower is determined to be the only viable option, the protocol should promote open dialogue with major telecommunications carriers to encourage co-location and avoid network redundancies and/or competing proposals.
- In some cases, excess capacity is built to accommodate co-location in the future. While this strategy can reduce tower proliferation, it may conflict with the desire to minimize the impact of a particular installation. In these instances, the protocol should take a practical approach that considers near-term needs, while acknowledging that technological advances could obviate the need for excess capacity before it has been utilized.

Location Preferences

- The protocol should outline the municipality's siting preferences and identify any sensitive areas that it would like to protect from visual and/or environmental disruption.
- Siting preferences may include:
 - siting towers a certain distance away from residential zones
 - specifying minimum distances to schools, day-care centers, hospitals, senior homes, etc.
 - avoiding locations with topographical prominence to minimize impact on views and vistas
 - giving preference to locations that are compatible with adjacent land uses
- Sensitive areas may include:
 - Prime agricultural land
 - Heritage conservation districts
 - Parklands and recreation
 - Waterways and wetlands
 - Breeding or migratory grounds
 - Archeological fields

Protocol Review

Design Preferences

- A common objective of all municipalities is to limit the visual impact of telecommunications infrastructure, whether it be standalone towers or small cell sites mounted on the side of buildings or on top of utility poles.
- A variety of strategies exist to install equipment in such a way that it blends in with the surrounding landscape.
- Municipalities often specify a preference for monopole structures in residential areas opposed to steel tri-pole lattice structures.
- Artificial tree towers may be preferred in rural settings, while color-matched building integrations, or property boundary setbacks might be preferred in urban environments.
- In some instances, the municipality reserves the right to request the proponent to consider alternative structures or heights -- even if it may limit the structure's sharing capacity in the future.

Notification Radius

- Under Industry Canada's default consultation process, proponents are only required to notify property owners within a distance of three times the height of a proposed tower.
- For a tower that measures 50m, this translates into a notification radius of just 150m, which, even in a dense residential area, would only capture a handful of dwellings.
- This is not sufficient, considering the visual impact of a tower can extend for several kilometers. It is also not conducive to generating effective public consultation with affected residents.
- The protocol should expand the notification radius to a more sensible range that is commensurate with the visual footprint of the tower. This could be anywhere from 1-3km depending on the location and height of the tower.

Notification Disclosure

- The protocol should also seek to improve the public notification process by mandating early notices to abutting property owners during the pre-consultation phase.
- Some municipalities have added the requirement for large project notice signs to be posted on the proposed property during the consultation phase.
- Additionally, the disclosure requirements in the public notification package could be expanded beyond the minimum standards set by Industry Canada.
- For example, it would be reasonable for the proponent to disclose the following:
 - a description of the target coverage area that the installation will serve;
 - the rationale for the proposal and a description of the public benefit;
 - the results of any needs assessment studies;
 - the identities of the anchor tenants who support the project;
 - a description of the technology that will be deployed on the structure;
 - a discussion of the site selection process; and
 - a list of existing structures considered and why they were deemed unsuitable

Protocol Review

Council Approval Required

- Given the importance of developing a strong and reliable telecommunications network, and the lasting impact it can have on township landscapes, the protocol should require all letters of concurrence to pass through council and be subject to a vote.
- The Director of Planning would typically be required to submit a report to council that:
 - describes the proposal;
 - summarizes any concerns raised during the consultation process;
 - discusses how the proponent responded to the concerns raised;
 - confirms completion of the public consultation process;
 - confirms compliance with the municipality's siting protocol; and
 - provides a recommendation to council for consideration

Protocol Review

How Prescriptive?

- The question of how prescriptive the protocol should be is not easy to answer. It really depends on how much control and involvement the municipality would like during the consultation process.
- By law, the proponent is required to adhere to the local authority's protocol, meaning it can be as detailed and demanding as the municipality desires (within reason).
- To give one example, the Town of Caledon has developed a very thorough protocol that leaves almost nothing open to interpretation.
- Similar to other municipalities, the Town of Caledon requires the proponent to erect a large notification sign on the proposed property during the consultation period.
- The protocol describes in great detail exactly what size the sign should be, what material it should be made from, the information it should contain, the size of the lettering, where it should be located, etc.

Town of Caledon – Notification Sign

<u>(NAME OF PROPONENT)</u> HAS PROPOSED TO LOCATE A TELECOMMUNICATIONS FACILITY, BEING <u>(HEIGHT)</u> METRES IN HEIGHT, _____ METRES FROM _____ ROAD ON THIS PROPERTY.	
PUBLIC COMMENT IS INVITED.	
A PUBLIC INFORMATION CENTRE IS SCHEDULED ON <u>(DATE of MEETING)</u> FROM <u>(TIME)</u> pm AT <u>(LOCATION)</u>	
FOR FURTHER INFORMATION CONTACT: <u>(PROponent COMPANY)</u> <u>(PROponent'S PHONE NUMBER)</u>	<u>(VISUAL RENDERING OF THE PROPOSED ANTENNA SYSTEM SUPERIMPOSED TO SCALE)</u>
<u>(LEAD PLANNER)</u> DAPP DEPARTMENT, TOWN OF CALEDON 905-584-2272 ext. <u>(####)</u> TOWN FILE No.: <u>(FILE #)</u>	

The sign must be 2.4 metres wide by 1.2 metres high with a 0.9 metre ground clearance.

It is recommended that the sign be constructed using a 19 mm exterior grade plywood panel. Vertical structural members should be 100 mm by 100 mm fir, installed to a depth of 1.2 metres below grade: 50 mm by 50 mm horizontal fir stringers should be located behind the top, bottom, and centre of the sign panel.

Sign panels and all structural members must be painted with quality paint. Lettering is to be black inscribed on a white background.

The sign must include a colour photograph of the subject property with a superimposed scaled image of the Antenna System, support structure and supporting facilities, with the height and width of the proposed Antenna System shown on the photo.

The sign is to be professionally lettered or silk screened, using upper case letters, size 50 mm and 100 mm.

One sign shall be erected along each street frontage of the property and midway between the adjacent property lines.

The sign will read as follows with the appropriate information filled in that is underlined:

A photograph illustrating each of the required signs and the date on which it was erected on the subject property must be submitted to the Development Approval and Planning Policy Department.

Conclusion

Customized Protocol Fits Best

Conclusion

Develop Customized Protocol


- Municipal telecommunication protocols come in various shapes and sizes. They have been developed independently by hundreds municipalities over the past decade to suit their individual needs. Many protocols were likely borne out of necessity, after the federal default process failed to protect local interests.
- In developing a protocol, the recommended approach would be to borrow heavily from municipalities that have already done it themselves and have done it well.
- Industry Canada's *"Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols"* is a useful resource, as is the ready-made template created by the Federation of Canadian Municipalities in collaboration with the Canadian Wireless Telecommunications Association.
- However, one of the main benefits of establishing a protocol is the ability to customize it to reflect unique community values, which may differ from one jurisdiction to the next.
- For example, the Township of Wilmot is a community based on agriculture. Thus, protecting prime agricultural land and taking advantage of existing structures like grain elevators to expand network coverage might be specific goals that wouldn't apply to an inner-city jurisdiction. For this reason, adopting a template protocol off the shelf is not recommended.
- With two active proposals on table, and more likely to come in the near future, it is time for the Township of Wilmot to develop its own protocol and play a more active role in telecommunications siting decisions.

Third Ice Pad & Parks Operations Centre Location Studies **PRELIMINARY FINDINGS**

Council Presentation
November 8, 2021

mbpc
Monteith • Brown
planning consultants

CORNERSTONE
ARCHITECTURE

Wickens Greenspace
Consultants 



Study Background

In October 2020, Township Council approved the Indoor Arena Usage & Needs Analysis Update which recommended a third ice pad be provided in Wilmot in the short-term.

Council directed Staff and Monteith Brown Planning Consultants Ltd. to "*undertake further study to determine strategies for delivering a third ice surface.*"

The Township's 10-Year Capital had separately identified the need to plan for a new Parks Operations Centre (currently housed at the WRC) due to recent and forecasted population growth in Wilmot.

Given the integrated nature of WRC arena and parks operations, the two studies were combined for process efficiencies.

Study Purpose

- 1) **ARENAS:** To determine the optimal location for a third ice pad by either:
 - Expanding the Wilmot Recreation Complex;
 - Recommissioning the New Hamburg Community Centre; or
 - Selecting a new site if the existing arenas are deemed to not be suitable
- 2) **PARKS OPERATIONS:** Evaluate the continued suitability of the WRC for the Parks Operations Centre in light of current constraints, future growth needs and an ability to deliver efficient services



The **Preliminary Findings Summary Report** includes:

- Summary of research, consultations and an analysis of the WRC and NHCC
- Outline of the operational needs of the Parks and Facilities Division
- Preferred options for a new arena and parks operations centre

We would like to receive direction from Township Council regarding the Preferred Options prior to initiating Phase 2

Study Methodology

Phase 1

- Engage arena users and Township staff
- Site tours of the WRC and NHCC
- Review background, trends, and best practices
- Develop site selection criteria
- Report Preliminary Findings to Council
- Test support with stakeholders and the public

Phase 2

- Prepare conceptual plans and costing for the Preferred Sites
- Test support with stakeholders and the public
- Present Final Reports back to Council (early 2022)



Preliminary Findings: Arenas



Participating Stakeholders:

1. New Hamburg Hockey Association
2. Wilmot Girl's Hockey Association
3. New Hamburg Skating Club
4. New Hamburg Junior C Firebirds
5. The Community Players
6. Wilmot Junior C Lacrosse
7. Wilmot Soccer Club

Input from Local Arena Stakeholders

- Users were supportive of the Township's decision to explore a third ice pad and indicated that the WRC was their preferred location
- NHCC was the secondary preference though some suggested it could become a practice rink or dryland training facility
- All groups support an NHL-regulation ice pad (200' x 85') with a minimum of 6 dressing rooms, seating typical of a community rink, and adequate storage
- The Community Players were engaged and articulated constraints at the NHCC such as lack of rehearsal space, storage and workshop
- Wilmot Soccer Club was also engaged given that expansion of the WRC building may have an impact on fields

WRC: Existing Conditions

- Twin-pad arena built in 2007
- Co-located with indoor aquatics, youth centre, fitness space, sports fields, splash pad and playground
- Strong access to local and regional markets via Highway 7
- Adjacent land uses presently consist of Schmidt Woods and agricultural lands
- Building Condition Assessment finds the WRC in good condition
- Designed with modern barrier-free accessibility and building code standards in mind





WRC: Opportunities & Constraints

Opportunities

- Space exists to fit at least one additional ice pad (would require reconfiguration of parking lot)
- Strong geographic access and central location
- Retain economies of scale and efficiencies in arena operations
- Areas around the Nafziger Road are envisioned for long-term population and employment growth

Constraints

- Would increase the intensity of use on the site
- Potential re-orientation or relocation of one or more soccer fields may be required for an expanded arena to fit onsite

NHCC: Existing Conditions

- Single-pad arena built in 1948
- Embedded in New Hamburg, adjacent to residential areas and Norm S. Hill Park
- A portion of the site is in the Nith River floodplain
- Building Condition Assessment finds the facility in fair to good condition
- Does not meet current standards for persons with disabilities





NHCC:

Opportunities & Constraints

Opportunities

- Sentimental value among certain residents
- Provides a level of service directly in New Hamburg

Constraints

- Limited on-site parking
- Rink size is smaller than NHL-regulation
- Number and size of dressing rooms is inadequate
- Limited expansion potential due to size, grading and floodplain
- Older building systems may require significant reinvestment to meet long-term environmental sustainability /climate action objectives
- Single-pad arenas do not achieve economies of scale in operation compared to multi-pad arenas
- Previous studies estimate up to \$6.5 million for a dressing room expansion, new mechanical systems and selected building improvements (2019 dollars)



Preliminary Findings: Parks Operations Centre

WRC: Existing Conditions



- Parks staff use a workshop and break room originally designed for arena staff
- Small fenced area on the north exterior wall for equipment along with unsecured material storage across from the north entrance to the aquatic centre
- Shared laneway between Parks Staff and the public



WRC: Opportunities & Constraints

Opportunities

- Central location and strong access to local transportation network
- Management, supervisors and front-line staff are all on one site

Constraints

- Amount of space is inadequate for current and future Parks needs
- Workshop limits efficiencies due to small size
- Unsecured storage has led to theft and vandalism of fleet, equipment and materials
- Shared laneway creates conflicts with the public vehicles
- Inadequate space for staff lockers, changerooms, showers, lunchroom
- Potential relocation of some soccer fields may be required for an expanded operations to fit onsite

Site Evaluation

WRC

- Area to the east presently occupied by mini soccer fields would have sufficient space for a building and storage (would require relocation of the fields to another park)
- The two undeveloped areas by the entrance off Nafziger Road may create sufficient space but would likely require relocating the entrance to the complex and/or relocation of some parking (and creates the potential for conflict with public traffic)
- Area to the north of the community centre deemed unfeasible due to configuration and available space
- Unlikely to accommodate joint operations between municipal departments (i.e. space would be relegated to just Parks & Facilities)



Preliminary Directions

That the Township of Wilmot:

1. Construct a third ice pad by way of expanding the Wilmot Recreation Centre, designed and oriented in a manner that also allows for a potential fourth ice pad if required to meet post-2031 arena needs.
2. Assemble potential new lands to construct a new Parks Operations Centre on the basis that the WRC is selected as the preferred location for the arena addition.





Next Steps

1. **Seek Council feedback** regarding the existing conditions analysis and Preliminary Directions
2. **Conduct Stakeholder & Public Consultation** for an expanded arena at the WRC
3. **Proceed with conceptual plans** and costing estimates for the Preferred Options
4. **Report back to Township Council** in early 2022



PARKS, FACILITIES AND RECREATION SERVICES

Staff Report

REPORT NO: PFRS 2021-018

TO: Council

SUBMITTED BY: Sandy Jackson, Director Parks, Facilities and Recreation Services

PREPARED BY: Sandy Jackson, Director Parks, Facilities and Recreation Services

REVIEWED BY: Patrick Kelly, Director Corporate Services/ Treasurer
Sharon Chambers, Chief Administrative Officer

DATE: November 8, 2021

SUBJECT: Third Ice Pad Location Study – Preliminary Findings Summary Report

RECOMMENDATION:

THAT the Third Ice Pad Location Study – Preliminary Findings Summary Report be received;

AND FURTHER THAT staff be directed to initiate a public consultation process to seek comments on the recommended location of the Wilmot Recreation Complex for the third rink site;

AND FURTHER THAT staff be directed to present the public consultation results to Council with a recommendation regarding the preferred site.

SUMMARY:

This staff report and consultant presentation provide an update to Council regarding the consulting work provided by Monteith Brown Planning Consultants Ltd. related to the preferred site for a third rink in Wilmot Township. The report recommends the Wilmot Recreation Complex as the preferred site based on user group consultation, site tours and background work conducted by Monteith Brown. Next steps include a public consultation to seek comments regarding the proposed location, and development of a conceptual design with high-level budget estimates, which will be brought back to Council in future meetings.

BACKGROUND:

In October 2020, Council approved the Indoor Arena Usage and Needs Analysis Update which recommended a third ice pad be provided in Wilmot in the short-term to meet current and future needs from population growth. Monteith Brown Planning Consultants Ltd. were retained to complete the study as a follow up to a report they provided in 2013 regarding future ice needs.

The report included the following:

- A summary of current ice facilities and level of prime-time ice bookings;
- A review of area municipal arenas within a 30 km/ 30-minute drive from Wilmot Township;
- A review of previous studies undertaken by the Township;
- Inclusion of related recommendations from the 2017 Parks, Facilities and Recreation Services Master Plan related to ice needs in the community;
- A review of stakeholder consultation undertaken as part of the 2020 ice needs analysis;
- A community profile outlining existing and forecasted population growth;
- A demographic review related to age structure within the community;
- An overview of socio-economic trends related to participation in sports;
- A review of pressures impacting key arena stakeholders regarding access to ice;
- A summary of a survey issued to all ice users currently utilizing the Wilmot Recreation Complex (WRC);
- A chart outlining the current registration levels for the major ice users;
- A comparison to national and provincial trends related to ice use;
- Reference to the current and potential future impacts of COVID-19; and
- An outline of the timing for future ice surface investment.

The following recommendations were included in this report:

1. Continue to target 1 ice pad per 450 registered youth participants (ages 5 to 19) in the planning for current and future ice surface needs, consistent with the Parks, Facilities & Recreation Services Master Plan and the previous Ice Needs Analysis. Based on this target and a continuation of existing participation rates, there is a deficit of ice at present (equivalent to 0.5 ice pads), growing to 1.1 ice pads by 2026 and 1.4 ice pads by 2031.
2. Provide one additional ice pad as early as the 2021/22 season. It is anticipated that the findings of this Analysis will be used by the Township to develop a strategy for the provision of future municipal ice surfaces. Specifics relating to the location, design, cost, funding, and form of management for a third ice pad are beyond the scope of this Analysis.

The Township should undertake further study to determine strategies for delivering a third ice surface, including considerations to partnerships, locations, operational models (multi-pad arenas are more sustainable than single pad facilities), and

funding (e.g., capital reserve). Potential strategies may include (but not necessarily limited to):

- rehabilitation of the New Hamburg Community Centre as a winter ice venue;
 - an expansion to the Wilmot Recreation Complex; or
 - new construction at an alternative site, with capacity for a fourth municipal ice pad (to be determined through future arena assessments).
3. Review potential implications of COVID-19 on arena participation and utilization rates as they pertain to short-term arena demand. The need for a fourth ice pad should be confirmed based on arena market factors including (but not limited to) the rate and timing of population growth (with emphasis on growth in the 5 to 19 age group), changes to participation rates, additions or removals of ice pads from the regional arena supply, changes to user group programming requirements and capabilities, etc.

As a result of these report recommendations, Council approved staff report PFRS 2021-013 and the following recommendations:

THAT the recommendations in the Indoor Arena Ice Usage and Needs Analysis Update prepared by Monteith Brown Planning Consultants Ltd. be received, and;

THAT staff proceed with Recommendation #2 *'to undertake further study to determine strategies for delivering a third ice surface'*, and;

THAT funding be included into the 2021 budget as per the existing 10-year Capital Forecast at an estimated cost of \$55,000; and,

THAT the existing contract with Monteith Brown Planning Consultants Inc. be extended to include strategies for delivering a Third Ice Surface report.

As a result, the 2021 Capital budget included funding for the follow-up study to determine strategies for delivering a third ice surface including location analysis, concept design(s) and estimated budget for construction planning. Three (3) options for location were identified for the new ice pad, including the WRC, recommissioning of the New Hamburg Community Centre (NHCC) arena, or selecting a new site if neither of the existing sites are deemed suitable.

In addition to the follow-up for the ice rink needs, the capital budget included a provision to complete a needs assessment and location study for a new Parks Operations site. This work was undertaken concurrently by Monteith Brown due to the synergies between the third rink and parks operations site, due to its current location at the WRC.

The report attached presents the preliminary findings of Monteith Brown's research and user group consultation.

REPORT:

The Third Ice Pad Study – Preliminary Findings Report is intended to provide guidance to the Township of Wilmot regarding prospective locations and preliminary design considerations for a new ice pad and parks operations centre. The report outlines the results from study undertaken by Monteith Brown, which included the following deliverables:

- Engage arena users and Township staff;
- Site tours of WRC and NHCC;
- Review background, trends & best practices for ice pads and parks operations centres;
- Develop site selection criteria for each project;
- Report preliminary findings to Council.

Consultation and Site Preference

Three (3) options were considered for the ice surface location including the WRC, NHCC and a new site should neither of the first two (2) options provide an opportunity.

The following groups were engaged and interviewed during the consultation process:

- New Hamburg Hockey Association (NHHA)
- Wilmot Girl's Hockey Association (WGHA)
- New Hamburg Skating Club (NHSC)
- New Hamburg Jr C Firebirds
- The Community Players (TCP)
- Wilmot Jr C Lacrosse

The Parks and Facilities Operations Centre was considered in tandem with the ice rink location due to the integrated nature of the current arena and operations centre. Although user group consultation was sought for the rink location, public / user group consultation was not part of the background work for the Parks and Facilities Operations Centre due to the operational nature.

The ice user group consultation and analysis completed by Monteith Brown identified the preferred location for the third rink as the Wilmot Recreation Complex (WRC) for the following reasons:

- Co-location with existing two active rinks – ideal for tournaments;
- Co-location with multi-purpose uses of aquatics, youth centre, fitness space, sports fields, splash pad and playground;
- Adjacent to Hwy 7/8 for local and regional markets;
- Ample land available for expansion;
- Existing building was constructed using modern barrier free accessibility and building code standards;

The NHCC site was not preferred as it displayed limitations due to small ice surface (less than NHL size), lack of parking, lack of expansion room for proper dressing room space due to flood plain and steep grade, poor accessibility standards due to age of structure.

Ice Rink Recommendation

The study completed by Monteith Brown includes the following preferred option:

"It is recommended that the Township of Wilmot construct its third ice pad by way of expanding the Wilmot Recreation Complex, designed and oriented in a manner that also allows for a potential fourth ice pad if required to meet post-2031 arena needs."

Parks and Facilities Operation Site Recommendation

The report indicates that should the third rink be located at the WRC, that a new site be sought for the Parks and Facilities Operation Centre. Both uses have compatibility challenges and co-locating an operations centre with the public facing recreation complex is not preferred.

Next Steps

With the preliminary work completed, providing Council supports this report, a two-week online consultation will be available for public input regarding the preferred location of the third rink which will include the following questions:

1. Do you currently reside in Wilmot Township?
2. Are you a current user of the Wilmot Recreation Complex?
3. If yes, what organization are you affiliated with (if any)?
4. Please provide your comments on the preferred location of the Wilmot Recreation Complex for a third ice pad.

It is anticipated that a follow up staff report will be presented to Council with input from the public based on the online survey questions in early December. In the interim, Monteith Brown will continue basic work on preparation of conceptual design(s) and high-level costing which will be presented back to arena stakeholders and Council in early 2022.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

Completing the Third Ice Pad Study aligns with the Core Values of Health and Wellbeing, Community, Legacy, Accessibility, and Inclusivity and Forward-thinking.

This study supports the Goals of Quality of Life, Community Engagement and Responsible Governance.

ACTIONS TOWARDS UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Goal 3: Ensure healthy lives and promote well-being for all at all ages.

Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

FINANCIAL CONSIDERATIONS:

Following the final presentation to Council, capital budget implications will need to be considered. Future reports will include additional information regarding order of magnitude costing for the third rink site and the parks operations site.

Both projects were included within the recently approved 2021 Development Charges Background Study, with a significant proportion of funding deemed growth related. Staff will need to develop a Business Plan, complete with financing strategies, to cover the non-DC eligible portion of capital and operating costs.

Monteith Brown estimates that the project will take a minimum of two (2) years to complete and typically rinks need to open in September to capture the full ice user market.

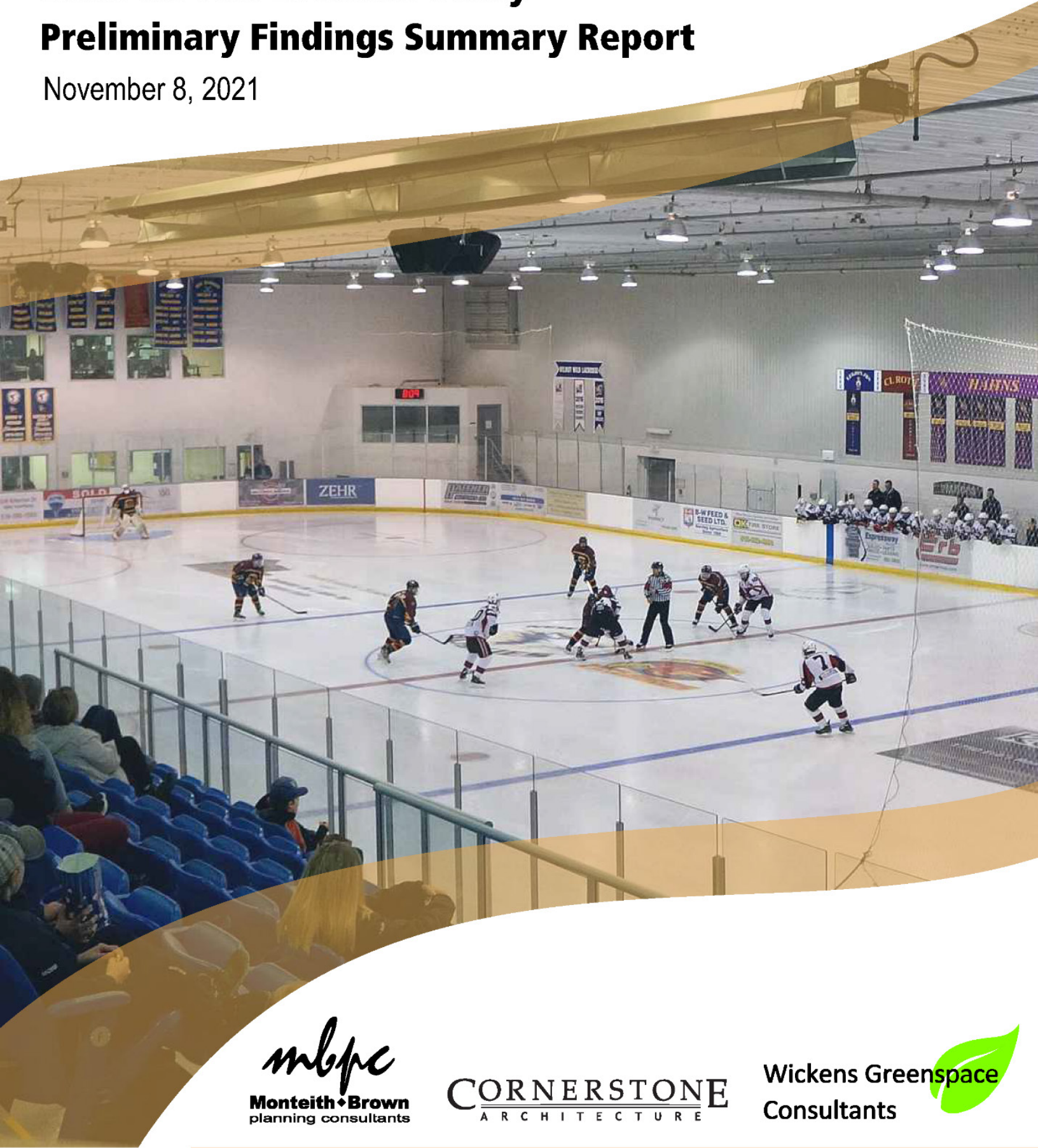
ATTACHMENTS:

Third Ice Pad Study – Preliminary Findings Summary Report

Township of Wilmot

Third Ice Pad Location Study Preliminary Findings Summary Report

November 8, 2021





Township of Wilmot

Third Ice Pad Location Study Preliminary Findings Summary Report

November 8, 2021

Prepared by:



**Wickens Greenspace
Consultants**



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The disclosure of any information contained in this Preliminary Findings Summary Report for the Third Ice Pad Location Study is the sole responsibility of the Township of Wilmot. The Study is attributable to work conducted to inform the Township of Wilmot's Terms of Reference for the Study and any findings contained herein should not constitute final recommendations since subsequent works will need to be undertaken by the Township. This Study has been prepared in consideration of information and documentation provided to Monteith Brown Planning Consultants Ltd., and reflects the Consultant's judgment in light of the information available to us at the time of preparation of this report.

Any use which a third party makes of the Third Ice Pad Location Study, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Monteith Brown Planning Consultants Ltd., Cornerstone Architecture and Wickens Greenspace Consultants accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

1.0 Study Purpose & Key Inputs

1.1 Study Purpose & Context

The Third Ice Pad Location Study (“the Study”) is intended to provide guidance to the Township of Wilmot as it evaluates prospective locations and preliminary design considerations for a new ice pad and operations centre.

In October 2020, an Indoor Arena Usage & Needs Analysis Update was presented to Township Council. The Analysis recommended that the Township provide a third ice pad to meet future needs arising from population growth as well as strong arena utilization and registration rates in Wilmot. Three options were identified for the new ice pad, consisting of the Wilmot Recreation Complex (WRC), recommissioning the New Hamburg Community Centre (NHCC) arena, or selecting a new site altogether if either of the existing facilities were deemed to not be feasible. Township Council directed Staff to initiate a follow up study focused upon site selection and cost implications to determine the optimal location for the third ice pad (while also considering longer-term expansion potential in the event a fourth ice pad would be required in the future).

At the same time, the Township was also planning to investigate whether the parks and facilities operations centre currently housed within the WRC remains the most appropriate location. The operations yard is situated behind the WRC and also occupies some space within the arena maintenance area. The Township wishes to evaluate the continued suitability of the WRC for the operations centre in light of future growth needs and an ability to deliver efficient services, or whether an alternative location should be considered. The intent of the two studies is to identify sites within a broad geographic area through which the Township can investigate specific parcels through subsequent and separate processes.

Due to the integrated nature of the current arena and Parks & Facilities Operations Centre, a decision was made to combine the arena and operations centre studies. Through the Third Ice Pad and Parks & Facilities Operations Centre Studies, the Township is seeking direction on whether a third ice pad is appropriate at the WRC and whether sufficient space would still exist to retain the parks and facilities operations centre, and/or whether alternative locations for both a new ice pad or operations centre should be contemplated (either co-located or provided on separate sites).

1.2 Study Methodology

Monteith Brown Planning Consultants Ltd., Cornerstone Architecture, and Wickens Greenspace Consultants are assisting the Township with the Third Ice Pad Location Study. Notable elements of the project methodology involve:

- Engaging arena stakeholders and Township Staff throughout the planning process through interviews and workshops near the onset of the project, while a feedback opportunity will be afforded to stakeholders so that may review the Draft Study prior to its finalization;
- Reviewing relevant background information including building condition assessments, site and facility plans, staff reports, and trends pertinent to the design and construction;
- Development of site selection criteria to guide where the third ice pad would be optimally situated;
- Preparation of a conceptual plan and order-of-magnitude capital costs for the preferred option;
- Collaborating with Township Staff with respect to the development of operating costs; and
- Presentations to Township Council at key milestones throughout the process.

Study Exclusions

The scope of work for the Study excludes site engineering or building condition assessments, detailed construction drawings or technical specifications, comprehensive organizational reviews, negotiations with prospective partners, preparation of pricing structures, and quantification of specific community economic impacts. As a result, additional studies and investigations may be required to confirm assessments and findings contained herein.

1.3 Preliminary Findings Summary Report

This Preliminary Findings Summary Report summarizes information gleaned through research, consultations and an analysis of the WRC and NHCC as carried out to date. This Report recommends the preferred option(s) including ideal characteristics / features of a renovated, expanded, or new arena. The intent of the Preliminary Findings Report is to identify the most suitable location(s) for a third rink for the consideration of the Township Staff Team and Council.

Please note that a Preliminary Findings Report prepared in support of the Parks & Facilities Operations Centre Study is contained under separate cover.

1.4 Parks, Facilities & Recreation Services Master Plan

In January 2017, Township of Wilmot Council endorsed the Parks, Facilities & Recreation Services Master Plan prepared by Monteith Brown Planning Consultants. With the assistance of an extensive public consultation program and supported by a comprehensive assessment of indoor recreation facility needs, the Master Plan found that the Wilmot Recreation Complex arena was operating at capacity during many prime time periods and that selected arena users were travelling outside of the Township to access ice time available in other municipalities. The Master Plan found support for providing a total of three ice pads in Wilmot, confirming previous analyses prepared as part of the 2013 Indoor Ice Usage and Needs Analysis, along with the 2007 Addendum to the 2002 Recreation Facility Needs Study. Each of these studies identified options for a third ice pad, but did not evaluate or select a preferred provision option.

1.5 Indoor Arena Usage & Needs Analysis Update

In October 2020, Township Council endorsed the Indoor Arena Usage & Needs Analysis Update. That process involved consultation with major arena stakeholders along with a comprehensive assessment of arena needs over a 10-year planning period. The Update confirmed findings and directions contained in the Parks, Facilities & Recreation Services Master Plan as well as a previous Indoor Arena Usage & Needs Analysis prepared in 2013. The following recommendations were made:

1. Continue to target 1 ice pad per 450 registered youth participants (ages 5 to 19) in the planning for current and future ice surface needs, consistent with the Parks, Facilities & Recreation Master Plan and the previous Ice Needs Analysis. Based on this target and a continuation of existing participation rates, there is a deficit of ice at present (equivalent to 0.5 ice pads), growing to 1.1 ice pads by 2026 and 1.4 ice pads by 2031.
2. Provide one additional ice pad as early as the 2021/22 season. It is anticipated that the findings of this Analysis will be used by the Township to develop a strategy for the provision of future municipal ice surfaces. Specifics relating to the location, design, cost, funding, and form of management for a third ice pad are beyond the scope of this Analysis.

The Township should undertake further study to determine strategies for delivering a third ice surface, including considerations to partnerships, locations, operational models (multi-pad arenas are more sustainable than single pad facilities), and funding (e.g., capital reserve). Potential strategies may include (but not necessarily limited to):

- rehabilitation of the New Hamburg Community Centre as a winter ice venue;
 - an expansion to the Wilmot Recreation Complex; or
 - new construction at an alternative site, with capacity for a fourth municipal ice pad (to be determined through future arena assessments).
3. Review potential implications of COVID-19 on arena participation and utilization rates as they pertain to short-term arena demand. The need for a fourth ice pad should be confirmed based on arena market factors including (but not limited to) the rate and timing of population growth (with emphasis on growth in the 5 to 19 age group), changes to participation rates, additions or removals of ice pads from the regional arena supply, changes to user group programming requirements and capabilities, etc.

1.6 Arena Stakeholder Consultation

Stakeholders that were consulted during the 2020 Indoor Arena Usage & Needs Analysis were re-engaged to obtain feedback regarding arena location and design. Certain stakeholders not involved in the 2020 Needs Analysis were also contacted for this Study. One-on-one interviews were held via video conference in March 2021 with representatives from:

- | | |
|-------------------------------------|-----------------------------------|
| 1. New Hamburg Hockey Association | 4. New Hamburg Junior C Firebirds |
| 2. Wilmot Girl's Hockey Association | 5. The Community Players |
| 3. New Hamburg Skating Club | 6. Wilmot Junior C Lacrosse |

Notable and common points arising from these interviews are as follows:

- **WRC:** Ice sport organizations were supportive of the Council direction to proceed with the third ice pad, indicating it would allow them to grow their programs. The preference was to expand the WRC with one if not two ice pads, space permitting.
- **NHCC:** While recommissioning the NHCC arena was the secondary preference, ice sport organizations indicated that they would view it as a “practice rink” or dryland training facility due to its limited parking and dated changerooms, as well as a preference to use the WRC for games and more competitive-level programming.
- **Location & Site:** Arena users indicated that a future ice pad should be located along or near major roads/highways and central to the Township’s population, reinforcing the WRC as a preferred site. They indicated that the ability for the site to allow expansion for a fourth ice pad would also be ideal in the event that registrations continue to grow into the future. Certain groups noted that vehicular circulation is extremely important, using the example of the WRC where the parking lot and drop-off zone becomes very busy when multiple events are happening (e.g. Junior C games, swim programs, etc.).
- **Design:** All groups supported an NHL-regulation ice pad (200’ x 85’) with a minimum of 6 dressing rooms, referee room, and adequate storage. Bleacher seating would be suitable and organizations did not foresee a need for enhanced spectator seating capacity above what would be considered the average for a community recreational ice rink. A need for strong Wi-Fi connectivity and mobile phone reception throughout the building was also expressed.
- **Theatre:** The Community Players articulated their current constraints with operating out of the NHCC, largely associated with a lack of rehearsal space, storage, and workshop which creates functional challenges and can exhaust their volunteer resources. Their goal is to have a single space for all theater activities. TCP have invested in NHCC in the past and would be willing to stay at this location with some additional facility improvements, such as the insulation between floors.
- **Capital Contributions:** Arena organizations were willing to discuss if there is a role and capacity to assist the Township with potential contributions to capital funding for a new ice pad or enhanced amenities. However, organizations would have to consult with their executives, Boards and membership prior to making any commitments.

1.7 Arena Staff Workshop

The Township's arena staff were engaged to obtain feedback regarding the feasibility of adding an ice pad to existing arenas and design of a new ice pad. A group workshop was held via video conference on August 16, 2021 with seven staff in attendance consisting of Managers, Supervisors and Operators.

Notable points arising from the workshop are as follows:

- **WRC:** This arena has the potential for expansion and by incorporating the third ice pad it would be centralizing staff and programs to allow for maximum efficiency. The WRC offers ample parking though there are traffic congestion issues during peak times, primarily in the drop-off zone.
- **NHCC:** Some barriers to expansion on this site are being situated in the floodplain, limited onsite parking, and accessibility challenges for persons with disabilities. As a single pad it could have to shut down for an emergency mechanical repair if a replacement is not readily available unlike the WRC where some equipment can be "borrowed" between the two ice pads. However, the building has sentimental value to certain staff who would like to see this space retained for a new "warm" use if not recommissioned for ice purposes.
- **Site & Location:** A new arena should be in close proximity to facility users and staff, therefore, population distribution and a central location between New Hamburg and Baden is considered most advantageous. Situating the arena close to the highway or existing arenas would allow for easy access and efficiencies between locations.
- **Design:** Staff supported an NHL-regulation ice pad (200' x 85') with a minimum of 6 dressing rooms (ensuring availability for different genders or non-binary individuals), adequate storage for both operations and user groups, and a full bowl seating area. An area to send children waiting to get on the ice was suggested so that they do not damage flooring with their sticks or create conflicts with other facility patrons. Managing traffic flow and internal vehicular circulation will be important to factor into the site plan.
- **Sustainability:** staff indicated that Township Council have made a commitment to "go green" by the year 2035. This will have affect architectural building standards (e.g. LEED or Net Zero designations), size of the ice resurfacer room depending upon use of combustion versus electric engines, opportunities for heat recovery and exchange, building automation and use of technology in general.

2.0 Existing Arenas Analysis

2.1 Arena Supply

The Township operates two NHL-regulation sized ice pads at the Wilmot Recreation Complex (WRC) with six change rooms per pad and spectator seating for 350 and 750 spectators for each respective ice pad. The arena is part of a broader multi-use community centre that includes an indoor aquatics facility, fitness space, youth centre, program rooms, and a number of outdoor recreational amenities. The WRC is centrally located in the Township with direct access to Highway 7 and 8, drawing residents from across Wilmot as well as area municipalities.

The New Hamburg Community Centre (NHCC) is a former arena whose ice plant was mothballed after the opening of the WRC in 2007, a decision supported by the findings of the Township's 2002 Recreation Facility Needs Study. Originally constructed in 1948, the NHCC was most recently renovated in 2013 to improve the entrance, lobby and washrooms. The arena's dry floor is currently being used by the Wilmot Family Resource Centre for youth programs, The Community Players (TCP), special events, and a limited number of community rentals; it is not currently being used for ice sports or activities.



Wilmot Recreation Complex



New Hamburg Community Centre



2.2 Trends / Best Practices in Arena Design & Construction

Trends and best practices for arena design and Construction can be grouped under three major categories:

1. Design
2. Accessibility
3. Energy Efficiency

Design

While the most significant trend in arena design has seen the co-location of multiple uses in one building (including aquatic facilities, community centres, libraries, childcare centres and schools), arena design, in and of itself, has evolved to consider aspects of inclusion, safety and comfort for ice users and spectators. Current arena facilities are typically designed to ensure that:

- Dressing rooms are located on the same side as the benches, to ensure that coaches/ trainers are not crossing the ice to access the benches.
- Spectator access to seating areas is separated from the access to the dressing rooms, to limit the level of interaction between spectators and participants.
- A minimum of 6 dressing rooms are provided for each ice pad, to allow space before and after each ice allotment for the change over of groups/ teams.
- Smaller, non-gender dressing rooms are typically provided so that entire change rooms are not occupied by one or two people, and allowing for the change over function between time slots to be retained.
- Each dressing room is typically provided with two shower heads, a drying area, a toilet and sink, as well as a urinal, although a urinal is not always provided.
- One referee room is typically provided for each ice pad (though sometimes two rooms are provided recognizing that a refereeing crew may be composed of different genders).
- In addition to the dressing rooms, gender neutral washrooms are being implemented in most community recreation facilities, as well as a universal washroom.
- Both warm and cold viewing areas are provided for spectators.
- Dryland training/warm-up spaces are provided and can also function as multi-use spaces.
- Natural light is being integrated into many facilities, both in viewing areas and for the ice surfaces. It is important to ensure that any glazing does not create glare or “hot spots” on the ice surface.
- In light of experiences with COVID 19, reducing the number of touchable devices is being considered, including door operators, plumbing fixtures and washroom accessories.

Accessibility

Requirements of the *Ontario Building Code* and *Accessibility for Ontarians with Disabilities Act* are integrated into the design of current arena facilities, extending beyond mobility considerations to include visual, aural, and cognitive design considerations as follows:

- Access to the facility and change room areas is provided via automatic sliding doors.
- A minimum of one change room is typically designed to meet accessibility requirements outlined in the Ontario Building Code.
- Viewing areas include space for visitors using wheelchairs or mobility aids, designed at a height to allow for viewing of the ice surface.
- Visual contrast is provided between floors and walls, as well as walls and doors.
- Enhanced sound systems (e.g. “soundfield” equipment) provided in viewing areas.
- Wayfinding is designed to be accessible for individuals with visual and cognitive issues.

Energy Efficiency

Arena facilities consume significant amounts of energy. As a result, many technologies have been developed to address energy efficiency, including:

- Capturing heat generated in the process of ice-making to provide in-floor heat in dressing rooms and other warm spaces.
- Super-insulating the ice pad area.
- Insulating the dressing rooms to prevent heat loss and condensation issues.
- Providing CO₂ detectors in viewing areas to allow for demand control ventilation.
- Utilizing natural light throughout the facility.

2.3 Arena Site Selection Criteria

Arenas have historically played an important role as community gathering places where sport, physical activity and social connections are encouraged. Arenas are land-intensive facilities due to the size of their ice pads, multiple dressing rooms, other amenities (such as halls or program rooms), and their parking requirements. As community focal points and drive-to destinations, a number of criteria must be considered when selecting where to locate a future ice pad or arena.

Evaluating and selecting a preferred site for the proposed ice pad is important to its ultimate success. The location needs to be chosen with care, so as to embody as many key characteristics as possible. Maximizing accessibility to as many residents as possible (both now and in the future) should certainly be one of the key objectives; however, there is also a need to ensure that the site and its facility can be properly serviced, is compatible with adjacent land uses, can be developed cost effectively, and so on. The site can have a dramatic impact on the facility's construction cost. Land acquisition costs (if applicable), servicing potential, stormwater management, traffic and road access, soil condition, available infrastructure, etc. can all result in significant budget implications.

The criteria articulated in Table 1 provide a strong rational basis for evaluating potential sites and have regard to the project objectives. While it is preferable for the selected site to demonstrate all of the criteria, it is possible that they all may not be able to be met. The criteria were applied to the WRC and NHCC whose site and building conditions are explained in greater detail in Section 2.4 and 2.5, respectively.

Based on a high level analysis relegated to the site selection criteria, the WRC site is the more optimal of the two. Both the WRC and NHCC sites are municipally owned, situated beside parks and outdoor recreational amenities located along or near major transportation corridors, and in areas that can be considered community focal points. However, the WRC site provides the following advantages to a greater degree than the NHCC:

- The WRC has undeveloped open space portions on its site and expansion could occur, if required, on one or more sports fields (there are undeveloped open spaces within other Township parks that could accommodate sports field relocations should the need arise).
- The WRC has a large parking lot and room to construct additional parking to support a third ice pad.
- The WRC has a centralized staff complement by way of its multi-use nature which offers efficiencies in staffing numbers, supervision, maintenance and programming.
- Traffic and noise impacts on surrounding land uses would be less intrusive at the WRC (whereas the NHCC is embedded within a residential neighbourhood).
- There are very few environmental or legal encumbrances at the WRC (whereas the NHCC is located in close proximity to a regulated flood plain).
- The site is accessible in a reasonable time by car for a number of residential areas in Wilmot, and areas near the WRC are being planned for future residential growth.

Table 1: Arena Site Selection Criteria

Considerations	Prospective Criteria	WRC	NHCC
Location & Access	<ul style="list-style-type: none"> – The site is within reasonable proximity to existing and future residential areas. – The site can be accessed from an arterial or collector road, is in the vicinity of a connected trail network, and has barrier-free access. 	✓ ✓	✓ ✓
Site Development Potential	<ul style="list-style-type: none"> – The site area and shape are sufficient for the proposed use and provide a reasonable level of flexibility in design. – The site is able to accommodate enough on-site and/or nearby parking for both patrons and staff. 	✓ ✓	
Community Compatibility	<ul style="list-style-type: none"> – The facility would be compatible (in terms of building design, scale, landscaping, setbacks, etc.) with the surrounding area/buildings. 	✓	
Known Constraints	<ul style="list-style-type: none"> – The site is not unduly impacted by a geographic barrier (e.g. watercourse, rail line), is not restricted by easement/man-made obstructions, does not require site decommissioning (e.g. brownfield), and is relatively flat. – Suitable infrastructure exists (e.g. sewers, water, etc.) on the site or can be reasonably extended to the site. – The site does not require the demolition of a significant building or elimination of necessary parkland, parking or other vital land use. 	✓ ✓ ✓	 ✓ ✓
Planning Approval Status	<ul style="list-style-type: none"> – The site is capable of complying with applicable planning policies. 	✓	✓
Availability of Site	<ul style="list-style-type: none"> – The site is owned by the Township or can be acquired for a reasonable price. 	✓	✓
Focal Point Potential	<ul style="list-style-type: none"> – The site is at a visible location within the community. – The site is located at or has the potential to be a community focal point. 	✓ ✓	✓ ✓
Expansion Potential	<ul style="list-style-type: none"> – The site possesses long-term expansion potential for municipal uses. 	✓	
Amenity Opportunities	<ul style="list-style-type: none"> – The site has the ability to enhance and support other facilities, accommodate potential partners, and generate increased usage due to proximity to other locations. – The site offers the potential for economies of scale in construction and/or operation due to the co-location of other municipal and/or community services. – The site has the ability to incorporate outdoor parkland/features. 	✓ ✓ ✓	 ✓

2.4 Wilmot Recreation Complex: Opportunities & Constraints

Site Conditions

The WRC is located at 1291 Nafziger Road in Baden, situated at the intersection with Highway 7/8. The WRC is easily identified and accessible to both local and regional markets by virtue of its centralized location between Wilmot's two primary settlements and access to the Highway 7/8 corridor that links Stratford to Kitchener-Waterloo and beyond.

The developed portion of the site occupies approximately 11.05 hectares. The WRC property includes the Schmidt Woods located immediately to the east of the community centre and sports fields along with an internal laneway running to the north and east of the site that connects Nafziger Road to Gingerich Road. Situated immediately to the north of the WRC property is a 6.6 hectare undeveloped woodlot that is also owned by the Township.

The developed portion of the site contains the WRC building, several sports fields, a playground and splash pad, and public parking. The Township's Parks & Facilities Operations Centre is housed at the north end of the building and an unsecured materials storage area is found across the laneway. A stormwater management pond is situated north-west of the WRC building while there are two undeveloped open space portions of land fronting Nafziger Road on either side of the entranceway.

Figure 1: WRC Site Context



Building Conditions

The WRC was constructed in two phases, the first in 2007 consisting of the two arenas and the second phase adding the indoor aquatic centre and multi-purpose program rooms in 2012. The WRC occupies a gross floor area of approximately 163,000 square feet.

A Building Condition Assessment was completed in 2020.¹ It found that the poured concrete slab and foundation walls to be in good condition with some cracks found in the structure likely due to settlement. Window and the metal roofs on the arena and pools are in good conditional and with no reports of leaking. Air conditioning and heating units are is fair condition needing to be replaced in the next 5-10 years. Interior finishes are in good condition with some regular maintenance to dressing rooms and rink area required. Overall, the BCA found the main issue to be worn sealants.

Of the \$1.2 million identified for the WRC in the Township's 10-year Capital Expenditure Summary between 2021 and 2030, arena-specific projects include \$670,000 for an 'arena refrigeration system maintenance plan' with other costs shared with other components in the community centre (e.g. aquatics).

As a relatively modern facility, the WRC was designed with barrier-free accessibility in mind and is thus considered to be highly accessible; however, current OBC and AODA requirements should be factored into long-range budgets for facility upgrades.



Wilmot Recreation Complex Event Rink & Ice Resurfacer Corridor

¹ Township of Wilmot. 2020. Building Condition Assessment: Final Report #2 – CC, RC & Admin. Buildings.

Facility Fit / Expansion Potential

The WRC is well suited to accommodate a third and fourth ice pad (the latter if required longer-term) due to the extensive site area available. An addition of this scale can be accommodated to the southwest of the existing arena / ice pad volume, but would require the relocation of existing parking as well as the reorganization of the traffic pattern with particular attention devoted to ensure a safe and efficient facility drop-off area(s).

Site Opportunities

- The consolidation of recreational services in the Township is well served through the WRC whereby locating both of its ice surfaces in this building creates efficiencies in terms of public access and staffing, and strengthens the potential for attracting/hosting tournaments.
- The WRC is central to and integrated with the planned Active Transportation Corridors being constructed to link the growing communities of Baden and New Hamburg, as well as more broadly to connections in Waterloo Region and Oxford County.
- The expansion of the entrance area to connect the existing building to the addition provides opportunity to create additional drop-off areas, as well as other common spaces.
- Creation of a new internal laneway can help to alleviate issues associated with the current drop-off area.
- The service lane can be extended at the north side of the building to access the addition.
- An upgraded refrigeration system to support the new ice pad(s), as well as the existing ice pads can be investigated.
- The facility can remain in operation during the construction of the addition.

Site Constraints

- The volume of traffic on this site would be increased significantly, and would have to be considered in the re-design of traffic circulation patterns.
- The reconfiguration or relocation of some soccer fields would be required to create a new access lane and provide additional parking on site that would be required to support a new ice pad(s). A cursory review of, sports fields could be considered at existing parks and open spaces owned by the Township or through future parkland developments.
- Exiting from the existing ice pads would have to be maintained/ considered in the construction of the new ice pad addition.

2.5 New Hamburg Community Centre: Opportunities & Constraints

Site Conditions

The New Hamburg Community Centre is located at 251 Jacob Street in New Hamburg. It forms part of a broader 9.8 hectare site that is fully developed with the NHCC building, the Royal Canadian Legion, three ball diamonds, covered stadium bleachers, pavilion, playground, running track and public parking. There is an internal pathway through the site connecting each amenity. This site is located on a flood plain with the Nith River running along the east side of the property, with a significant grade differential between the NHCC and the rest of the park site.

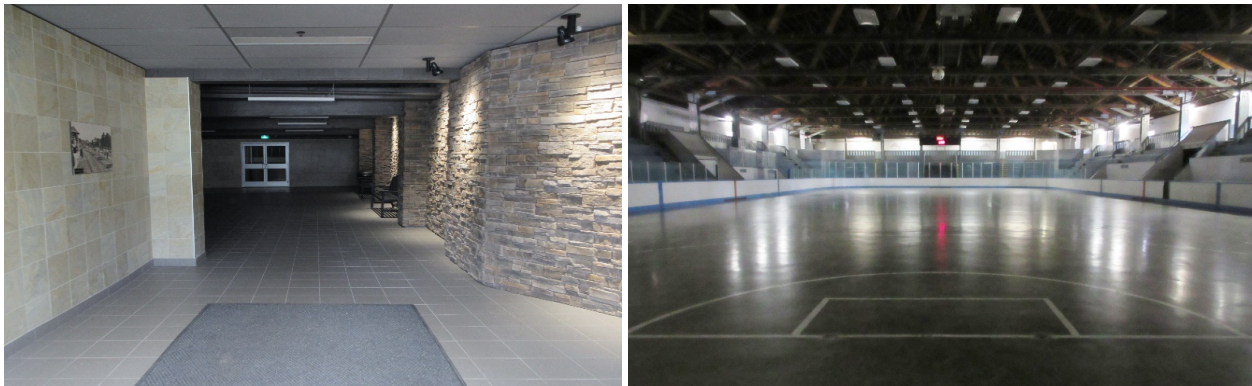
Figure 2: New Hamburg Site Context



Building Conditions

The New Hamburg Community Centre was originally constructed in 1948 with a northern addition built in 1984 and a more recent lobby renovation in 2014 to improve the entryway. The NHCC occupies a gross floor area of approximately 39,000 square feet consisting of a community centre and an arena.

The NHCC was built as an arena and previously used as such until the opening of the WRC twin-pad arena. Since that time, NHCC has been used as a “warm” dry pad facility. Other components of the community centre include a hall/auditorium located on the second floor, a dedicated space for a theatre tenant, meeting rooms, a common entry foyer, public washrooms and other ancillary spaces. There is an existing freight elevator between the main and second floor levels (not for public use) along with a small service basement.



New Hamburg Community Centre Lobby & Dry Floor

A 2020 Building Condition Assessment found that the concrete walls exhibit stains due to moisture and high humidity which may be a result of basement flooding in 2017. A few cracks on the foundation walls and in the arena corridors were noted as well. The slab on grades were reported to generally be in good condition. The roof structure and supporting columns of the arena are in operating order but will need replacement in 5-10 years. The roof was recorded to be in fair condition with observations of sealant failures, deformed flashing, water ponding and vegetation on the surface. Windows are in operating order but are stated to need replacement in the next 5 to 10 years. Interior finishes on the upgraded section of the lobby are in good/very good condition but the older parts of the community centre and arena need some repairs and upgrades.²

A previous assessment completed by CIMCO³ in 2018 reported that *“As a high level budget it will be approximately \$680,000 - \$850,000 + HST to completely replace the refrigeration system including the rink slab. This budget is just for refrigeration related items. It does not include work such as concrete, insulation, forming and other work required to bring the plant room to compliance.”* During the process of removing the ammonia from the building in early 2021, CIMCO noted that a significant brine leak had occurred in the south side of the system and recommended soil testing to determine the extent of contamination and inform any cost estimates related to remediation.

The Township’s 10-year Capital Expenditure Summary identifies nearly \$900,000 specifically for the NHCC between 2021 and 2030. Half of this expenditure (\$450,000) is allocated to replacing the roof membrane with

² Township of Wilmot. 2020. Building Condition Assessment: Facilities Located at 251 Jacob St. New Hamburg (Ontario)

³ CIMCO Refrigeration. New Hamburg Community Centre – Refrigeration Equipment Life Cycle. Letter dated December 5, 2018

other notable costs including \$175,000 for structural repairs and \$186,000 for parking lot/sidewalk replacement and lot expansion.

Based on a review of documentation along with visual observations, the NHCC has a number of functional limitations that would need to be addressed beyond its refrigeration, roofing, and other elements noted in the 10-Year Capital Expenditure Summary. While the Township could reasonably expend a minimum of \$1.75 million⁴ to recommission the NHCC arena and provide an experience similar to that found at present based on the information above (i.e. no major improvements), the following additional costs could be expected:

- Accessibility upgrades in compliance with the AODA and related facility accessibility standards;
- Replacement of dasher boards and glass system;
- Replacement of the wooden spectator seating surrounding the ice pad as these have been documented⁵ to not meet current design Codes and Regulations;
- Dressing room / washroom additions, enhancements or renovations.

The Township engaged an engineering consultant in 2019 to look at the potential of recommissioning the NHCC. The study investigated three Options as follows, noting that it did not identify a preferred Option. However, the study offers a more realistic picture of facility development/redevelopment costs, in the range of \$6.5 million⁶ should the Township wish to recommission the NHCC for ice sports and arena activities.

Study Option	Notable Improvements	Cost Estimate (2019)
Option 1: Ice Rink	A 7,200 ft ² expansion to accommodate 4 full-size dressing rooms, 2 smaller dressing rooms and 2 referee rooms alongside a new slab and boards, ice plant, electrical system, etc.	\$6,452,750
Option 2: Ice Rink	A 5,200 ft ² expansion containing same features as Option 1 but scaled back in size and amenities (i.e. fewer dressing rooms with plumbing).	\$6,042,500
Option 3: Permanent Warm Facility	A 2,500 ft ² expansion accommodate 4 full-size dressing rooms and position the NHCC as permanent interior multi-purpose concrete pad facility to house any number of events and situations such as indoor lacrosse, roller skating and Civic events.	\$2,950,500

Source: New Hamburg Arena Re-Commissioning Study

It bears noting that costs of materials and construction have escalated significantly for recreation sector projects across the country in the time that the study was prepared while the \$6.5 million estimate does not account for a number of other structural, mechanical and functional upgrades that could escalate the price further. On this basis, it is reasonable to expect that the cost to recommission and meaningfully enhance the NHCC to meet modern standards could be similar to those incurred for new arena construction.

⁴ Derived from 10-Year Capital Expenditure Summary and CIMCO Refrigeration quotation

⁵ NA Engineering Associates Inc. 2019. New Hamburg Arena Re-Commissioning Study. p.22

⁶ Ibid. NA Engineering Associates Inc. pp.22-29

Facility Fit / Expansion Potential

The New Hamburg Community Centre, while significant in terms of its place in the community as a gathering space and proximity to other adjacent recreational spaces, is a more challenging candidate for consideration as a third pad, due to the limited site area noted above, lack of on-site parking as well as its proximity to the flood plain. The original ice pad volume has a historic character but is limited in its use as a full-service arena due to the size of the ice pad. The 1984 addition poses significant challenges in terms of accessibility and contemporary expectations in arena design, as there are inconsistent floor levels on the main floor, there are no accessible washrooms, change rooms are smaller than current standards, spaces are cramped and confined, and there is no accessible route to the second floor common spaces.

Opportunities

- As noted above, the site is well-located in terms of its location in the community, promoting opportunities for walkability within the community of New Hamburg.
- The site provides the Township of Wilmot with an alternative recreation centre, along with the adjacent open space uses.
- The original ice pad structure has a romantic character, which could be enhanced through careful renovation to provide a unique player/spectator/user experience.
- Existing on-site parking could be reorganized (possibly by constructing a small lot on the open space immediately south of the existing building along Jacob Street), and provide a vehicular drop-off.

Constraints

- The size of the ice pad limits the use of this facility for (hockey) game and tournament play; resizing of the ice pad is possible, but would be a costly endeavour.
- A new refrigeration plant would be required, as the existing plant has been decommissioned, along with a new rink floor including brine lines and headers.
- Significant upgrade is required to the existing building, and will be required regardless of future use.
- Support spaces do not meet current arena expectations, and would require construction of new change rooms/ washrooms etc.
- A significant grade change on the east side of the building limits its usage as a potential area for expansion; this area is also within the GRCA floodplain.
- It is anticipated that climate change will continue to expand floodplain areas, further impacting the east side of the site.
- The age of the structure and original building system may not readily support improvements required to attain the Township's long-term sustainability and energy/water conservation objectives.
- Renovation/ expansion work would likely require the closure of the facility during renovation.

2.6 New Arena Site

Assembling new land for future arena site would provide the Township with flexibility to configure the site in a manner that is not subject to constraints of existing buildings, sports fields, etc. Depending on the size of the property, there may be potential to include other community centre components though it bears noting that the 2017 Parks, Facilities & Recreation Services Master Plan did not recommend any new major indoor recreational spaces apart from the ice pad. Any new lands acquired by the Township, however, should be large enough to accommodate a second phase arena expansion and associated additional parking in the event that a fourth ice pad is required in Wilmot.

In the event that a new arena site is being contemplated, the following criteria should be met at a minimum:

- The lands are large enough to allow future arena expansion and/or addition of other community facilities if required in the future;
- The site is centrally located between Baden and New Hamburg which will remain as the Township's primary urban settlements and home to the majority of Wilmot's population;
- The site offers strong access to major transportation corridors;
- The site is not constrained by environmental, geotechnical, or other constraints that would substantially escalate site preparation and development works;
- The site is serviced for hydro, water, and sewer or is in a location where extension of infrastructure servicing is being contemplated.

In the event that the Township does not already own a parcel of land that meets the above noted minimum criteria, it is likely that land purchase will be required. There may also be an opportunity to consider land swaps or other means permitted by the Ontario Planning Act to work with local landowners/developers to obtain the requisite amount of land. Unlike the WRC, the Township could also expect to incur site preparation and servicing costs for a new parcel of land.

2.7 Preferred Site for Third Ice Pad

Based on an analysis of site and buildings conditions for the WRC and NHCC, the WRC is the preferred location for the third ice pad. It would allow the Township to continue centralizing arena operations to the benefit of arena users and staff by virtue of the economies of scale generated. Doing so would not require the Township to assemble new lands thereby saving real estate purchases and will further reinforce the WRC as the premier recreation destination in Wilmot. The fact that a potential fourth ice pad may fit on the site is also a major benefit in the event that local ice registration rates remain strong and return to pre-pandemic levels; the most recent Indoor Ice Usage and Needs Analysis Update⁷ estimated that a third ice pad could be at capacity as early as 2025 with a potential fourth pad required after the year 2031.

PREFERRED OPTION:

It is recommended that the Township of Wilmot construct its third ice pad by way of expanding the Wilmot Recreation Centre, designed and oriented in a manner that also allows for a potential fourth ice pad if required to meet post-2031 arena needs.

⁷ Monteith Brown Planning Consultants Ltd. 2020. Indoor Ice Usage and Needs Analysis Update. p.19

3.0 Implementation & Next Steps

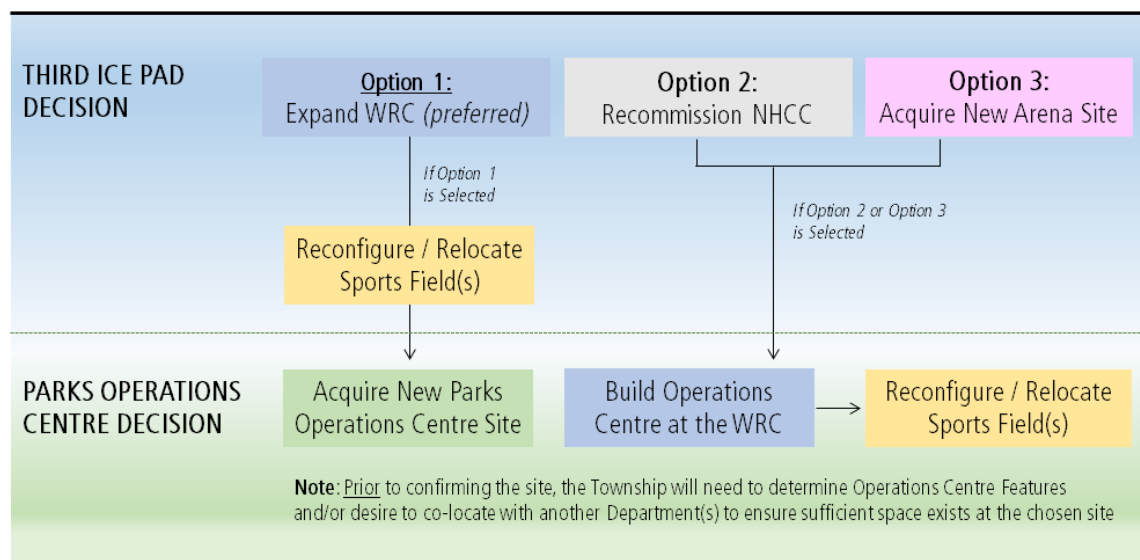
3.1 Summary of Options & Decision-Making Process

This Preliminary Findings Summary Report has identified that the WRC is the preferred option for an arena expansion. While the separately contained analysis for a new Parks & Facilities Operations Centre also demonstrates that such a facility could also fit at the WRC, the site is not deemed to be appropriate for both an arena expansion and a new operations centre due to factors such as:

- A high level of intensity from public use / programming and staff operations leading to the potential for conflicts between public and operational uses.
- An inability for either the arena or operations centre to be meaningfully expanded in response to ongoing population growth and associated level of service increases beyond the next 10 years.
- Limited operational efficiencies or gains from co-locating arena operations with parks and facilities operations (i.e. there is no compelling rationale to continue co-locating these uses at the WRC moving forward).
- A preference to relegating the WRC as Wilmot's primary focal point for recreation that could be undermined aesthetically and functionally if integrating an expanded operations centre and yard.

The preferred approach would be to prioritize recreation facilities and programs at the WRC since it is recognized as the Township's premier recreational destination by way of the ice pad, aquatics centre, multi-purpose program spaces and other community centre components, rectangular fields, and splash pad. Providing a third ice pad onsite is also deemed to create greater operational efficiencies for the Township and arena users than creating a single pad arena elsewhere (whether in New Hamburg or a new site), and these efficiencies would also be greater than retaining parks and facilities operations at the WRC.

The following decision-tree summarizes the preliminary findings and articulates the next steps in this study, and how it may affect decision-making for a new Parks & Facilities Operation Centre (including whether to relocate sports fields required to support an arena expansion as part of the new operations centre as well).



3.2 Arena Implementation

The ordered tasks below are intended to guide the Township of Wilmot in the development of the proposed arena project using a conventional Design-Bid-Build (DBB) delivery methodology. DBB is the most common project delivery method though others may be considered by the municipality such as design-build, integrated project delivery, etc.

1. Decision of Preferred Capital Project – the Township will confirm the preferred option (invest in the WRC) and identify an order of magnitude cost estimate in its long-term capital forecast; interim asset management and financial management decisions will reflect this decision.
2. Acquisition of consultants – assuming a DBB method, a Request For Proposal may be issued for a project manager to provide services through the life of the project; the project manager would develop a procurement strategy and lead the procurement of other consultants, including an architect for preliminary design.
3. Functional program – the general recommendations of this Study will be further elaborated to define the specific requirements for the facility, typically defined by an architect.
4. Schematic design – includes floor plans and elevations and shows the character and materials to be used in the building.
5. Allocation of funds – the project budget is re-assessed to make a determination of how, and when, to proceed; this is an appropriate stage to commence fundraising effort.
6. Construction document preparation – includes design development and the preparation of tender documents, sufficient for preliminary site plan approval; on completion of the tender documents a pre-tender Class B estimate to within 10% of the contract cost can be developed.
7. Tendering and award – tender documents are issued and interested general contractors (or pre-qualified bidders) develop submissions and pricing, which are formally evaluated by the Township and its project manager; the lowest priced bid that meets the tender requirements may be awarded the contract.
8. Construction – the successful bidder will construct the project in accordance with the construction documents, with significant oversight from the Township and its project manager.
9. Commissioning – this process ensures that the Township's requirements are incorporated into the design, are built, and are configured to produce the required result (often achieved with the assistance of a Commissioning Agent); move-in follows, which can require considerable advance coordination
10. Decommissioning – should the Township decide to close the NHCC as an ice venue, decommissioning of the ice plant will be required once the replacement arena opens; decisions around future repurposing of the NHCC should be considered in advance, with input from the community.

The implementation process for this project is anticipated to take a minimum of two years given the need to receive final approval, secure funding, establish partnership parameters (if applicable), complete the design and tender process, and to construct/reconstruct the facility.

3.3 Next Steps

The information and proposed directions contained in this Preliminary Findings Report is scheduled for presentation to Township of Wilmot Council on November 8, 2021. Township Council will be requested to provide direction to Township Staff and the Consulting Team as to whether it generally agrees with the locations identified for the third ice pad.

Upon receiving Council direction, the Consulting Team will test the preferred option with stakeholders and the public, undertake any refinements to conceptual plans as well as prepare capital and operating cost estimates with the assistance of Township Staff. The Third Ice Pad Location Study will be presented back to Township Council for consideration in 2022.



INFORMATION AND LEGISLATIVE SERVICES *Staff Report*

REPORT NO: ILS 2021-39

TO: Council

SUBMITTED BY: Dawn Mittelholtz, Director of Information and Legislative Services /
Municipal Clerk

PREPARED BY: Tracey Murray, Manager of Information and Legislative Services /
Deputy Clerk

REVIEWED BY: Sharon Chambers, CAO

DATE: November 8, 2021

SUBJECT: Consideration of Drainage Engineer's Report
For the Snyder Drain, South Part of Lot 18, Concession North of
Bleams Road, Township of Wilmot

RECOMMENDATION:

THAT the Drainage Engineer's Report dated September 22, 2021 for the Snyder Drain requiring drainage for the South Part of Lot 18, Concession North of Bleams Road, Township of Wilmot, be received, and further;

THAT the date for the Consideration of the Report be scheduled for Monday, November 22, 2021 at 7:00 pm.

SUMMARY:

Council will be asked to accept the Snyder Drain 2021 Engineer Report for consideration at the November 22, 2021 Council meeting.

BACKGROUND:

On April 5, 2017, Council accepted a Petition for Drainage Works from Agcom Inc. (Stewart Synder). On June 26, 2017 Council appointed K. Smart & Associates Inc. of 85 McIntyre Drive, Kitchener as the Engineer for this Municipal Drain project.

REPORT:

On September 22, 2021, K. Smart & Associates Inc. filed their Engineer's Report with the Clerk. Pursuant to the requirements of the Drainage Act, within 30 days of the filing of the Report, Council must acknowledge receipt of the Report and send notice of the Council Meeting where the Report will be considered along with a copy of the Report.

A copy of the Report is attached hereto. Notices of the meeting and copies of the Report will be forwarded to the assessed landowners as well as any affected public agencies, as required.

At the November 22, 2021 meeting to consider the Report, the Drainage Engineer will review the Report for Council and answer any questions that may arise. The landowners and all other affected parties will be given the opportunity to ask questions and voice any concerns relating to any aspect of the Report. At the conclusion of the meeting, the owners affected will be given the opportunity to add or withdraw their names from the petition.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

By proceeding with the requirements of the Drainage Act, Council is supporting the infrastructure within the Municipality.

ACTIONS TOWARDS UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS:

Goal 2, End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Target 2.4 - ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Goal 6, Ensure availability and sustainable management of water and sanitation for all:

Target 6.5 – Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Target 6.6 – Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

FINANCIAL CONSIDERATIONS:

If the municipal drainage works proceed pursuant to the Drainage Act, all benefitting property owners would be assessed in accordance with the assessment schedule. Upon completion of the project, Council will be required to approve the Drain Levy By-law, at which time staff will process billing to assessed properties and submit funding applications to OMAFRA for eligible properties.

ATTACHMENTS:

Snyders Drain Engineer Report

ENGINEERING REPORT

for the

SNYDER DRAIN

Township of Wilmot

Date: September 22, 2021

File No. 17-374



K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS & PLANNERS

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APPENDIX A – CALCULATION OF ASSESSMENTS

SPECIFICATIONS

Section 200 – General Conditions

Section 300 – Special Provisions (see Drawings)

Section 400 – Standard Specifications for Construction of Drains

Section 410 – Standard Specifications for Open Drains

Section 420 – Standard Specifications for Closed Drains

Section 430 – Standard Specifications for Boring

DRAWINGS 1 TO 11

Definitions:

“Act” means The Drainage Act RSO 1990
“CSP” means corrugated steel pipe
“Drain” means Snyder/Agcom Drain
“Grant” means grant paid under Agricultural Drainage Infrastructure Program
“HDPE” means high density polyethylene
“Municipality” means Township of Wilmot
“OMAFRA” means the Ontario Ministry of Agriculture, Food and Rural Affairs
“MECP” means Ministry of Environment, Conservation and Parks
“MNRF” means Ministry of Naturel Resources and Forestry
“GRCA” means Grand River Conservation Authority
“DFO” means Department of Fisheries and Oceans Canada
“Tribunal” or “Drainage Tribunal” means Agriculture, Food and Rural Affairs Appeal Tribunal

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K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS & PLANNERS

85 McIntyre Drive
Kitchener, ON N2R 1H6

Tel: 519-748-1199
Fax: 519-748-6100

September 22, 2021

File No. 17-374

SNYDER DRAIN
TOWNSHIP OF WILMOT

1 EXECUTIVE SUMMARY

This report is prepared pursuant to Sections 4 and 8 of the Drainage Act RSO 1990. The Township received *Petitions for Drainage Works* under Section 4 from the owners of:

- Roll No. 007-09800, filed May 20, 2003, former Finnie property, now MTO
- Roll No. 007-09600, filed April 5, 2017, signed by S. Snyder
- Roll No. 007-07100, filed April 15, 2019, signed by M. Good

Pursuant to Section 8 of the Act, K. Smart Associates Limited was appointed by resolutions of Council (passed on June 23, 2003, September 11, 2017 and June 3, 2019) to prepare a report on the petitions received.

To address the petitions received, this report recommends the following:

- Main Drain: Improvement of 972m of open drain and construction of 1,671m of closed drain with overflow swale, includes one, bored road crossing with 900mm diameter steel pipe
- Branches 1, 2 and 3: Incorporation of 1,000m of closed drain

The estimated cost of this project is \$622,000.

The watershed served is approximately 289 hectares (714 acres).

Assessment schedules are provided for construction and future maintenance of the drainage works.

- Schedule A shows the assessment of the total estimated cost
- Schedule B will be used for prorating future maintenance cost
- Schedule C will be used for levying the final cost of the Drain and it indicates estimated net assessments after deducting grants and allowances, where applicable.
- Appendix A illustrates the calculation of the assessments outlined in Schedules A and B.

2 DRAINAGE HISTORY

There is no record of any drainage works previously constructed under the Drainage Act within or adjacent to the watershed of the proposed Snyder/Agcom drain. The outlet of the proposed Drain is an existing ditch on the west side of Nafziger Road which outlets into Nith River approximately 500m downstream. Upstream of Nafziger Road, the existing drainage system is an open ditch that conveys flows through agricultural lands, crosses Bleams Road and reaches its upstream extent at the property line between Roll No. 007-09600 and Roll No. 007-09800. Upstream of this location there is an old tile of unknown vintage that is connected to a pipe/catchbasin system under Highway 7 & 8 and former Gingrich Road. There are also a number of privately constructed tile drains serving multiple properties which outlet into the existing ditch.

3 INVESTIGATION

3.1 On-Site Meeting for Finnie Petition

On May 7, 2008 an on-site meeting was held for the Finnie petition. Notice of the meeting was sent to the petitioners (Roll No. 007-09800), the landowners most affected by the drain, the Region of Waterloo, the Grand River Conservation Authority and the Ministry of Transportation. During discussion and site review, it was noted the existing 150mm diameter tile across 007-09800 is in poor condition and lacks adequate capacity to convey flows from the highway and lands north. Landowners suggested a larger tile drain would allow more productive agricultural use of the low ground along the existing tile.

Subsequently, field survey and preliminary design was undertaken. After the petitioners sold the property later in 2008, only limited design work was completed until a petition for drainage was filed in 2017 by the adjacent property owner.

3.2 On-Site Meeting for Snyder Petition

On November 21, 2017 an on-site meeting was held for the Snyder petition. Notice of the meeting was sent to the petitioner (Roll No. 007-09600) and landowners most affected by the drain, the Region of Waterloo, the Grand River Conservation Authority and the Ministry of Transportation.

The following input was provided by those in attendance:

Stewart Snyder – Agcom Inc. (Roll No. 007-09600)

Property is systematically tiled except for the northeastern portion. His intent for the project is to enclose the open drain on his property with a new tile on the east side of the ditch and provide an overflow swale in the location of the current open ditch. He would also like to incorporate the 675mm diameter tile privately constructed at the southeastern portion of his property as a branch of the municipal drain. He noted an increase in flow across his property after construction of the Wilmot Recreation Complex and widening of Highway 7 & 8.

M.T.O. represented by Ryan McKerracher (Roll No. 007-09800)

Property has an old, non-functioning 150mm diameter tile. Maurice Good , owner of 007-07100) rents the property, previously had discussions with M.T.O. improving drainage across low ground. Mr. McKerracher offered to review M.T.O. records and provide any details of future plans for 007-09800.

D. Boshart (Roll No. 007-09601)

No drainage issues on his property. Noted there may be a basement drain leading from his house to the existing ditch on Mr. Snyder's. Mentioned the Bleams Road culvert floods periodically during the spring melt.

Hans Weiss and Harty Weiss (Roll No. 007-09500)

The Weiss property was systematically tiled in 1984. The tile plan shows all tiling was brought to the low point near southwest corner of 007-09500 where it drains into a private 675mm diameter tile which crosses Roll No. 007-09600 and empties into the north ditch of Bleams Road near an existing box culvert. Mr. Weiss explained the cost-sharing with Mr. Snyder for the 675mm private tile and agreed this tile should be incorporated as a municipal drain under this report. He also mentioned the M.T.O. had constructed a berm along the north property line and that minimal water from Highway 7 & 8 drains onto his property.

D. Honderich (Roll No. 007-09300) – not present

The Weiss tile plan shows the Honderich property has a few small diameter tile connections to Weiss tile system. Mr. Weiss indicated there are no issues with the drainage from the Honderich property.

Region of Waterloo (Bleams Road)

No specific comments, acknowledged an additional pipe under Bleams Road may be required for tile drainage. Landowners mentioned Bleams Road has flooded on multiple occasions due to obstruction of the culvert by accumulated ice and the significant amount of surface runoff that occurs during the spring melt.

Maurice Good – Kaymaure Holsteins Inc. (Roll No. 007-07100)

Wants to enclose the open ditch on his property. Mentioned a catchbasin at his east property line with Don Steinman's (Roll No. 007-07200) connects to a tile Maurice installed which eventually outlets in the open ditch on Richard Good's land.

Richard Good (Roll No. 007-07000)

Would like the open ditch incorporated as a municipal drain on his farm but is concerned if the ditch will need to be deepened considerably. Noted a portion of the Nafziger Road ditch drains onto his property. His online pond is used for irrigation and does not require any improvements.

Mary Hell (Roll No. 007-07068) – Carmen Hell present (Currently Jason Gaignard)

No concerns with project. Their existing ditch has minimal erosion. The ditch is diverted around the dam for their ponds in piped section approximately 50m long.

Jason Jackson (Roll No. 007-07681)

The ditch crosses a wooded, floodplain area on the Jackson property and outlets to the Nith River. Mr. Jackson noted that downcutting of the ditch bottom near the Nith River has progressed upstream from the river approximately forty feet in fifteen years.

3.3 Site Examination and Survey

The route of the Drain was examined after the on-site meetings. Topographic survey of the open ditch was completed in winter and late spring of 2018 from the Nith River to the upstream side of Highway 7&8. Survey of the branch drains to be incorporated under Maurice Good's petition was completed on August 27, 2019. Further survey near the Wilmot Recreation Complex (Roll No. 007-09810) was completed in June 2020 to verify watershed extents.

Downstream of Nafziger Road, the ditch bypasses the pond/reservoir on 007-06800. The ditch banks are well vegetated with many boulders embedded in the slopes for added stability. The bypass structure through the dam is a 54m length of arch CSP, 1.1m high x 1.6m wide. Downstream of the CSP, the flow path crosses a wooded area for approximately 150m to the Nith River.

Between Nafziger Road and Bleams Road the existing ditch crosses the R. Good property. This portion of the ditch includes an online pond, created by a 1m high pile of earth, rocks and concrete rubble in the ditch bottom. The pond length was approximately 150m at the time of survey.

3.4 Watershed Description

The perimeter watershed of the Drain has been established based on site investigation and topographic information. Land use in the watershed is predominately agricultural except for road allowances, several residential lots and the athletic fields and wooded areas of the Wilmot Recreational Complex, as shown on Drawing 1.

4 AUTHORITY FOR REPORT

Section 4 of the Drainage Act provides for construction of new drainage works for an area requiring drainage. As a result of discussion at the site meeting and on-site examination, the following areas requiring drainage were determined:

- For the petition signed by the Finnies, the area requiring drainage is the low ground on Roll No. 007-09800 along the route of the existing,

non-functioning tile. The petition is valid under Section 4(1)(a) and 4(1)(b) since the petition represents 100% of the area requiring drainage.

- For the petition signed by S. Snyder, the area requiring drainage is the route of the existing ditch and the existing 675mm tile ("Branch 1") on Roll No. 007-09600. The petition is valid under Section 4(1)(a) and 4(1)(b) since the petition represents 100% of the area requiring drainage.
- For the petition signed by M. Good, the area requiring drainage is the route of the existing ditch on his property and the routes of the existing existing 250mm dia. tile ("Branch 2") and the twinned 150mm to 250mm dia. tiles ("Branch 3"), all on Roll No. 007-07100. The petition is valid under Section 4(1)(a) and 4(1)(b) since the petition represents 100% of the area requiring drainage.

5 DESIGN CONSIDERATIONS

5.1 Sufficient Outlet

Section 15 of the Act requires that proposed work be continued downstream to a sufficient outlet. Section 1 of the Act defines sufficient outlet as "a point at which water can be discharged safely so that it will do no damage to lands or roads."

The existing open channel downstream of Nafziger Road (Station 0+504) provides sufficient outlet and will allow the proposed works to function as intended. The existing channel provides sufficient capacity and outlets into the Nith River 500m downstream.

5.2 Drain Capacity

The size of the proposed tile drain was determined using the Drainage Coefficient Method outlined in the *Drainage Guide for Ontario*, published by OMAFRA. The drainage coefficient is a measure of the amount of runoff that a closed drain can remove from an upstream watershed in a 24-hour period. Based on review of the watershed and discussions with landowners, the proposed tile drains on this project have been designed for a 38mm (1.5") drainage coefficient. The branch drains being incorporated also provide a minimum 25mm (1") drainage coefficient.

The elevation of the proposed tile drain provides adequate depth for planned systematic tiling within the watershed area shown on Drawing 1.

Lane culverts are sized to carry between the 5-year and 10-year event. The existing Nafziger Road culvert carries the 10-year event.

At Bleams Road, the new 900mm diameter pipe in combination with the existing box culvert are able to convey the 100-year storm with approximately 1m of

freeboard below the road. A design memo was provided to the Region in July 2020 with a summary of the hydrology and hydraulics for proposed work at Bleams Road.

5.3 Soil Conditions

Online soils mapping provided by OMAFRA for this area indicates that the soils in the vicinity of the drain are Huron Clay Loam and Perth Loam.

Based on available information, no adverse subsurface conditions are expected on this project and the use of conventional construction equipment is anticipated.

Refer to the Standard Specifications for drain construction procedures when adverse subsurface conditions are encountered.

6 ADDITIONAL MEETINGS

On March 6, 2019, discussion was held with Maurice Good (Roll No. 007-07100) and Stewart Snyder (Roll No. 007-09600) regarding preliminary alignment options for the portion of the Main Drain on their properties.

On March 25, 2019, further discussion was held with Maurice Good (Roll No. 007-07100) regarding the two tile drains he installed from the east edge of his property to the existing ditch. Mr. Good signed a petition to incorporate these private tile drains under the Drainage Act. The north tile is shown on Drawing 1 as Branch 2. The south tile is shown on Drawing 1 as Branch 3. At the upstream end of Branch 2, a new lane crossing pipe and catchbasin was requested to provide better outlet for surface water and a connection for tile drainage.

On April 16, 2020 Stewart Snyder explained his near-term plans for additional systematic tiling in the northeast portion of Roll No. 070-09600. He indicated a catchbasin would be installed at his east property line to carry surface runoff from the northwest corner of the Weiss property, but it was not necessary to incorporate this catchbasin and outlet tile under the Drainage Act.

On June 11, 2020 a meeting was held with landowners along the Drain route to review proposed work. Landowners repeated their concerns about increased runoff across their lands since the Wilmot Recreation Complex was constructed and suggested the watershed boundary at the complex be re-visited. Additional property-specific input/comments were:

Stewart Snyder – Agcom Inc. (Roll No. 007-09600)

- Mentioned a small berm may be needed near the Branch 1 catchbasin reduce overland surface flows.
- Agreed with design concept of sediment control feature at north limit of his property and at this laneway.

- Requested an estimate of the cost increase to upsize the proposed drain beyond the standard capacity of a 38mm (1.5") drainage coefficient.

Maurice Good – Kaymaure Holsteins Inc. (Roll No. 007-07100)

- Agreed with ditch enclosure concept for new tile along west side of ditch.
- Requested cost estimate to upsize the proposed drain beyond the standard capacity of a 38mm (1.5") drainage coefficient but recognized minimum cover for tile might be an issue.

Richard Good (Roll No. 007-07000)

- Asked for the ditch to be deepened and widened downstream of his pond. Also suggested the sharp bend in the ditch just upstream of Nafziger Road should be re-aligned to provide a more gradual transition and reduce erosion.
- Requested spoil from ditch excavation be spread on the north side of the ditch during construction

After the June 11th meeting, additional field survey was completed in the vicinity of the Wilmot Recreation Complex. As a result, the watershed boundary was expanded to reflect existing conditions and the proposed tile drain size was increased to provide capacity for the 38mm (1.5") drainage coefficient.

On September 1, 2020 a meeting was held with Corridor Management staff from the Region of Waterloo regarding the proposed crossing at Bleams Road. The Region requested some minor straightening of the north road ditch and also requested further options be considered for the Bleams Road crossing. As part of this options analysis, the Region requested an updated condition assessment for the box culvert (Region ID #04005). The assessment was completed in accordance with Ontario Structure Inspection Manual procedures and was provided to the Region in late September 2020. The culvert was found to be in good structural condition, though additional riprap for each end was recommended.

On September 11, 2020 a site meeting was held with Stewart Snyder (Roll No. 007-09600) as well as Hans and Harty Weiss (Roll No. 007-09500). At the meeting, location/size of the berm at the upstream limit of Branch 1 was discussed. The Weiss' also noted a correction was needed for the watershed boundary near the northeastern corner of their property, where their catchbasin receives runoff from approximately one acre of the MTO right-of-way.

On September 21, 2020, J. Jackson (Roll No. 007-07687) was contacted regarding the project. The Engineer explained the downstream limit proposed for the drain was the west side of Nafziger Road and that the project would not artificially transfer new watershed areas into the existing ditch on Jackson's property. Mr. Jackson had no concerns with the information provided and did not express interest in extending the Drain across his property.

On October 8, 2020 a second meeting with landowners was held. Notice for the meeting was sent to the Region of Waterloo, the Grand River Conservation Authority and the Ministry of Transportation. The following roll numbers were represented: 007-07000, 007-07100, 007-07200, 007-07400, 007-09300, 007-09500, 007-09600, 007-15800 and 006-08800.

At the meeting the results of the investigation to-date were presented along with a summary of the proposed work, drains to be incorporated, preliminary cost estimates and assessments. The basis for *Drainage Act* assessments was also present.

The following input was provided by those in attendance:

Stewart Snyder & Martin Snyder – Agcom Inc. (Roll No. 007-09600)

- Stewart Snyder repeated his intent for the drain to be adequately sized to account for future runoff increases due to land use changes in the upper watershed.

Harty Weiss – 1210918 Ontario Inc. (Roll No (007-09500)

- Inquired whether one of his existing header tiles serving a portion of the Honderich property should be incorporated as part of the Drain. After further discussion, Honderich and Weiss agreed incorporation of the header tile was not needed.
- Expressed concern about assessment calculations

William and Marian Weicker (Roll No. 007-15800 & 006-08850)

- Expressed concern about assessment calculations
- Explained portions of their property were historically used for a gravel pit operation and request a follow-up, on-site discussion with the Engineer.

In October and November 2020, follow-up discussions were held at the Weicker properties to review property history and observe drainage features in the vicinity. Drainage paths were observed in the bush area downgradient of the Weicker and Pfeifer parcels. However, outlet assessments for the Weicker and Pfeifer parcels were reduced in light of the granular nature of their soils and the flow attenuation that occurs in the bush area.

In December 2020, the Region indicated the proposed design at Bleams Road, to bore a 900mm diameter steel pipe immediately west of the existing box culvert, was an acceptable design. The Region also noted a work permit would be required prior to construction.

In December 2020, MTO provided input on the proposed design. They noted an encroachment permit would be required prior to construction and also requested the

drain be situated on Roll No. 007-09800 in a location that would accommodate future ramp construction, based on conceptual drawings.

On January 22, 2021 a design review meeting was held with Stewart and Martin Snyder (Roll No. 007-09600), Maurice Good (Roll No. 007-07100) and Harty Weiss (Roll No. 007-09500). Mr. Snyder and Mr. Good agreed a closed drain with capacity for the 38mm (1.5") drainage coefficient should be installed. The proposed drain size on Mr. Snyder's land ranges from 525mm to 600mm diameter. The proposed drain size on Mr. Good's land is twin 675mm diameter tiles. The Engineer explained future land use changes in the watershed would be subject to standard development requirements to control stormwater flow rates to match pre-development rates.

There was additional discussion of assessment methodology and all landowners reiterated that assessments to MTO and the Township should be determined based on their flow contributions to the proposed drain.

7 ENVIRONMENTAL CONSIDERATIONS

7.1 Agency Notification

Contact was made with the Grand River Conservation Authority, the Ministry of the Environment, Conservation and Parks (MECP) and the Department of Fisheries and Oceans (DFO) during the process of preparing this report.

7.2 Agency Responses

7.2.1 Grand River Conservation Authority

The Conservation Authority received notice of public meetings conducted during the course of this project. A site photo log and drawing package was sent to The Grand River Conservation Authority for review in June 2019. A response from the Conservation Authority was received in January 2020. The following comments from GRCA are being implemented:

- Enhanced bank stability in erosion prone locations using riprap and vegetation.
- Preserve bank vegetation where feasible. Disturbed banks will be seeded following construction.
- Riprap apron to be implemented at proposed tile outlet to prevent scour.
- Work will be completed under dry conditions where feasible. In addition to sediment traps shown on the drawings, heavy duty silt fence will be used at the downstream limit of the work zone.
- GRCA recommends vegetated buffer strips along the open ditch portion of the drain. K. Smart Associates' standard specifications require a 3m wide vegetated buffer strip on each side of open drains to minimize sediment transport.

7.2.2 MECP

A screening request for species at risk, site photo log and drawing package was submitted to MECP in June 2019. The screening request indicated no species at risk occurrences at the project location. The response from the ministry in August 2019, noted the work is authorized under 23.9 of Ontario Regulation 242/08 for drainage work.

7.2.3 DFO

DFO mapping for aquatic species at risk was reviewed. There are no records of aquatic species at risk within the impact zone for this project.

A Request for Review was submitted to DFO along with a site photo log and drawing package in June 2019. In September 2019, the route of the proposed drain was examined with a DFO biologist and K. Smart Associates staff. The response from DFO, dated November 8, 2019, indicated the following measures were to be implemented in order to avoid and mitigate the potential for prohibited effects to fish and fish habitat:

- Conduct work in the dry
- Install heavy-duty silt fence downstream of work zone
- Reseed any banks disturbed by construction activity

8 RECOMMENDED WORK

8.1 Overview

The Drawings and Special Provisions detail the construction proposed by this report and include a description of the drain for future maintenance. In summary, the following work is recommended:

- Improvement of 972m of open drain
- Installation of 1,671m of new closed drain with overflow swale, including one, bored road crossing with 900mm diameter steel pipe.
- Incorporation of 1,000m of closed drain

A detailed list of work items is provided in *Section 11.2 Construction Cost Estimate*.

8.2 Culverts

Table 8.2-1 - Summary of Culverts identifies culverts that are part of the Drain and specifies minimum capacity for future culverts that may be installed by landowners at their expense, subject to the approval of the municipality as required by the Maintenance section of this report.

Table 8.2-1 - Summary of Culverts

Roll Number or Road	Station	Existing	Proposed	Responsibility
Main Drain				
Nafziger Road	0+504 to 0+524	13m of 1800mm diameter CSP	No work now. Future to be 18m of 1800mm diameter CSP	Road
007-07000	1+258 to 1+270	7m of 1200mm diameter CSP	12m of 1600mm diameter CSP	Drain
007-07000	1+476 to 1+488	9m of 1500mm diameter CSP	12m of 1500mm diameter CSP	Owner
Bleams Road	1+729 to 1+758	17m of 2400mm wide x 1200mm concrete box culvert	29m of 900mm diameter smooth wall steel pipe	Road
007-09600	2+254 to 2+263	8m of 900mm diameter CSP	Twin 9m x 450mm diameter HDPE	Drain

Based on the responsibility noted above, culverts constructed under this report are assessed as follows:

- Drain – 50% to the listed roll number and 50% to the upstream watershed
- Road – special assessment to the road authority per Section 26
- Owner – 100% to the listed roll number

Refer to the Maintenance section of this report for instructions regarding assessing future culvert maintenance costs.

9 **CONSTRUCTION CONSIDERATIONS**

9.1 **Pre-Construction Approvals**

Before starting work, the Contractor shall ensure all public utilities are located and shall contact all landowners along the proposed drain route to determine the location of any private utilities. The Contractor is responsible for determining there are no utility conflicts for the proposed drainage works.

Work at Bleams Road is subject to approval by and coordination with the Region.

9.2 **Construction Scheduling**

Construction cannot commence until 10 days after a bylaw to adopt this report is given third reading in accordance with the Act.

No timing windows were identified by the Grand River Conservation Authority or DFO. All work is to be conducted in the dry where feasible.

9.3 Changes during Construction

Changes to the drain requested by landowners, agencies or other authorities after the bylaw is passed cannot be undertaken unless the report is amended.

Section 84.1 of the Act and the associated regulation, O. Reg. 500/21, now provide a process to amend this report if design changes are required during construction. Design changes must: arise from unforeseen circumstances encountered during construction, comply with existing agency approvals, not increase the total project cost by more than 133% and not impact drain capacity. If design changes meet these criteria and are approved by the Engineer, the report can be amended after construction with the as-constructed design before passing the actual cost bylaw.

Additional work desired by the landowner(s) which is not part of the drainage works may be arranged with the Contractor provided the cost of the work is paid by the landowner(s), and the Engineer reviews the additional work in advance. Such additional work is not part of the drainage works for future maintenance.

9.4 Alignment of Drains

All drains shall be constructed and maintained generally to the alignment as noted on the plans and specified by the Special Provisions. In the absence of survey bars, existing fences and similar boundary features are assumed to represent property lines.

Should landowners desire a more precise location for the drains in relation to their property line or if there is a dispute about the location of any property line, it is recommended that landowners obtain a legal survey at their own cost prior to construction.

10 DRAWINGS AND SPECIFICATIONS

10.1 Drawings

The location of the drain, watershed boundary and the affected properties are shown on Drawing No. 1 included with this report. The numbers adjacent to the drain are station numbers which indicate in metres the distance along the drain from the outlet. The profiles, details and special provisions for the Drain are on Drawings 2 to 11.

10.2 Specifications

This report incorporates the General Conditions, Standard Specifications and Special Provisions listed in the Table of Contents which govern the construction and maintenance of the drain.

11 COST ESTIMATE

The estimated cost of this project includes allowances to owners, the construction cost, the engineering cost and other costs associated with the project.

11.1 Allowances

Sections 29 to 33 of the Drainage Act provides for allowances (compensation) to owners affected by proposed drain construction. On this project, allowances under Section 29 and Section 30 and Section 31 apply and are summarized in *Table 11.1-1 - Summary of Allowances*.

11.1.1 Section 29 – Right of Way

Section 29 provides for payment of an allowance to landowners for right of way required for construction and maintenance of the new drain. This allowance compensates the owners for land to accommodate the drain, access routes to the drain and for a corridor along the drain for construction and maintenance purposes. Section 29 allowances along the drain were computed based on a rate of \$5,000/ha and a 20m corridor width for open drains and a 10m corridor width for closed drains.

11.1.2 Section 30 - Damages

Section 30 provides for payment of an allowance to landowners along the drain for damages caused by construction of the drain. In agricultural areas, crop damages are computed based on published crop values. The allowance for damage to lands and crops was calculated at a rate of \$1,900 per hectare for agricultural lands within the 20m wide working area on each property.

11.1.3 Section 31 – Existing Drains

Section 31 provides for payment of an allowance to the owner of an existing drain that is to be incorporated as part of the new drain. The allowance for incorporating the existing 675mm concrete tile and catchbasins for Branch 1 was based on contractor invoices, with Section 31 allowance amounts due to Agcom Inc. (Roll # 007-09600) and 1210918 Ontario Inc. (Roll #007-09500) based on the cost sharing used when Branch 1 was constructed in 2017. The allowances for incorporating the existing 250mm diameter plastic tile (Branch 2) on the Kaymaure Holsteins Inc. property (Roll #007-07100) and incorporating the existing tiles (Branch 3) on the Kaymaure Holsteins Inc. property (Roll #007-07100) were based on 2011 construction costs.

Table 11.1-1 - Summary of Allowances

	R.O.W.	Damages	Existing	
Roll Number	Sec.29	Sec.30	Sec. 31	Total
	(\$)	(\$)	(\$)	(\$)
007-07000	10,900	3,800	9,520	24,220
007-07100	3,500	900	27,000	31,400
007-09600	6,200	3,900	16,760	26,860
007-09800	1,500	1,200	0	2,700
007-09500	100	100	11,520	11,720
007-07200	200	0	0	200
TOTAL ALLOWANCES:	22,400	9,900	64,800	97,100

In accordance with Section 62(3) of the Act, the allowances shown may be deducted from the final assessment levied. Payment to the owner would only be made when the allowance is greater than the final assessment. The allowances are a fixed amount and are not adjusted at the conclusion of construction.

11.2 Construction Cost Estimate

The estimated cost for Labour, Equipment and Materials to construct the proposed drain is outlined in detail in Estimated Costs Summary in *Table 11.5-1 – Estimated Cost Summary*. The construction cost estimate is based on recent costs for comparable work. A contingency amount is included to cover additional work that may be required due to field conditions or minor adjustments during construction.

The contract for the drain will be awarded by public tender. If the contract price is more than 33% over the engineer's estimate, Section 59 of the Act requires a Council meeting with the petitioners to determine if the project should proceed.

11.3 Engineering Cost Estimate

Estimated Engineering costs are give in *Table 11.5-1 – Estimated Cost Summary*. Engineering costs include report preparation and attending the Council meeting to consider report and the Court of Revision.

Construction Phase Services may include: preparing tender documents and tender call, review of tenders, attending pre-construction meeting, periodic construction inspection, payments, final inspection, post construction follow-up, final cost analysis and preparation of the grant application.

The cost for report preparation is usually not altered at the conclusion of a project unless the report is referred back or the report is appealed to the Drainage Tribunal which would result in additional costs. The amount shown for meetings is an

estimate. Final cost will be based on the actual time required for meetings. The estimate shown for construction phase services is based on past experience and assumes good construction conditions and a Contractor who completes the construction in an efficient manner. The final cost for the construction phase will vary as per the actual time spent during and following drain construction.

11.4 Estimate of Section 73 Costs

Section 73(2) and 73(3) of the Act direct that the cost of services provided by municipal staff and Council to carry out the Act process shall not form part of the final cost of the drain. However, Section 73(1) outlines that the following costs incurred by the municipality can be included in the cost of the drain: “*cost of any application, reference or appeal and the cost of temporary financing.*”

The estimate of Section 73 costs is included to cover the above referenced items which are applicable to this project. This cost estimate may not be adequate to cover legal or engineering costs incurred by or assessed to the municipality should the project be appealed beyond the Court of Revision though such costs will form part of the final drain cost.

Grant policy indicates that municipal cost for photo-copying and mailing to carry out the required procedures under the Act can be included in the final drain cost. This cost estimate includes an allowance for these costs.

11.5 Harmonized Sales Tax

The Harmonized Sales Tax (HST) will apply to most costs on this project. The Municipality is eligible for a partial refund on HST paid, the net 1.76% HST is included in the cost estimates in this report.

Table 11.5-1 – Estimated Cost Summary

Item	Stations	Description	Cost	Total
ALLOWANCES				\$97,100
CONSTRUCTION COST ESTIMATE				
Main Drain				
MD-1	0+492	Remove obstruction near downstream end of road culvert	\$1,000	
MD-2	0+524 to 0+549	Permanent sediment trap, 0.3m deep x 25m long, includes temporary silt-fence during construction	\$500	
MD-3	0+524 to 0+830	Cleanout and widen 306m of ditch, 1.2m bottom width and 2:1 side slopes, includes incidental clearing. Re-align bend at sta. 0+565 to be more gradual. Level spoil, seed banks.	\$6,100	
MD-4	0+830 to 1+000	Cleanout 170m of ditch, 1m bottom width and 2:1 side slopes. Level spoil, seed banks.	\$2,000	

Item	Stations	Description	Cost	Total
MD-5	1+258 to 1+270	12m x 1600mm dia. galvanized CSP (125x25mm corrugations, 2.0mm wall thickness) with 5m ² riprap at each end. Includes removal of existing culverts and restoration of gravel laneway.	\$11,500	
MD-6	1+270 to 1+476	Cleanout 206m of ditch, 1m bottom width and 2:1 side slopes. Level spoil, seed banks.	\$2,500	
MD-7	1+476 to 1+488	12m length of 1500mm diameter galvanized CSP (125x25mm corrugations, 2.0mm wall thickness) with 5m ² riprap at each end. Includes removal of existing culvert and restoration of gravel laneway	\$10,000	
MD-8	1+476 to 1+488	Install 12m of 750mm HDPE pipe salvaged from Branch 1 outlet, and place 15m ² riprap at outlet.	\$2,500	
MD-9	1+488 to 1+495	Construct rock chute with 15 m ² of riprap at outlet of overflow swale. Includes 6m of 750mm diameter HDPE pipe with rodent gate for outlet of south 675mm tile.	\$3,500	
MD-10	1+488 to 1+729	241m of twin 675mm diameter concrete tile. Includes pre-locating existing header and lateral tiles along drain route.	\$43,400	
MD-11	1+495 to 1+729	234m of existing ditch to be backfilled and graded into overflow swale with 1m bottom and 8:1 side slopes	\$5,900	
MD-12	1+502	Connect 150mm diameter tile	\$200	
MD-13	1+507	Connect 100mm diameter tile	\$100	
MD-14	1+729	Construct 1200x2400mm 4:1 DICB with birdcage grate and 15m ² riprap	\$8,500	
MD-15	1+729 to 1+759	30m of 900mm diameter steel pipe under Bleams Road by jacking and boring	\$37,500	
MD-16	1+759	Construct 900x1200mm 2:1 DICB with birdcage grate and 5m ² riprap	\$2,700	
MD-17	1+754 to 1+775	Re-grade 21m of ditch on the north side of Bleams Rd & construct rock chute with 15m ² riprap	\$2,000	
MD-18	1+905	Construct 900x1200mm 3:1 DICB with birdcage grate. Includes 15m ² riprap at catchbasin and for rock chute.	\$3,700	
MD-19	1+915	Connect 150mm diameter tile	\$200	
MD-20	1+759 to 2+252	493m of 600mm diameter concrete tile	\$37,000	
MD-21	2+252 to 2+264	12m of 600mm diameter HDPE pipe	\$3,100	
MD-22	2+255 to 2+264	Remove existing 900mm diameter CSP & concrete block headwall. Dispose of CSP pipe, place concrete blocks in landowner-approved location.	\$1,000	

Item	Stations	Description	Cost	Total
MD-23	2+254 to 2+263	Construct 9m of twin (2) 450mm diameter HDPE pipes with 5m ² riprap at each end. Includes restoring laneway with 60m ² of granular A	\$3,500	
MD-24	2+264	Construct 900x1200mm 3:1 DICB with birdcage grate and 5m ² riprap	\$2,700	
MD-25	2+270	Construct 200mm diameter hickenbottom with 5m of 200mm diameter plastic tubing & 5m ² riprap	\$1,000	
MD-26	2+265 to 2+275	Construct 10m long x 10m wide permanent sediment trap with 15m ² riprap	\$1,500	
MD-27	2+264 to 2+773	509m of 525mm diameter concrete tile	\$30,500	
MD-28	1+922 to 2+254	332m of existing ditch to be backfilled and graded into overflow swale with 1m bottom and 8:1 side slopes	\$8,300	
MD-29	2+276 to 2+768	492m of existing ditch to be backfilled and graded into overflow swale with 1m bottom and 8:1 side slopes	\$12,300	
MD-30	2+152	Connect 100mm diameter tile	\$100	
MD-31	2+277	Connect 150mm diameter tile	\$200	
MD-32	2+252 & 2+344	Connect two 200mm diameter tiles	\$600	
MD-33	2+773	Construct 900x1200mm 3:1 DICB with birdcage grate and 5m ² riprap	\$2,700	
MD-34	2+769 to 2+779	Construct permanent sediment trap with 5m wide x 60m long bottom, includes 80m long berm with 1m wide top, 3:1 side and 5m wide overflow weir using 15m ² riprap.	\$3,600	
MD-35	2+773 to 3+069	296m of 525mm diameter concrete tile	\$17,800	
MD-36	2+779 to 3+072	293m of existing ditch to be backfilled and graded into overflow swale with 1m bottom and 8:1 side slopes	\$7,300	
MD-37	3+069	Construct 900x1200mm CB with birdcage grate, 5m ² riprap, and 3m of 150mm subdrain in clear stone envelope.	\$3,000	
MD-38	3+064 to 3+072	Construct permanent sediment trap with 5m wide x 100m long bottom, includes 120m long berm with 1m wide top, 3:1 side and 5m wide overflow weir using 15m ² riprap.	\$5,000	
MD-39	3+069 to 3+147	78m of 450mm reinforced concrete pipe. Abandon existing 150mm diameter tile	\$17,200	
MD-40	3+069 to 3+147	78m of 0.2 to 0.3m deep v-ditch.	\$1,500	
MD-41	3+147	Remove and dispose of ex. CB and construct 600x600mm CB (OPSD 705.010) with birdcage grate and 5m ² riprap.	\$3,500	
Sub Total Main Drain			\$307,200	

Item	Stations	Description	Cost	Total
Branch 1				
Br 1-1	0+004 to 0+020	Taper existing grade to low wall of new DICB & construct 1m wide sediment trap with 10m ² riprap on geotextile	\$2,000	
Br 1-2	0+000 to 0+015	Remove existing tile outlet and connect to new DICB with 15m of 675mm diameter concrete tile. Removed 750mm diameter HDPE pipe to be re-used at Main Drain tile outlet (Sta 1+476 to 1+488)	\$1,500	
Sub Total Branch 1			\$3,500	
Branch 2				
Br 2-1	0+000 to 0+020	20m of 300mm diameter plastic tubing to connect existing tiles with new Main Drain concrete tile	\$1,000	
Br 2-2	0+188 to 0+196	8m of 250mm diameter HDPE and gravel laneway restoration	\$2,500	
Br 2-3	0+196	Construct 600x600mm 2:1 DICB with birdcage grate and 5m ² riprap	\$2,200	
Sub Total Branch 2			\$5,700	
Branch 3 - No work required, incorporation only.				
CONSTRUCTION SUB TOTAL			316,400	
Lump Sum Contingency Allowance			\$31,800	
Net H.S.T. (1.76%)			\$6,125	
TOTAL CONSTRUCTION COST ESTIMATE				\$354,325
ENGINEERING				
Report Preparation			\$102,400	
Consideration of Report Meeting			\$1,500	
Court of Revision Meeting			\$1,500	
Construction Phase Services			\$46,700	
Net H.S.T (1.76%)			\$2,675	
TOTAL ENGINEERING COST ESTIMATE				\$154,775
SECTION 73 COSTS				\$15,800
TOTAL ESTIMATED COST				\$622,000

12 ASSESSMENTS

The Drainage Act requires that the total estimated cost be assessed to the affected lands and roads under the categories of Benefit (Section 22), Outlet Liability (Section 23), Injuring Liability (Section 23), Special Benefit (Section 24) and Increased Cost (Section 26). On this project assessment for Benefit, Special Benefit, Outlet Liability and Increased Cost (Special) Assessment are involved.

12.1 Calculation of Assessments

The method of calculating the assessments for the Drain is illustrated in Appendix A which has been included with this report. Appendix A divides the drain into intervals. The estimated cost for each interval is then determined. For each interval the first step in the assessment calculation is to determine the benefit assessment to the affected lands and roads, then special assessments to roads and utilities are determined, where applicable. After deducting the total benefit and special assessments from the interval cost the balance of the cost is then assessed as outlet liability on a per hectare basis to all lands and roads in the watershed.

12.2 Benefit Assessments (Section 22 and Section 24)

Benefit assessments are listed in Schedule A – Schedule of Assessments and shown on a per interval basis in Appendix A - Calculation of Assessments.

Section 22 benefits were determined for lands that receive a direct outlet or improved drainage as a result of this project.

- Direct outlet: Benefit for direct outlet was assessed to properties receiving a connection to the Drain.
- Improved Drainage: Where an open drain is proposed, benefit for improved drainage is based on the cost a landowner would incur for periodic maintenance of a private ditch over the next fifty years, the minimum service life for municipal drains. Where ditch enclosure is proposed, benefit for improved drainage is assessed to the landowner receiving the enclosure and is based on the increased cost for installing a closed drain.

Section 24 special benefits apply to work which is unrelated to the function of the drain. Examples of such work, where costs are not prorated to the watershed but assessed to the requestor, include hauling spoil and additional works for aesthetic reasons. Section 24 work that is not prorated to the watershed may be undertaken by the landowner, subject to the approval of the Engineer and the requirements of this report.

A portion of each access crossing is assessed as special benefit to the abutting land and the remainder assessed to the upstream watershed. The full cost of the second crossing for roll number 007-07000 (See *Table 8.2-1 - Summary of Culverts*) is estimated at \$10,000, is assessed to the landowner as Special Benefit and is not eligible for grant.

12.3 Outlet Liability Assessments (Section 23)

Section 23(3) of the Drainage Act states that outlet liability assessment is to be based on the volume and rate of flow of the water artificially caused to flow. To satisfy this requirement, the lands and roads in the watershed are assessed on a per hectare basis, with adjustments made to recognize the different amount of runoff generated by different land uses. The basis for the adjustments is 1 hectare

of cleared agricultural land contributing both surface and subsurface water to the drain. Land uses with a different runoff rate are adjusted by the factors given below.

Table 12.3-1 – Runoff Factors Table

Land Use	Runoff factor
Forest	0.5
Agricultural	1
Developed	1.5
Gravel Road	1
Paved Road	2
Highway	3

In this watershed, a runoff factor of 0.5 was used for agricultural lands north of Highway 7&8 due to soil permeability. Cleared portions of Roll No. 007-09810 and 007-09520 were assigned the developed runoff factor of 1.5.

12.4 Special Benefit Assessment (Section 24)

Special Benefits are incurred when works are constructed, at the request of landowners, which are unrelated to the function of the Drain. Such works are not pro-rated to the watershed and are not considered part of the Drain for future maintenance purposes. In general, Special Benefits are not eligible for Grant.

12.5 Increased Cost (Special) Assessments (Section 26)

Section 26 of the Drainage Act directs that any increased cost due to a public utility (utility) or road authority (road) shall be paid for by that utility or road. These assessments are known as Special Assessments and are summarized in *Table 12.5-1 – Estimated Special Assessments*.

The equivalent drain cost is based on the length of drain affected by the road allowance or utility right of way and the normal cost of drain construction. The increased cost caused by the road or utility is determined by subtracting the equivalent drain cost from the construction and engineering costs.

Table 12.5-1 – Estimated Special Assessments

Drain	Main Drain 1+729 to 1+758	Main Drain 3+072 to 3+147
Location	Bleams Road (Reg. Road 4)	Highway 7&8
Owner	Region of Waterloo	M.T.O.
Construction Cost	48,000	20,700
+ Engineering Cost	15,000	9,000
- Equivalent Drain Cost	5,220	4,290
+ Net HST	1,020	450
= Est. Spec. Assmt.	58,800	25,860

The actual special assessments will be determined after construction by inserting the actual construction and engineering costs in the Special Assessments Table. Any additional costs identified by the Engineer will be added to the Special Assessment where appropriate. The road authority or utility may elect to construct the drain within their right of way with their own forces. In this case, the special assessment is calculated by inserting zero for the construction cost.

If there are increased costs to the drain project due to a utility or road not listed in the Table above, a Special Assessment will be based on the actual costs incurred.

Special Assessments do not apply to future maintenance assessments.

12.6 Assessment Schedules

In the assessment schedules each parcel of land assessed has been identified by the municipal assessment roll number at the time of the preparation of this report. The size of each parcel was established using the assessment roll information. If an "F" is shown in the first column, it denotes lands with current Farm Property Tax Class designation that may qualify for Grant. For convenience only, each parcel is also identified by the owner name(s) from the last revised assessment roll.

12.6.1 Schedule A- Schedule of Assessments

The estimated cost for the drainage works in this report is distributed among lands, roads and utilities as shown in Schedule A, the Schedule of Assessments.

12.6.2 Schedule B -Schedule of Assessments for Maintenance

In accordance with Section 74 of the Act, the Drain shall be maintained by the municipality and the cost of maintenance shall be assessed to lands and roads

upstream of the maintenance location, prorata with the amounts in Schedule B.

The amounts in Schedule B are derived from the cost distribution shown in Appendix A. Schedule B amounts will not be levied with the final cost of the drainage works, they determine the share of future maintenance cost. The municipality is to determine grant eligibility at the time of future maintenance cost levy.

Schedule B is divided into columns to reflect the different drain intervals where maintenance work may be undertaken. These column intervals assist in identifying upstream lands and roads to be assessed for future maintenance. The percentages shown in Schedule B determine the share of future maintenance to be levied to a property or road. For example, a \$1,000 tile repair will result in a \$50 assessment to a property with a 5% maintenance assessment.

12.6.3 Schedule C – Schedule for Actual Cost Bylaw

After the construction of the drain is certified complete by the Engineer the municipality will determine the actual cost of the drain. Actual assessments will be calculated by prorating the actual cost of the drain using Schedule C. Schedule C illustrates the estimated net assessments after deducting allowances and grants from the total assessments shown in Schedule A. Eligibility for grant will be confirmed by the municipality at the time the actual cost is levied. Actual assessments in Schedule C will be levied to the owner of the identified parcel at the time the Actual Cost Bylaw is passed.

13 GRANT

In accordance with the provisions of Section 85 of the Act, a grant not exceeding 1/3 (33-1/3%) may be available on the assessments against lands used for agricultural purposes. Current OMAFRA grant policy defines agricultural lands as privately owned parcels of land which have the Farm Property Class Tax Rate. Based on Municipal assessment roll information, parcels that have the Farm Property Tax Class are identified with an 'F' in the first column of the assessment schedules.

Section 88 of the Act provides for the Municipality to apply for this grant after the construction of the drain is certified complete by the Engineer. The municipality must confirm the Farm Property Tax Class on the assessed parcels at the time the grant application is completed and submitted to OMAFRA. OMAFRA has the authority to determine grant eligibility regardless of the designation herein.

If any portion of the drainage works is not eligible for grant, those ineligible costs have been separately identified in this report.

14 PRIVACY OF LANDS

Although a municipal drain is situated on the property of various landowners, one landowner may not enter another landowner's property by means of the drain. Persons authorized to enter private lands to carry out duties authorized under the Act include: Engineers (or their assistants), Contractors (or their assistants) and the appointed Drainage Superintendents (or their assistants).

15 MAINTENANCE

15.1 General

Section 74 of the Act requires the Drain, as outlined in this report, to be maintained by the Municipality and the cost of maintenance to be assessed to the upstream lands and roads prorata with the assessments in Schedule B.

All parties affected by the Drain are encouraged to periodically inspect the drain and report any visible or suspected problems to Municipality.

A right-of-way along the drain and access routes to the drain exist for the Municipality to maintain the drain. The right-of-way for the drain as described in the Allowances section of this report, shall remain free of obstructions. The cost for removing obstructions is the responsibility of the owner.

Any landowner making a new connection to the Drain must notify the Drainage Superintendent before making the connection. If the Drainage Superintendent is not notified, the cost to remedy new connections that obstruct or otherwise damage the drain will be the responsibility of the owner.

The discharge of anything but clean, unpolluted water into a drain is regulated by other provincial legislation. Any non-compliance will be reported to the appropriate environmental agency.

Buffer strips along open drains shall be maintained in accordance with the specifications in this report.

15.2 Updating Future Maintenance Schedules

To ensure future maintenance assessments are equitable, the assessments provided in this report should be reapportioned under Section 65 when severances or amalgamations occur, when new lands are connected to the Drain or when a land-use change occurs that can be accommodated by the existing Drain. If a future land-use change will cause the drain capacity to be exceeded, a report under Section 4 or 78 may be required to provide increased capacity.

15.3 Culvert Maintenance

- The costs of cleaning through all culverts shall be assessed as drain maintenance to upstream lands and roads.
- The cost for future structural repair, extension or replacement of road culverts will be assessed fully to the road authority.
- When the responsibility for an access culvert is designated in *Table 8.2-1 - Summary of Culverts* as "Drain," the cost for repair or replacement shall be assessed 50% to the abutting landowner and the remainder to the upstream watershed. The cost of additional culvert length is assessed to the owner.
- When the responsibility for an access culvert is designated as "Owner," the cost for installation, repair, replacement and removal are the responsibility of the roll number listed in *Table 8.2-1 - Summary of Culverts*.
- Prior approval of the Municipality is required before a landowner installs a culvert not constructed under this report and culvert shall be installed per sizing and design grade specified in this report. If culverts smaller than the minimum recommended size are installed, such culverts will be deemed an obstruction to the drain and removed at the landowner's expense.

16 BYLAW

This report including the drawings and specifications, assessment schedules and appendices, when adopted by bylaw in accordance with the Act, provides the basis for construction and maintenance of the Drain.

All of which is respectfully submitted,

K. SMART ASSOCIATES LTD.



Joel E. Miller, P. Eng.

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SCHEDULE A - SCHEDULE OF ASSESSMENTS
SNYDER DRAIN
Township of Wilmot

				Total ha affected	Main Drain			Branch 1			Branch 2			Branch 3			GRAND TOTAL
Con	Lot	Roll No.	Owner		Benefit	Outlet	Total	Benefit	Outlet	Total	Benefit	Outlet	Total	Benefit	Outlet	Total	
Township of Wilmot																	
F SSR	16	006-08800	W. Weicker	1.9	0	733	733	0	0	0	0	0	0	0	0	0	733
F SBR	18	007-07000	R. Good	35.0	28,050	2,403	30,453	0	0	0	0	0	0	4,000	0	4,000	34,453
F SBR	17	007-07100	Kaymaure Holsteins Inc	26.2	72,400	2,392	74,792	0	0	0	3,500	0	3,500	10,000	5,125	15,125	93,417
F SBR	17	007-07200	D. Steinmann	19.6	1,500	800	2,300	0	0	0	2,000	6,217	8,217	4,000	4,409	8,409	18,926
F SBR	17	007-07300	R. Steinman	2.9	0	130	130	0	0	0	0	1,184	1,184	0	601	601	1,915
SBR	17	007-07400	Wilmot Mennonite Church	0.2	0	27	27	0	0	0	0	444	444	0	0	0	471
F NBR	16	007-09300	D. Honderich	22.4	0	4,908	4,908	0	6,953	6,953	0	0	0	0	0	0	11,861
NBR	17	007-09400	D. Laurence	1.9	0	344	344	0	0	0	0	0	0	0	0	0	344
F NBR	17	007-09500	1210918 Ontario Inc	65.0	1,500	15,845	17,345	7,000	14,800	21,800	0	0	0	0	0	0	39,145
NBR	17	007-09501	M. Holmberg	1.5	0	527	527	0	0	0	0	0	0	0	0	0	527
NBR	17/18	007-09520	Wilmot Township	7.7	6,500	4,398	10,898	0	0	0	0	0	0	0	0	0	10,898
F NBR	18	007-09600	Agcom Inc	40.7	115,750	17,460	133,210	7,000	0	7,000	0	0	0	0	0	0	140,210
NBR	18	007-09601	D. Boshart	0.2	0	129	129	0	0	0	0	0	0	0	0	0	129
NBR	18	007-09700	J. Hunke	0.2	0	220	220	0	0	0	0	0	0	0	0	0	220
F NBR	18	007-09800	M.T.O	12.7	55,400	9,308	64,708	0	0	0	0	0	0	0	0	0	64,708
NBR	18	007-09810	Wilmot Township	9.4	6,500	6,743	13,243	0	0	0	0	0	0	0	0	0	13,243
F SSR	18	007-14700	M. Pfeifer	4.3	0	1,613	1,613	0	0	0	0	0	0	0	0	0	1,613
SSR	18	007-14706	Wilmot Township	5.2	0	1,905	1,905	0	0	0	0	0	0	0	0	0	1,905
F SSR	17	007-15800	W. Weicker	16.3	0	6,010	6,010	0	0	0	0	0	0	0	0	0	6,010
Total Assessments on Lands:				273.3	287,600	75,895	363,495	14,000	21,753	35,753	5,500	7,845	13,345	18,000	10,135	28,135	440,728
Bleams Road				3.1	26,000	1,459	27,459	0	0	0	0	0	0	0	0	0	27,459
Gingerich Road				0.8	0	1,172	1,172	0	0	0	0	0	0	0	0	0	1,172
Hwy 7 & 8				10.2	46,000	21,643	67,643	0	132	132	0	0	0	0	0	0	67,775
Nafziger Road (Reg. Rd 5)				0.3	0	129	129	0	0	0	0	0	0	0	0	0	129
Nafziger Road (Twp Rd 14)				1.4	0	77	77	0	0	0	0	0	0	0	0	0	77
Bleams Road Spec. Asmt.					58,800	0	58,800										58,800
Hwy 7 & 8 Spec. Asmt.					25,860	0	25,860										25,860
Total Assessments on Roads:				15.8	156,660	24,480	181,140	0	132	132	0	0	0	0	0	0	181,272
TOTAL ASSESSMENTS				289.1	444,260	100,375	544,635	14,000	21,885	35,885	5,500	7,845	13,345	18,000	10,135	28,135	622,000

Notes:

1. Roll numbers are per the Municipality's last revised assessment roll, names included for convenience.
2. "F" denotes lands with current Farm Property Tax Class designation that may qualify for grant.

SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR MAINTENANCE
SNYDER DRAIN
Township of Wilmot

Township of Wilmot				Main Drain								Branch 1		Branch 2		Branch 3			
				Interval 1		Interval 2		Interval 3		Interval 4		Interval 5							
				0+504 to 0+959		0+959 to 1+476		1+476 to 1+759		1+759 to 2+769		2+769 to 3+147		0+000 to 0+219		0+000 to 0+196		0+000 to 0+585	
Con	Lot	Roll No.	Owner	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%		
SSR	16	006-08800	W. Weicker	27	0.16	63	0.24	139	0.21	200	0.20	304	0.59	0	0.00	0	0.00	0	0.00
SBR	18	007-07000	R. Good	4,610	26.72	6,651	25.20	5,167	7.88	0	0.00	0	0.00	0	0.00	4,000	18.93		
SBR	17	007-07100	Kaymaure Holsteins Inc	1,465	8.49	1,274	4.83	18,503	28.21	0	0.00	0	0.00	0	0.00	7,000	44.18	10,125	47.90
SBR	17	007-07200	D. Steinmann	785	4.55	515	1.95	250	0.38	0	0.00	0	0.00	0	0.00	7,217	45.55	6,409	30.33
SBR	17	007-07300	R. Steinman	79	0.46	51	0.19	0	0.00	0	0.00	0	0.00	0	0.00	1,184	7.47	601	2.84
SBR	17	007-07400	Wilmot Mennonite Church	8	0.05	19	0.07	0	0.00	0	0.00	0	0.00	0	0.00	444	2.80	0	0.00
NBR	16	007-09300	D. Honderich	584	3.39	1,352	5.12	2,972	4.53	0	0.00	0	0.00	6,953	16.21	0	0.00	0	0.00
NBR	17	007-09400	D. Laurence	41	0.24	95	0.36	208	0.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
NBR	17	007-09500	1210918 Ontario Inc	2,023	11.73	4,356	16.50	9,278	14.14	938	0.96	0	0.00	18,300	42.67	0	0.00	0	0.00
NBR	17	007-09501	M. Holmberg	63	0.37	145	0.55	319	0.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
NBR	17/18	007-09520	Wilmot Township	164	0.95	379	1.44	833	1.27	1,948	1.99	4,324	8.36	0	0.00	0	0.00	0	0.00
NBR	18	007-09600	Agcom Inc	1,860	10.78	3,321	12.58	9,820	14.97	33,189	33.87	0	0.00	17,500	40.81	0	0.00	0	0.00
NBR	18	007-09601	D. Boshart	8	0.05	19	0.07	42	0.06	60	0.06	0	0.00	0	0.00	0	0.00	0	0.00
NBR	18	007-09700	J. Hunke	8	0.05	19	0.07	42	0.06	60	0.06	91	0.18	0	0.00	0	0.00	0	0.00
NBR	18	007-09800	M.T.O	846	4.90	1,302	4.93	2,264	3.45	27,536	28.10	18,310	35.42	0	0.00	0	0.00	0	0.00
NBR	18	007-09810	Wilmot Township	251	1.46	581	2.20	1,278	1.95	2,587	2.64	5,296	10.24	0	0.00	0	0.00	0	0.00
SSR	18	007-14700	M. Pfeifer	60	0.35	139	0.53	306	0.47	439	0.45	669	1.29	0	0.00	0	0.00	0	0.00
SSR	18	007-14706	Wilmot Township	71	0.41	164	0.62	361	0.55	519	0.53	790	1.53	0	0.00	0	0.00	0	0.00
SSR	17	007-15800	W. Weicker	224	1.30	518	1.96	1,139	1.74	1,637	1.67	2,492	4.82	0	0.00	0	0.00	0	0.00
Total Assessments on Lands:				13,177	76.41	20,963	79.41	52,921	80.68	69,113	70.53	32,276	62.43	42,753	99.69	15,845	100.00	21,135	100.00
Bleams Road Region of Waterloo				1,669	9.64	1,892	7.19	5,778	8.80	7,620	7.78	0	0.00	0	0.00	0	0.00	0	0.00
Gingerich Road Township of Wilmot				44	0.26	101	0.38	222	0.34	319	0.33	486	0.94	0	0.00	0	0.00	0	0.00
Hwy 7 & 8 M.T.O				2,313	13.41	3,382	12.81	6,639	10.12	20,871	21.30	18,938	36.63	132	0.31	0	0.00	0	0.00
Nafziger Road (Reg. Rd 5) Region of Waterloo				8	0.05	19	0.07	42	0.06	60	0.06	0	0.00	0	0.00	0	0.00	0	0.00
Nafziger Road (Twp Rd 14) Township of Wilmot				39	0.23	38	0.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total Assessments on Roads:				4,073	23.59	5,432	20.59	12,681	19.32	28,870	29.47	19,424	37.57	132	0.31	0	0.00	0	0.00
TOTAL ASSESSMENTS				17,250	100.00	26,395	100.00	65,602	100.00	97,983	100.00	51,700	100.00	42,885	100.00	15,845	100.00	21,135	100.00

Note:

1. Roll numbers are per the Municipality's last revised assessment roll, names included for convenience.
2. Amounts are not payable at this time, they determine share of future maintenance cost.
3. Determine grant eligibility at the time of maintenance cost levy.

SCHEDULE C - SCHEDULE FOR ACTUAL COST BYLAW
SNYDER DRAIN
Township of Wilmot

<i>Township of Wilmot</i>				Estimated	Actual	Grantable	1/3	Allowances	NET
Con	Lot	Roll No. Roll No.	Owner	Assessment	Assessment	Assessment	Grant		
F	SSR 16	006-08800	W. Weicker	733	733.00	733.00	244.33		488.67
F	SBR 18	007-07000	R. Good	34,453	34,453.00	24,453.00	8,151.00	24,220	2,082.00
F	SBR 17	007-07100	Kaymaure Holsteins Inc	93,417	93,417.00	93,417.00	31,139.00	31,400	30,878.00
F	SBR 17	007-07200	D. Steinmann	18,926	18,926.00	18,926.00	6,308.67	200	12,417.33
F	SBR 17	007-07300	R. Steinman	1,915	1,915.00	1,915.00	638.33		1,276.67
	SBR 17	007-07400	Wilmot Mennonite Church	471	471.00		0.00		471.00
F	NBR 16	007-09300	D. Honderich	11,861	11,861.00	11,861.00	3,953.67		7,907.33
	NBR 17	007-09400	D. Laurence	344	344.00		0.00		344.00
F	NBR 17	007-09500	1210918 Ontario Inc	39,145	39,145.00	39,145.00	13,048.33	11,720	14,376.67
	NBR 17	007-09501	M. Holmberg	527	527.00		0.00		527.00
	NBR 17/18	007-09520	Wilmot Township	10,898	10,898.00		0.00		10,898.00
F	NBR 18	007-09600	Agcom Inc	140,210	140,210.00	140,210.00	46,736.67	26,860	66,613.33
	NBR 18	007-09601	D. Boshart	129	129.00		0.00		129.00
	NBR 18	007-09700	J. Hunke	220	220.00		0.00		220.00
	NBR 18	007-09800	M.T.O	64,708	64,708.00		0.00	2,700	62,008.00
	NBR 18	007-09810	Wilmot Township	13,243	13,243.00		0.00		13,243.00
F	SSR 18	007-14700	M. Pfeifer	1,613	1,613.00	1,613.00	537.67		1,075.33
	SSR 18	007-14706	Wilmot Township	1,905	1,905.00		0.00		1,905.00
F	SSR 17	007-15800	W. Weicker	6,010	6,010.00	6,010.00	2,003.33		4,006.67
Total Assessments on Lands:				440,728	440,728		112,761.00	97,100	230,867.00
	Bleams Road		Region of Waterloo	27,459	27,459.00				27,459.00
	Gingerich Road		Township of Wilmot	1,172	1,172.00				1,172.00
	Hwy 7 & 8		M.T.O	67,775	67,775.00				67,775.00
	Nafziger Road (Reg. Rd 5)		Region of Waterloo	129	129.00				129.00
	Nafziger Road (Twp Rd 14)		Township of Wilmot	77	77.00				77.00
	Bleams Road Spec. Asmt.		Region of Waterloo	58,800	58,800.00				58,800.00
	Hwy 7 & 8 Spec. Asmt.		M.T.O.	25,860	25,860.00				25,860.00
Total Assessments on Roads:				181,272	181,272.00				181,272.00
TOTAL ASSESSMENTS				622,000	622,000.00		112,761.00	97,100	412,139.00

Notes:

1. Roll numbers are per the Municipality's last revised assessment roll, names included for convenience.
2. Net assessment is levied to the owner at the time of actual cost levy.
3. Grant eligibility subject to farm property tax class at time of actual cost levy.

APPENDIX A - CALCULATION OF ASSESSMENTS
SNYDER DRAIN
Township of Wilmot

		Main Drain 0+504 to 0+959 Interval 1			Main Drain 0+959 to 1+476 Interval 2			Main Drain 1+476 to 1+759 Interval 3			Main Drain 1+759 to 2+769 Interval 4			Main Drain 2+769 to 3+147 Interval 5				
ESTIMATED COST	Allowances	\$10,450			\$12,370			\$2,300			\$8,900			\$2,700				
	Construction	\$10,175			\$16,280			\$130,150			\$118,345			\$68,995				
	Engineering	\$4,375			\$7,020			\$56,275			\$51,185			\$29,815				
	Section 73 Costs	\$900			\$1,100			\$4,060			\$3,740			\$5,500				
TOTAL		\$25,900			\$36,770			\$192,785			\$182,170			\$107,010				
Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet
Lands																		
006-08800	W. Weicker	1.9	1.0		1.0	27		1.0	63		1.0	139		1.0	200		1.0	304
007-07000	R. Good	35.0	35.2	7,300	35.2	960	10,750	20.2	1,276	10,000	1.2	167		0.0	0		0.0	0
007-07100	Kaymaure Holsteins Inc	26.2	26.2	1,500	26.2	715	1,500	8.3	524	69,400	8.3	1,153		0.0	0		0.0	0
007-07200	D. Steinmann	19.6	19.6	500	19.6	535	500	4.2	265	500	0.0	0		0.0	0		0.0	0
007-07300	R. Steinman	2.9	2.9		2.9	79		0.8	51		0.0	0		0.0	0		0.0	0
007-07400	Wilmot Mennonite Church	0.2	0.3		0.3	8		0.3	19		0.0	0		0.0	0		0.0	0
007-09300	D. Honderich	22.4	21.4	0	21.4	584	0	21.4	1,352	0	21.4	2,972		0.0	0		0.0	0
007-09400	D. Laurence	1.9	1.5		1.5	41		1.5	95		1.5	208		0.0	0		0.0	0
007-09500	1210918 Ontario Inc	65.0	65.0	500	65.0	1,773	500	65.0	4,106	500	65.0	9,028	*4.70	938		0.0	0	0
007-09501	M. Holmberg	1.5	2.3		2.3	63		2.3	145		2.3	319		0.0	0		0.0	0
007-09520	Wilmot Township	7.7	6.0		6.0	164		6.0	379		6.0	833	1,500	6.0	1,198	5,000	6.0	1,824
007-09600	Agcom Inc	40.7	40.7	1,500	40.7	1,110	1,500	40.7	2,571	12,500	40.7	5,653	100,250	40.7	8,126		0.0	0
007-09601	D. Boshart	0.2	0.3		0.3	8		0.3	19		0.3	42		0.3	60		0.0	0
007-09700	J. Hunke	0.2	0.3		0.3	8		0.3	19		0.3	42		0.3	60		0.3	91
007-09800	M.T.O	12.7	12.7	500	12.7	346	500	12.7	802	500	12.7	1,764	25,000	12.7	2,536	28,900	12.7	3,860
007-09810	Wilmot Township	9.4	9.2		9.2	251		9.2	581		9.2	1,278	1,500	9.2	1,837	5,000	9.2	2,796
007-14700	M. Pfeifer	4.3	2.2		2.2	60		2.2	139		2.2	306		2.2	439		2.2	669
007-14706	Wilmot Township	5.2	2.6		2.6	71		2.6	164		2.6	361		2.6	519		2.6	790
007-15800	W. Weicker	16.3	8.2		8.2	224		8.2	518		8.2	1,139		8.2	1,637		8.2	2,492
Sub-Total (Lands):		273.3	257.6	11,800	257.6	7,027	15,250	207.2	13,088	93,400	182.9	25,404	128,250	87.9	17,550	38,900	42.2	12,826
Roads																		
Bleams Road	Region of Waterloo	3.1	6.2	3,000	6.2	169	3,000	6.2	392	5,000	5.6	778	15,000	0.6	120		0.0	0
Gingerich Road	Township of Wilmot	0.8	1.6		1.6	44		1.6	101		1.6	222		1.6	319		1.6	486
Hwy 7 & 8	M.T.O	10.2	29.8	3,000	29.8	813	3,000	29.8	1,882	5,000	29.8	4,139	15,000	29.4	5,871	20,000	29.4	8,938
Nafziger Road (Reg. Rd 5)	Region of Waterloo	0.3	0.3		0.3	8		0.3	19		0.3	42		0.3	60		0.0	0
Nafziger Road (Twp Rd 14)	Township of Wilmot	1.4	1.4		1.4	39		0.6	38		0.0	0		0.0	0		0.0	0
Bleams Road Spec. Asmt.	Region of Waterloo									58,800								
Hwy 7 & 8 Spec. Asmt.	M.T.O.																	
Sub-Total (Roads):		15.8	39.3	6,000	39.3	1,073	6,000	38.5	2,432	68,800	37.3	5,181	30,000	31.9	6,370	45,860	31.0	9,424
TOTALS		289.1	296.9	17,800	296.9	8,100	21,250	245.7	15,520	162,200	220.2	30,585	158,250	119.8	23,920	84,760	73.2	22,250

Notes:

*Surface drainage for NW 9.4ha of 007-09500 flows to Interv sub-surface systematic tile drainage flows to Branch 1.

APPENDIX A - CALCULATION OF ASSESSMENTS
SNYDER DRAIN
Township of Wilmot

			Main Drain Totals		Branch 1 0+000 to 0+219			Branch 2 0+000 to 0+196			Branch 3 0+000 to 0+585			Grand Total		
ESTIMATED COST																
				\$36,720		\$29,680		\$4,700		\$26,000		\$97,100				
				\$343,945		\$3,970		\$6,410		\$0		\$354,325				
				\$148,670		\$2,035		\$2,035		\$2,035		\$154,775				
				\$15,300		\$200		\$200		\$100		\$15,800				
				\$544,635		\$35,885		\$13,345		\$28,135		\$622,000				
Roll No.	Owner	Total Benefit	Total Outlet	Total	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet	Benefit	Adj Ha	Outlet	Total Benefits	Total Outlets	GRAND TOTAL
Lands																
006-08800	W. Weicker	0	733	733		0.0	0		0.0	0		0.0	0	0	733	733
007-07000	R. Good	28,050	2,403	30,453		0.0	0		0.0	0	4,000	0.0	0	32,050	2,403	34,453
007-07100	Kaymaure Holsteins Inc	72,400	2,392	74,792		0.0	0	3,500	0.0	0	10,000	17.9	5,125	85,900	7,517	93,417
007-07200	D. Steinmann	1,500	800	2,300		0.0	0	2,000	4.2	6,217	4,000	15.4	4,409	7,500	11,426	18,926
007-07300	R. Steinman	0	130	130		0.0	0		0.8	1,184		2.1	601	0	1,915	1,915
007-07400	Wilmot Mennonite Church	0	27	27		0.0	0		0.3	444		0.0	0	0	471	471
007-09300	D. Honderich	0	4,908	4,908		21.0	6,953		0.0	0		0.0	0	0	11,861	11,861
007-09400	D. Laurence	0	344	344		0.0	0		0.0	0		0.0	0	0	344	344
007-09500	1210918 Ontario Inc	1,500	15,845	17,345	7,000	*44.70	14,800		0.0	0		0.0	0	8,500	30,645	39,145
007-09501	M. Holmberg	0	527	527		0.0	0		0.0	0		0.0	0	0	527	527
007-09520	Wilmot Township	6,500	4,398	10,898		0.0	0		0.0	0		0.0	0	6,500	4,398	10,898
007-09600	Agcom Inc	115,750	17,460	133,210	7,000	0.0	0		0.0	0		0.0	0	122,750	17,460	140,210
007-09601	D. Boshart	0	129	129		0.0	0		0.0	0		0.0	0	0	129	129
007-09700	J. Hunke	0	220	220		0.0	0		0.0	0		0.0	0	0	220	220
007-09800	M.T.O	55,400	9,308	64,708		0.0	0		0.0	0		0.0	0	55,400	9,308	64,708
007-09810	Wilmot Township	6,500	6,743	13,243		0.0	0		0.0	0		0.0	0	6,500	6,743	13,243
007-14700	M. Pfeifer	0	1,613	1,613		0.0	0		0.0	0		0.0	0	0	1,613	1,613
007-14706	Wilmot Township	0	1,905	1,905		0.0	0		0.0	0		0.0	0	0	1,905	1,905
007-15800	W. Weicker	0	6,010	6,010		0.0	0		0.0	0		0.0	0	0	6,010	6,010
Sub-Total (Lands):		287,600	75,895	363,495	14,000	65.7	21,753	5,500	5.3	7,845	18,000	35.4	10,135	325,100	115,628	440,728
Roads																
Bleams Road	Region of Waterloo	26,000	1,459	27,459		0	0		0.0	0		0.0	0	26,000	1,459	27,459
Gingerich Road	Township of Wilmot	0	1,172	1,172		0	0		0.0	0		0.0	0	0	1,172	1,172
Hwy 7 & 8	M.T.O	46,000	21,643	67,643		0	132		0.0	0		0.0	0	46,000	21,775	67,775
Nafziger Road (Reg. Rd 5)	Region of Waterloo	0	129	129		0	0		0.0	0		0.0	0	0	129	129
Nafziger Road (Twp Rd 14)	Township of Wilmot	0	77	77		0	0		0.0	0		0.0	0	0	77	77
Bleams Road Spec. Asmt.	Region of Waterloo	58,800	0	58,800										58,800	0	58,800
Hwy 7 & 8 Spec. Asmt.	M.T.O.	25,860	0	25,860										25,860	0	25,860
Sub-Total (Roads):		156,660	24,480	181,140	-	0.4	132	-	0.0	-	-	0.0	-	156,660	24,612	181,272
TOTALS		444,260	100,375	544,635	14,000	66.1	21,885	5,500	5.3	7,845	18,000	35.4	10,135	481,760	140,240	622,000

Notes:

*Surface drainage for NW 9.4ha of 007-09500 flows to Interv sub-surface systematic tile drainage flows to Branch 1.

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200 GENERAL CONDITIONS**200.1 SCOPE**

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Instructions to Tenderers, the Form of Tender and Agreement, the Schedule of Tender Prices, the Drawings, the General Conditions, Special Provisions and the Standard Specifications.

200.2 ORDER OF PRECEDENCE

In case of any inconsistency or conflict between the drawings and specifications, the following order of precedence shall apply: Addenda, Form of Tender and Agreement, Schedule of Tender Prices, Special Provisions, Contract Drawings, Standard Specifications, General Conditions.

200.3 MUNICIPALITY

Municipality refers to a municipal corporation in the Province of Ontario. Where reference to Township, County, Region, Town, City or Owner appears it shall be deemed to be the same as the word Municipality. Where reference to owner appears in the specifications it is usually in reference to the owner of the property on which the drain is being constructed.

200.4 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Schedule of Tender Prices must be completed and submitted with the Form of Tender and Agreement even though the Contract will be a lump sum. As outlined in the Instructions to Tenders a deposit in the form of a certified cheque, bank draft, bonding or irrevocable letter of credit must accompany each tender as a guarantee of good faith. The deposit shall name the Municipality as the payee. All deposits, except that of the Tenderer to whom the work is awarded, will be returned within 10 days of the time the contract is awarded. The certified cheque of the Tenderer awarded the work will be retained as Contract Security and returned with the Completion Certificate for the work. A Performance Bond may also be required to ensure maintenance of the work for a period of one year after the date of the Completion Certificate.

200.5 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS

Prior to the submission of the Tender, the Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to be satisfied with the existing conditions and the extent of the work to be done. The Tenderer must ensure that the meaning and intent of the drawings, estimated quantities and specifications is clearly understood before submission of the Tender. No allowances shall be made on behalf of the Contractor by reason of any error made in the preparation of the tender submission.

Any estimates of quantities shown or indicated on the drawings or elsewhere in the tender document are provided for the convenience of the Tenderer. The Tenderer should check the estimate of quantities for accuracy. Any use made of the estimated quantities by the Tenderer in calculating the tendered amounts is done at the Tenderers risk.

200.6 COMMENCEMENT AND COMPLETION OF WORK

The work must commence immediately after the Tenderer is notified of the contract award or at a later date, if set out as a condition in the Form of Tender and Agreement. If weather and ground conditions are unsuitable, work may be started at a later date from either of the above two dates if such delay is approved by the Engineer. The Contractor shall provide a minimum of 48 hours advance notice to the Engineer and the Municipality before commencement of any work. The work must proceed in such manner as to ensure its completion at the earliest possible date consistent with first class workmanship and within the time limit set out in the tender/contract document. Failure to commence or complete the work as set out in the tender/contract document may result in a forfeiture of all or part of the Contract Security if the Engineer deems that damages have been sustained to the Municipality or to any landowner because of the non-commencement or non-completion of the contract as awarded and that the failure to meet the specified dates has been the fault of the Contractor.

200.7 NOTICES RE COMMENCEMENT OF WORK

If the Contractor leaves the job site for a period of time after initiation of work, a minimum of 48 hours advance notice shall be given to the Engineer and the Municipality before commencement of any further work. If any work is commenced without the advance notice the Contractor shall be fully responsible for all such work undertaken prior to such notification and shall make good any works or materials judged to be inadequate or constructed in any manner that may have been subject to alteration if made known to the Engineer prior to commencement of construction.

200.8 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall apply and pay for all necessary permits or licenses required for the execution of the work. This shall not include the obtaining of permanent easements or rights or servitude. The Contractor shall give all necessary notices and pay all fees required by the law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety and if the specifications and drawings are at variance therewith, any resulting additional expense incurred by the Contractor shall constitute an addition to the contract price.

200.9 HEALTH AND SAFETY

Contractor must comply with the Occupational Health and Safety Act (OHSA) and the associated Regulations for Construction Projects. Contractor will also follow any site-specific safety and training requirements of the Municipality, agencies, utility companies or other authorities.

Communication about site-specific hazards and safety requirements shall occur at the pre-construction meeting. If no pre-construction meeting is conducted, Contractor will communicate site-specific hazards and safety requirements before beginning work.

Contractor shall immediately report any workplace incidents, near misses, injuries and occupational illnesses to the Engineer.

200.10 LIMITATIONS OF OPERATIONS

Except for such work as may be required by the Engineer to maintain the works in a safe and satisfactory condition, the Contractor shall not carry out operations under the contract on Sundays or Statutory Holidays without permission in writing from the Engineer. The Engineer may direct in writing to the Contractor to cease or limit operations under the contract on any day or days if the operations are of such a nature, or if the work is so located, or if the traffic is of such a volume, that the Engineer deems it necessary or expedient to do so.

200.11 SUPERVISION

The Contractor shall provide constant supervision of the construction work and shall keep a competent foreman in charge at the site.

200.12 CHARACTER AND EMPLOYMENT OF WORKERS

The Contractor shall employ only orderly, competent and skillful workers to do the work and shall give preference to available qualified residents in the area of the contract. Whenever the Engineer informs the Contractor in writing that any workers are, in the opinion of the Engineer, disorderly, incompetent, or breaking the law, such workers shall be discharged from the job site and shall not again be employed on the job site without the written consent of the Engineer.

200.13 SUB-CONTRACTORS

If the Municipality so directs, the Contractor shall not sublet the whole or any part of this contract without the approval of the Engineer.

200.14 PAYMENT

Progress payments in cash equal to about 90% of the value of the work done and materials incorporated in the work will be made to the Contractor monthly. If directed by the Engineer the Contractor may be required to provide a written request for the progress payment amount. An additional 7% will be paid 45 days after the date of the Completion Certificate by the Engineer and 3% of the contract price may be reserved by the Municipality as a maintenance holdback for one year from the date of the Completion Certificate.

The holdbacks noted above may be increased by the Municipality if, in the written opinion of the Engineer, particular conditions of the contract require such greater holdback.

After the completion of the work any part of maintenance holdback may be used to correct defects from faulty construction and/or materials provided that notice shall first be given by the Engineer in writing to the Contractor stating that the Contractor has seven (7) days in which to remedy the defect in construction and/or materials.

200.15 TERMINATION OF CONTRACT BY THE MUNICIPALITY

Termination of the contract by the Municipality may be considered if the Contractor:

1. should be adjudged bankrupt or make a general assignment for the benefit of creditors or if a receiver should be appointed on account of insolvency;
2. should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days' notice in writing from the Engineer to supply such additional workmen or materials in order to commence or complete the works;
3. should fail to make prompt payment to sub-contractors or for materials or labour;
4. should persistently disregard laws, ordinances, or instructions from the Engineer, or otherwise be guilty of a substantial violation of the provisions of the contract;

then the Municipality, upon Certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, give written notice to the Contractor to terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Municipality may deem expedient, but without undue delay or expense. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price will exceed the expense of finishing the work including compensation to the Engineer for additional

services and including other damages of every name and nature, such excess shall be paid to the Contractor. If such expense will exceed such unpaid balance including the Contract Security, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer. If the contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the Contract Security and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new tender for the contract being terminated.

If any unpaid balance and the Contract Security do not equal the monies owed by the Contractor upon the termination of the contract, the Municipality may also charge such expenses against any money which is or may thereafter be due to the Contractor from the Municipality.

200.16 LIQUIDATED DAMAGES

It is agreed by the parties to the Contract that in case all the work called for under the Contract is not finished or complete within the period of time as set forth in the Tender/Contract Document, damage will be sustained by the Municipality. It is understood by the parties that it will be impracticable and extremely difficult to ascertain and determine the actual damage which the Municipality will sustain in the event of and by reason of such delay. The parties hereto agree that the Contractor will pay to the Municipality a sum as set out in the Form of Tender and Agreement for liquidated damages for each and every calendar day delay, including Saturdays, Sundays and Statutory Holidays, in finishing the work in excess of the number of working days prescribed. It is agreed that the liquidated damages amount is an estimate of the actual damage to the Municipality which will accrue during the period in excess of the prescribed number of working days.

The Municipality may deduct any amount due under this section from any monies that may be due or payable to the Contractor on any account whatsoever. The liquidated damages payable under this section are in addition to and without prejudice to any other remedy, action or other alternative that may be available to the Municipality.

The Contractor shall not be assessed with liquidated damages for any delay caused by acts of nature, or of the Public Enemy, Acts of the Province or of any Foreign State, Fire, Flood, Epidemics, Quarantine Restrictions, Embargoes or any delays of Sub-Contractors due to such causes.

If the time available for the completion of the work is increased or decreased by reason of alterations or changes made under the provisions of the Contract, the number of working days shall be increased or decreased as determined by the Engineer.

If the Form of Tender and Agreement does not show an amount for Liquidated Damages then Liquidated Damages do not apply for this contract.

200.17 CONTRACTOR'S LIABILITY

The Contractor and all workers, agents or any party under the Contractor's control, including Sub-Contractors, shall use due care that no person or property is injured and that no rights are infringed during the construction work outlined in the contract. The Contractor shall be solely responsible for all damages by whomsoever claimable in respect of any injury to persons or to lands, buildings, structures, fences, livestock, trees, crops, roadways, ditches, drains and watercourses, whether natural or artificial, or property of whatever description and in respect of any infringement of any right, privilege or easement wherever occasioned in the carrying on of the work or any part thereof, or by any neglect, misfeasance or non-feasance on the Contractor's part or on the part of any workers, agents or parties under the Contractor's control including Sub-Contractors, and shall bear the full cost thereof. The Contractor shall be fully responsible to make such temporary provisions as may be necessary to ensure the avoidance of any such damage, injury or infringement and to prevent the interruption of or danger or menace to the traffic in any railway or any public or private road entrance or sidewalk and to secure to all persons and corporations the uninterrupted enjoyment of all their

rights, in and during the performance of the work. The Contractor shall indemnify and save harmless the Municipality and the Engineer from and against all claims, demands, losses, costs, damages, actions, suits or other proceedings by whomsoever made, brought or prosecuted in any manner based upon, occasioned by, or attributed to any such damage, injury or infringement.

Wherever any work is of such an extent and nature that it must necessarily be confined to particular areas of a roadway, a working area, or private property, the Contractor shall use reasonable care not to damage or deface the remaining portions of the property, and if any damage is occasioned as a result of the Contractor's operations, it shall be rectified by and at the expense of the Contractor, to the satisfaction of the Engineer. Notwithstanding the indemnity provisions contained in this section, where in the opinion of the Engineer the Contractor has failed to rectify any damage, injury or infringement or has failed to adequately compensate any person for any damage, injury or infringement for which the Contractor is responsible under the contract, the Engineer, following notice in writing to the Contractor of an intention so to do, may withhold payment of any monies due the Contractor under this or any other contract until the Contractor has rectified such damage, injury or infringement or has paid adequate compensation for such damage, injury or infringement, provided however, that the Municipality will not withhold such monies where in the opinion of the Engineer there are reasonable grounds upon which the Contractor denies liability for such damage, injury or infringement and the Contractor has given the claimant a reasonable time in which to establish the validity of the claim, and provided further that the amount withheld under this section shall not exceed the amount of such claims against the Contractor.

Where the Contractor uses privately owned lands for pits or waste disposal areas, the Contractor shall comply with applicable laws and provide the Engineer with a release signed by or on behalf of the owner of each pit or waste disposal area used by the Contractor. If the said release is not obtained, then sufficient monies will be withheld from the Contractor except, however, where the owner's signature is withheld solely on the basis of damage, injury, or infringement it will be dealt with as provided elsewhere in this subsection.

Nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the country, province or locality in which the work is being done. Neither the Completion Certificate nor final payment thereunder, nor any provision in the Contract Document shall relieve the Contractor from this liability.

200.18 LIABILITY INSURANCE

The Contractor shall take out and keep in force until the date of acceptance of the entire work by the Engineer, a comprehensive policy of public liability and property damage insurance providing insurance coverage of at least \$3,000,000 for each and every accident, exclusive of interest and cost, against loss or damage resulting from bodily injury to or death of one or more persons and loss of or damage to property and such policy shall where, and as requested by the Municipality, name the Municipality and the Engineer as an additional insured thereunder and shall protect the Municipality against all claims for all damage or injury including death to any person or persons and for damage to any property of the Municipality or any other public or private property resulting from or arising out of any act or omission on part of the Contractor or any of his servants or agents during the execution of the Contract.

200.19 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the prosecution of the work, by reason of unanticipated difficulties, bad weather, strikes, wars, acts of nature, or other mischances, shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.

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400 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF DRAINS**400.1 ABBREVIATIONS**

- i) MTO means the Ministry of Transportation of Ontario.
- ii) ASTM means the American Society for Testing Materials.
- iii) CSA means the Canadian Standard Association.
- iv) OPSD means Ontario Provincial Standard Drawings
- v) OPSS means Ontario Provincial Standard Specifications
- vi) DFO means Fisheries and Oceans Canada
- vii) MNRF means Ministry of Natural Resources and Forestry
- viii) MECP means Ministry of Environment, Conservation and Parks

400.2 PRE CONSTRUCTION MEETING

The Contractor should arrange a pre-construction meeting with the Engineer, Municipality, affected landowners prior to commencement of construction.

If there is no pre-construction meeting or if a landowner is not present at the pre-construction meeting, the following shall apply. The drain is to be walked by the Contractor and each landowner prior to construction to ensure that both agree on the work to be done. Any difference of opinion shall be referred to the Engineer for decision. If the landowner is not contacted for such review, they are to advise the Engineer and/or Municipality.

400.3 COLD WEATHER

When working in cold weather is approved by the Engineer, the Contractor shall provide suitable means for heating, protection, and snow and ice removal. All work completed in cold weather conditions shall be to the satisfaction of the Engineer and any additional cost to remedy unsatisfactory work, or protect the work shall be borne by the Contractor. All backfilling operations shall be done as soon as possible to avoid backfilling with ground containing frozen particles. The Contractor will assume all responsibility for damages to any tile drains and for settlements or bank slippages that may result from work in cold weather.

400.4 WORKING AREA

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For a closed drain the working area shall be a 10 metre width on either side of the trench or any combination not exceeding 20 metres. A 10m x 10m working area shall exist around any catchbasin, junction box or access point. For an open drain the working area shall be 17 metres on the side for leveling and 3 metres on the opposite side. A 10m working area shall exist for any overflow swale or grassed waterway. If any part of the drain is close to a property line then the fence line shall be one of the limits of the work area. Reduced or increased working areas will be described in detail on the Drawings.

400.5 ACCESS

The Contractor shall have access to the drain by entering the working area directly from road allowances or along access routes shown on the Drawings. All specifications governing fences, livestock and crops during drain construction apply to access routes. No other access routes shall be used unless first approved by the Engineer and the affected landowner. The Contractor shall contact each landowner prior to using the designated access routes. Contractor shall make good any damages caused by using the designated access routes.

400.6 ACCESS TO PROPERTIES ADJOINING THE WORK

The Contractor shall provide at all times and at no additional cost, adequate pedestrian access to private homes and commercial establishments unless otherwise authorized by the Engineer. Where interruptions to access have been authorized by the Engineer, reasonable notice shall be given by the Contractor to the affected landowners and such interruptions shall be arranged to minimize interference to those affected.

400.7 DRAINAGE SUPERINTENDENT

Where a Drainage Superintendent (Superintendent) is appointed by the Municipality, the Engineer may designate the Superintendent to act as the Engineer's representative. If so designated, the Superintendent will have the power to inspect and direct the execution of the work.

Any instructions given by the Superintendent which change the proposed work or with which the Contractor does not agree shall be referred to the Engineer for final decision.

400.8 ALTERATIONS TO WORK

The Engineer shall have the power to make alterations, additions and/or deletions in the work as shown or described in the Drawings or Specifications and the Contractor shall proceed to implement such changes without delay. Alterations ordered by the Engineer shall in no way render the contract void.

If a landowner desires deviations from the work described on the Drawings, the landowner shall submit a written request to the Engineer, at least 48 hours in advance of the work in question.

In every such case, the contract amount shall be increased or decreased as required according to a fair evaluation of the work completed. Where such changes involve additional work similar to items in the contract, the price for additional work shall be determined after consideration is given to the tendered price for similar items.

In no case shall the Contractor commence work considered to be extra work without the Engineer's approval. Payment for extra work is contingent on receipt of documentation to the satisfaction of the Engineer. Refer to the Extra Work Summary included in the Special Provisions.

400.9 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error without notice shall be done at the Contractor's risk. Any additional cost incurred by the Contractor to remedy an error or unusual condition without notice shall be borne by the Contractor. The Engineer shall direct the alteration necessary to correct errors or unusual conditions. The contract amount shall be adjusted in accordance with a fair evaluation of documentation for the work added, deleted or adjusted.

400.10 TESTS

The Engineer reserves the right to subject any materials to a competent testing laboratory for compliance with the standard. If any materials supplied by the Contractor are determined to be inadequate to meet the applicable standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate materials with materials capable of meeting the standards.

The cost of testing the materials supplied by the Contractor shall be borne by the Contractor.

400.11 BENCHMARKS AND STAKES

Prior to construction, the Engineer will confirm the benchmarks. The Contractor shall be held liable for the cost of replacing any benchmarks destroyed during construction.

If the Engineer provides layout stakes, the Contractor shall be held liable for the cost of replacing any layout stakes destroyed during construction.

Where property bars are shown on the Drawings, they are to be protected and if damaged by the Contractor, they will be reinstated by an Ontario Land Surveyor at the expense of the Contractor. Where property bars not shown on the Drawings are damaged, they will be reinstated by an Ontario Land Surveyor at the expense of the project.

400.12 OPENING UP OF FINISHED WORK

If ordered by the Engineer, the Contractor shall make such openings in the work as are needed to re-examine the work, and shall forthwith make the work good again. Should the Engineer find the work so opened up to be faulty in any respect, the whole of the expense of opening, inspecting and making the work good shall be borne by the Contractor. Should the Engineer find the work opened up to be in an acceptable condition the Contractor shall be paid for the expense of opening and making the work good, unless the Contractor has been obligated by any specification or by the direction of the Engineer to leave the work open for the Engineer's inspection.

400.13 FINAL INSPECTION

Final inspection by the Engineer will be made within twenty (20) days after receiving notice in writing from the Contractor that work is complete, or as soon thereafter as weather conditions permit. All the work included in the contract must at the time of final inspection have the full dimensions and cross-sections.

Prior to commencing the final inspection an on-site meeting may be held by the Engineer and landowners directly affected by the construction of the drain. The Contractor will attend this meeting upon notice by the Engineer.

If there is no on-site meeting with the Engineer and landowners, the Contractor shall obtain from each landowner a written statement indicating that the work has been performed to the owner's satisfaction. If the Contractor is unable to obtain a written statement from the landowner, the Engineer will determine if further work is required prior to issuing the Completion Certificate.

400.14 WARRANTY

There shall be a one-year warranty period on all completed work. The warranty period will commence on the date of the Completion Certificate.

When directed by the Engineer, the Contractor shall repair and make good any deficiencies in the work that may appear during the warranty period.

Before the work shall be finally accepted by the Municipality, the Contractor shall complete all work as directed by the Engineer and remove all debris and surplus materials and leave the work neat and presentable.

400.15 MATERIALS**400.15.1 Concrete Drain Tile**

Concrete drain tile shall conform to the requirements of the most recent ASTM C412 specifications for heavy duty extra quality, unless a stronger concrete tile is required by the Special Provisions or Drawings. All tile furnished shall be subject to the approval of the Engineer.

The minimum nominal lengths of the tile shall be 750mm for 150 to 350mm diameter tile and 1200mm for 400 to 900mm diameter tile.

All tile should be of good quality, free from distortions and cracks and shall meet the standards specified. The ends should be smooth and free from cracks or checks. All rejected tile are to be immediately removed from the site.

Granular backfill, where required, shall consist of approved sand or gravel having no particles retained on a screen having 50mm square openings.

Earth backfill shall consist of approved material having no large lumps or boulders.

400.15.2 Corrugated Plastic Tubing

Corrugated plastic tubing shall conform to the *Land Improvement Contractors of Ontario Standard Specification for Corrugated Plastic Drainage Tubing, 2006*. Type of material (solid or perforated) and need for filter sock will be specified on the Drawings or in the description of the work in the Special Provisions. Filter sock where specified shall be a standard synthetic filter material as provided by a recognized plastic tubing manufacturer unless noted differently on the contract drawings or elsewhere in the contract document. Protect coils of plastic tubing from damage and deformation.

400.15.3 Corrugated Steel Pipe

Corrugated Steel Pipe (CSP) shall be according to OPSS 1801 (CSA G401). Unless stated otherwise in the Special Provisions the pipe shall be:

- galvanized
- helical corrugation with lock seam and re-rolled annular ends
- 68mm x 13mm corrugation profile for diameters up to 1200mm
- 125mm x 25mm corrugation profile for diameters 1200mm and larger
- minimum wall thickness of 1.6mm for diameters up to 500mm
- minimum wall thickness of 2.0mm for diameters 600mm and larger
- joined using standard couplers matching the pipe diameter and material

Other coatings that may be specified include aluminized Type 2 or polymer. Polymer coating shall be a 254mm polymer film laminated to both sides of the pipe.

400.15.4 Plastic Pipe

Plastic Pipe shall be a high density polyethylene (HDPE) double wall corrugated pipe with smooth inner wall, solid with no perforations in accordance with OPSS 1840.

A minimum stiffness of 320 KPa at 5% deflection

The pipe shall be joined with snap-on or split couplers.

400.15.5 Concrete Sewer Pipe

Concrete sewer pipe shall be in accordance with OPSS 1820.

Non-reinforced concrete sewer pipe shall be used for pipe 375mm in diameter and smaller and reinforced concrete sewer pipe shall be used for pipe over 375mm.

Classes shall be as shown on the Contract Drawings or as described in the Form of Tender.

All new concrete sewer pipe shall have rubber-type gasket joints.

Where concrete sewer pipe “seconds” are specified, the pipe should exhibit no damage or cracks on the barrel section and shall be capable of satisfying the crushing strength requirements of OPSS 1820. The pipe may contain cracks or chips in the bell or spigot which prevent the use of rubber gaskets but the joints must be protected with filter cloth.

400.16 RIPRAP

All riprap is to be placed on a geotextile underlay (Terrafix 360R or equal) unless directed otherwise in the specific construction notes. The riprap is to be graded heavy angular stone (quarry stone is recommended) with particles averaging in size from 200mm to 300mm and is to be placed at 300mm thickness. Fine particles may be included to fill voids. Along upstream edges of riprap, where surface water will enter, underlay is to extend a minimum of 300mm upstream from riprap and then be keyed down a minimum of 300mm. Wherever riprap is placed, the area is to be over-dug so that finished top of riprap is at design cross-section, at design elevation or flush with existing ground.

400.17 GEOTEXTILE

To be non-woven fabric that is rot proof, non-biodegradable, chemically resistant to acidic or alkaline soils and is dimensionally stable under different hydraulic conditions. The filter fabric is to be a material whose primary function is to act as a highly permeable, non-clogging soil separator for fine soils (Terrafix 360R or equal). Contractor is to follow the manufacturer's recommendations for cutting, installation and precautions necessary to avoid damage to fabric. Other approved equals will be considered by the Engineer prior to construction.

400.18 DISPOSAL OF MATERIALS

The Contractor shall remove all surplus materials from the job site at the end of the project. The Contractor shall locate the disposal site for all materials to be disposed of. Disposal of materials shall comply with applicable regulations.

400.19 NOTIFICATION OF RAILROADS, ROAD AUTHORITIES AND UTILITIES

Contractor will notify any Railroad, Road Authority or Utility at least 48 hours in advance regarding work to be performed on their property or affecting their infrastructure. The notice will be in writing and is exclusive of Saturdays, Sundays and Holidays.

A utility includes any entity supplying the general public with necessities or conveniences.

400.20 WORKING IN ROAD ALLOWANCES**400.20.1 General**

Work within public road allowances shall be done in accordance with the Ontario Traffic Manual Book 7, latest edition.

400.20.2 Road Crossings

If no specific detail is provided for road crossings on the drawings or in the specifications the following shall apply:

- A Road Authority will supply no labour, equipment or materials for the construction of the road crossing.
- Contractor will not commence road crossing work until any required permits have been obtained. The Engineer may apply for any required permits prior to construction.
- Contractor will notify the Road Authority at least 72 hours in advance of any construction in the road allowance.
- Road crossings may be made with an open cut unless otherwise noted.
- Exact location of crossing shall be verified with the Road Authority and the Engineer.
- Pipe shall be placed on a minimum 150mm depth of Granular A shaped for the pipe.
- Pipe backfill shall be compacted Granular A and extend 300mm above the top of the pipe.
- Trench shall be backfilled with acceptable native material for the base width of the road bed.
- The material shall be placed in lifts not exceeding 300mm in depth and shall be thoroughly compacted with an approved mechanical vibrating compactor.
- Top 600mm of the road bed backfill shall consist of 450mm Granular B and 150mm of Granular A placed in lifts and fully compacted.
- Any surplus excavated material within the road allowance may be spread on the right-of-way with consent of the Road Superintendent otherwise the surplus material shall be hauled away.
- Existing asphalt or concrete pavement or surface treatment shall be replaced by the Contractor to the satisfaction of the Engineer and Road Authority.
- Contractor shall be responsible for correcting any backfill settlement during construction and during the warranty period. Upon approval of the road authority, surplus gravel shall be stockpiled near gravel road crossings to provide backfill for future trench settlement.
- All road crossings shall meet the approval of the Road Authority.
- If any road crossing is not left in a safe manner at the end of the working day barricades and warning signs shall be erected to guarantee the safety of the travelling public.
- If the Engineer deems a road to surface to have been damaged by the construction of a drain, either across or along the road, the Engineer may direct the Contractor to restore the road surface to existing or better condition at no additional cost.

400.20.3 Maintenance of Traffic

Unless directed otherwise on the drawings or in the specifications the Contractor shall keep the road open to traffic at all times. The Contractor shall provide suitable warning signs and/or flagging to the satisfaction of the Road Authority to notify of the construction work.

If a detour is required, the Contractor shall submit a proposal as to the details of the detour for approval by the Road Authority. If necessary to close the road to through traffic, the Contractor shall provide for and adequately sign the detour route. Contractor shall undertake all notifications required for a road closure in consultation with the Municipality.

400.21 LOCATIONS OF EXISTING UTILITIES

The position of pole lines, conduits, watermains, sewers and other underground and overhead utilities are not necessarily shown on the Contract Drawings, and, where shown, the accuracy of the position of such utilities and structures is not guaranteed. Before starting work, the Contractor shall have all utilities located in accordance with the Ontario Underground Infrastructure Notification System Act.

All utilities shall be exposed to the satisfaction of the utility company to verify that the construction proposed will not conflict with the utility structure. Additional payment will be allowed for relocation of utilities if conflicts should occur.

The Contractor is responsible for protecting all located and exposed utilities from damage during construction. The Contractor shall assume liability for damage caused to all properly located utilities.

400.22 LANEWAYS

If no specific detail is provided for laneway crossings on the Drawings or in the Specifications the following shall apply:

- Pipe backfill shall be acceptable native material that can be compacted in place.
- Top 450mm of laneway backfill shall consist of 300mm Granular B and 150mm of Granular A placed in lifts and fully compacted.
- Minimum cover on laneway culverts shall be 300mm.
- Existing asphalt or concrete pavement or surface treatment shall be replaced by the Contractor.
- The width of surface restoration shall match the existing laneway.
- Contractor shall be responsible for correcting any backfill settlement during construction and during the warranty period.

The timing of laneway closures will be coordinated by the Contractor to the satisfaction of the landowner.

400.23 EXISTING CROSSING CLEANOUT

Where the Special Provisions require an existing crossing to be cleaned, the Contractor shall provide a bottom width and depth that provides capacity equivalent to the capacity of the channel on either side. Excavated materials shall be hauled away unless adjacent landowners give permission for leveling. Care shall be taken to ensure that existing abutments or any portion of the structure are not damaged or undercut. The method of removing the material is to be pre-approved by the Engineer.

400.24 FENCES

If the Contractor is responsible to remove and install fences, the following shall apply:

- All fences removed by a Contractor are to be re-erected in as good a condition as existing materials permit.
- All fences shall be properly stretched and fastened. Where directed by the Engineer, additional steel posts shall be placed to adequately support a fence upon re-erection.
- Where practical and where required by the landowner, the Contractor shall take down an existing fence at the nearest anchor post and roll the fence back rather than cutting the fence and attempting to patch it.
- Where fence materials are in such poor condition that re-erection is not possible, the Contractor shall replace the fence using equivalent materials. Such fence material shall be approved by the Engineer and the landowner. Where the Engineer approves new fence material, additional payment will be provided.

Any fences paralleling an open drain, that are not line fences, that hinder the proper working of the excavating machinery for drain construction or maintenance shall be removed and rebuilt by the landowner at their own expense. If such parallel fences are line fences they shall be removed and reinstalled by the Contractor.

No excavated or cleared material shall be placed against fences.

The installation of all fences shall be done to the satisfaction of the Engineer and the landowner.

400.25 LIVESTOCK

If any construction will be within a fenced field containing livestock that are evident or have been made known to the Contractor, the Contractor shall notify the owner of the livestock 48 hours in advance of access into the field. Thereafter, the owner shall be responsible for the protection of the livestock in the field during construction and shall also be liable for any damage to or by the livestock.

Where the owner so directs or where the Contractor has failed to reach the owner, the Contractor shall adequately re-erect all fences at the end of each working day. No field containing livestock shall have a trench left open at the end of the working day, unless the trench has been adequately backfilled or protected. Failure of the Contractor to comply with this paragraph shall render the Contractor liable for any damage to or by the livestock.

Where livestock may be encountered on any property the Contractor shall notify the Engineer to arrange for inspection of the work prior to backfilling.

400.26 STANDING CROPS

The Contractor shall not be held responsible for damages to standing crops within the working area for the drain. However, the Contractor shall notify the owner of the crops 48 hours prior to commencement of construction so as to allow the owner an opportunity to harvest or salvage the crop within the drain working area. If this advance notice is not given the Contractor may be liable for the loss of the standing crops.

400.27 CLEARING VEGETATION

400.27.1 General

The area for clearing, if not defined elsewhere, shall be 15m on each side of the drain.

400.27.2 Trees to Remain

Where it is feasible to work around existing trees that do not impede the function of the drainage works, the Contractor shall not remove any deciduous tree larger than 300mm and any coniferous tree larger than 200mm, unless authorized by the Engineer.

400.27.3 Incidental Clearing

Incidental clearing includes removal of trees, brush or other vegetation with an excavator during construction activities, and the cost is to be included in the price for the related construction activity.

400.27.4 Power Brushing

Power brushing includes removal of above-ground vegetation with a rotary brush cutter or other mechanical means. Stump and root removal is not required. Power brushed vegetation in a channel cross-section shall be removed and leveled in the working area. Excavated material may be placed and leveled on power brushed vegetation.

400.27.5 Close-Cut Clearing

Close-cut clearing includes removal of above-ground vegetation cut flush with the ground. Stump and root removal is not required.

400.27.6 Clearing And Grubbing

Clearing and grubbing includes removal of vegetation, including stumps and roots. Removal of earth from the grubbed area into the windrows or piles is to be minimized.

400.27.7 Disposal of Cleared Vegetation**400.27.7.1 In Bush Areas**

Cleared vegetation is to be pushed into windrows or piles at the edge of the cleared area. Stumps and roots are to be piled first at the edge of the cleared area, followed by other vegetation (trunks, branches, etc.). Provisions for lateral drainage are required through all windrows. Windrows are not to block any laneways or trails. After removing cleared vegetation, the working area shall be leveled to the satisfaction of the Engineer.

400.27.7.2 In Field Areas

Cleared vegetation resulting from incidental clearing or power brushing may be hauled away, mulched in place or reduced to a size that permits cultivation using conventional equipment without causing undue hardship on farm machinery.

Cleared vegetation resulting from close-cut clearing or clearing and grubbing is to be hauled away to an approved location. Disposal sites may be in bush areas or other approved locations on the same farm. No excavated material shall be levelled over any logs, brush or rubbish of any kind.

400.27.8 Landowner Requested Salvage

A landowner may request that wood be separated from the windrows for the landowner's future use. This additional work would be eligible for extra payment, subject to the approval of the Engineer. The cost of the additional work would be assessed to the landowner.

400.27.9 Clearing by Landowner

Wherever the Special Provisions indicate that clearing may be undertaken by the landowner, work by the landowner shall be in accordance with the Clearing Vegetation requirements of this specification and must be completed so as not to cause delay for the Contractor. If the landowner does not complete clearing in accordance with these requirements, the Contractor will undertake the clearing at a price approved by the Engineer.

400.28 ROCK REMOVAL**400.28.1 General**

Rock shall be defined as bedrock and boulders that are greater than one-half cubic metre in size and that require blasting or hoe-ram removal. Bedrock or boulders that can be removed with a standard excavator bucket are not considered rock removal.

400.28.2 Blasting Requirements

All blasting shall be performed by a competent, qualified blaster in accordance with OPSS 120. Blasting mats are required. A pre-blast survey meeting the requirements of OPSS 120 must be completed for any structure within 200m of any blasting. The cost for pre-blast survey shall be included in the tender price for rock removal.

400.28.3 Typical Sections and Pay Limits

For tile drains and road culverts, rock shall be removed to 150mm below the proposed grade shown on the profile so that pipes are not in direct contact with rock. The width of rock removal shall be 1m minimum or the diameter of the pipe plus 600mm.

For open drains, rock removal shall match the proposed grade and bottom width shown on the Drawings. Side slopes shall be vertical or sloped outward. Side slopes shall be free of loose rock when excavation is completed.

Payment for the quantity of rock removed will be based on the typical sections described in these specifications and confirmed by field measurements. There will be no payment for overbreak.

400.28.4 Disposal of Rock

Excavated rock shall be piled at the edge of the working area at locations designated by the landowner. The cost to pile excavated rock shall be included in the tender price for rock removal. If the Special Provisions or the landowner require excavated rock to be hauled away, additional payment will be considered.

Where approved by the Engineer, excavated rock may be used in place of imported riprap.

400.29 SEEDING

400.29.1 General

Contractor responsible for re-seeding as necessary for uniform catch during warranty period. Areas that remain grassed after construction may not need to be seeded unless directed otherwise by the Engineer.

400.29.2 Drainage Works and Road Allowances

All disturbed ditch banks, berms and road allowances are to be seeded at the end of the day.

The following seed mixture shall be applied at 60kg/ha using a mechanical (cyclone) spreader:

- 35% Creeping Red Fescue
- 25% Birdsfoot Trefoil
- 25% Kentucky Bluegrass
- 10% Cover Crop (Oats, Rye, Barley, Wheat)
- 5% White Clover

Provide temporary cover for late fall planting by adding an additional 10 kg/ha of rye or winter wheat.

400.29.3 Hydroseeding

Where hydroseeding is specified, disturbed areas will be restored by the uniform application of a standard roadside mix, fertilizer, mulch and water at a rate of 2,000 kg/ha and be in accordance with OPSS 804.

400.29.4 Seeding Lawns

Unless specified otherwise, lawn areas shall be seeded with Canada No. 1 lawn grass mixture applied at 300 kg/ha using a mechanical (cyclone) spreader on 100mm of topsoil. Fertilizer shall be 5:20:20 or 10:10:10 applied at 300 kg/ha. Seed and fertilizer shall be applied together. Contractor shall arrange for watering with landowners.

400.29.5 Sod

Where sod is specified, sod is to be commercial grade turfgrass nursery sod, Kentucky Bluegrass placed on 50mm of topsoil. Fertilizer shall be 5-20-20 applied at 10kg/ha. Place sod in accordance with supplier instructions. Contractor is responsible for saturating the sod with water on the day of sod placement. Subsequent watering is the responsibility of the landowner.

400.30 EROSION CONTROL BLANKETS

Erosion Control Blankets (ECB) shall be biodegradable and made of straw/coconut (Terrafix SC200, Nilex SC32 or equal) or coconut (Terrafix C200, Nilex C32 or equal) with photodegradable, double net construction. The blanket and the staples shall be supplied and installed as per OPSS 804.

Erosion control blanket shall be placed and stapled into position as per the manufacturer's installation instructions on slopes as directed by the Engineer. Blankets shall be installed in direct contact with the ground surface to form a uniform, cohesive mat over the seeded earth area. The blankets are to be single course with 150mm overlap between blankets and joints are to be staggered. The Contractor shall ensure that the ECB is anchored to the soil and that tenting of the ECB does not occur.

On slopes, when the ECB cannot be extended 1m beyond the crest of the slope, the uppermost edge of the ECB shall be anchored in a 150mm wide by 150mm deep trench. The trench shall be backfilled with earth and compacted.

400.31 SEDIMENT CONTROL**400.31.1 General**

Contractor shall install sediment control features at the downstream limits of the project and at other locations as shown on the drawings or directed by the Engineer.

Sediment control features shall be installed prior to any excavation taking place upstream of that location. The Contractor shall maintain all sediment control features throughout construction and the warranty period.

Sediment that accumulates during construction shall be removed and levelled as required.

400.31.2 Flow Check Dams**400.31.2.1 Temporary Straw Bale Flow Check Dam**

The straw bale flow check dam shall consist of a minimum of 3 bales. Each bale is to be embedded at least 150mm into the channel bottom and shall be anchored in place with 2 T-bar fence posts or 1.2m wooden stakes driven through the bale.

Straw bales shall be hauled away at the end of the warranty period. Accumulated sediments shall be excavated and levelled when the temporary straw bale flow check dam is removed.

400.31.2.2 Temporary Rock Flow Check Dam

The temporary rock flow check dam shall extend to the top of the banks so that dam overtopping does not cause bank erosion. Rock shall be embedded a minimum of 150mm into the ditch bottom and banks. No geotextile is required for temporary rock flow check dams.

Accumulated sediments shall be excavated and levelled when the temporary rock flow check dam is removed at the conclusion of the warranty period.

400.31.2.3 Permanent Rock Flow Check Dam

The requirements of temporary rock flow check dams shall apply except rock shall be placed on geotextile and the dam shall remain in place permanently.

400.31.3 Sediment Traps**400.31.3.1 General**

The channel bottom shall be deepened in accordance with the dimensions provided in the Drawings or Special Provisions. If dimensions are not specified on the Drawings, the sediment trap shall be excavated within the channel cross-section at least 0.3m below the design grade.

The Contractor will monitor the sediment trap during construction and cleanout accumulated sediments as required to maintain the function of the sediment trap.

If specified to be temporary, no sediment trap maintenance is required after construction is complete.

If specified to be permanent, the contractor will clean out the sediment trap at the conclusion of the warranty period, unless directed otherwise by the Engineer.

400.31.3.2 Sediment Trap with Flow Check Dam

A permanent rock sediment trap shall include a permanent sediment trap and a rock flow check dam.

A temporary rock/straw sediment trap shall include a temporary sediment trap and a rock/straw flow check dam.

400.31.4 Turbidity Curtains

A turbidity curtain is required when there is permanent water level/flow and a sediment trap is not feasible.

Turbidity curtains shall be in accordance with OPSS 805 and installed per manufacturer's instructions.

Turbidity curtains shall be sized and anchored to ensure the bottom edge of the curtain is continuously in contact with the waterbody bed so that sediment passage from the enclosed area is prevented. The curtain must be free of tears and capable of passing the base flow from the drainage works. Turbidity curtain locations may be approved by the Engineer.

Turbidity curtains are to remain functional until work in the enclosed area is completed. Prior to relocating or removing turbidity curtains, accumulated sediment is to be removed from the drain and levelled.

Where a turbidity curtain remains in place for more than two weeks it shall be inspected for damage or clogging and replaced, repaired or cleaned as required.

400.31.5 Silt Fence

Silt fence shall be in accordance with OPSS 805.07.02.02 and OPSD 219.110 (light-duty).

400.32 GRASSED WATERWAYS AND OVERFLOW SWALES

Grassed waterways and overflow swales typically follow low ground along the historic flow route. The cross-section shall be saucer shaped with a nominal 1m bottom width, 8:1 side slopes and 300mm depth unless stated otherwise in the Special Provisions.

All grassed waterways are to be permanently vegetated. Grassed waterways shall be seeded with the following permanent seed mixture: 50% red fescue, 45% perennial ryegrass and 5% white clover, broadcast at 80 kg/ha. Fertilizer to be 7-7-7 applied at 80 kg/ha.

Provide temporary cover for late fall planting by adding an additional 10 kg/ha of rye or winter wheat.

Overflow swales may be cropped using conventional farming practice.

400.33 BUFFER STRIPS

Open drains shall include minimum 3m wide, permanently vegetated buffer strips on each side of the drain. Catchbasins shall include a minimum 1m radius, vegetated buffer strip around the catchbasin.

Cultivation of buffer strips using conventional farming practice may be undertaken, provided sediment transport into the drain is minimized.

400.34 MAINTENANCE CORRIDOR

The maintenance corridor along the route of the drain, as established in the report, shall be kept free of obstructions, ornamental vegetation and structures. When future maintenance is undertaken, the cost of removing such items from the corridor shall be assessed to the landowner.

400.35 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor or any landowner shall not spill or cause to flow any polluted material into the drain that is not acceptable to the MECP. The local MECP office and the Engineer shall be contacted if a polluted material enters the drain. The Contractor shall refill or repair equipment away from open water. If the Contractor causes a spill, the Contractor is responsible to clean-up the spill in accordance with MECP clean-up protocols.

400.36 SPECIES AT RISK

If a Contractor encounters a known Species At Risk designated by the MECP, MNRF or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines for work around the species.

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410.1 DESCRIPTION

Work under this item shall include the supply of labour, equipment and materials required for: channel excavation to the cross-section specified, leveling or disposal of all excavated material (spoil) as directed, reconstruction of all intercepted drains as required and any other items related to open drain construction as required by the Schedule of Tender Prices, Special Provisions or the Drawings.

410.2 MATERIALS

Refer to Section 400, Standard Specifications for Drain Construction for any materials required for open drain construction.

410.3 CONSTRUCTION**410.3.1 Excavation**

The bottom width and the side slopes of the ditch shall be as shown on the profile drawing. If the channel cross-section is not specified in the Special Provisions it shall be a 1m bottom width with 1.5m horizontal to 1m vertical (1.5:1) bank slope. At locations along the drain where the specified side slopes change there shall be a transitional length of not less than 5m between the varying side slopes. At locations along the drain where the specified bottom width changes there shall be a transitional length of not less than 5m. In all cases there shall be a smooth transition between changes in any part of the channel cross-section. Where the bottom width of the existing ditch matches the specified bottom width, ditch excavation shall be completed without disturbing existing banks.

410.3.2 Low Flow Channels

Unless specified otherwise in the Special Provisions, all intermittent open drains with a bottom width greater than 1.8m and a grade less than 0.07%, shall have a low flow channel. The bottom of the low flow channel shall be the grade shown on the profiles.

The low flow channel shall have a U-shaped cross-section with an average top width of 0.5m and a minimum depth of 0.3m. The low flow channel will not be seeded and may meander along the main channel bottom provided it remains at least .3m from the toe of main channel bank slope.

410.3.3 Line

The drain shall be constructed according to the alignment shown on the drawings or shall follow the course of the existing ditch. All bends shall have a minimum inside radius of 2m. There shall be a smooth transition between changes in the channel alignment. The Contractor shall contact the Engineer before removing any bends or irregularities in an existing ditch.

410.3.4 Grade Control

The profile shows the grade line for the bottom of the ditch. Cuts may be shown on the profile from the existing top of bank and/or from the existing ditch bottom to the new ditch bottom. These cuts are shown for the convenience of the Contractor and are not recommended for quantity estimate or grade control. Accurate grade control must be maintained by the Contractor during ditch excavation. The ditch bottom elevation should be checked every 50 metres and compared to the elevation on the profile.

Benchmarks are identified on the Contract Drawings. The Engineer will confirm all benchmark elevations prior to construction.

410.3.5 Variation from Design Grade

A variation of greater than 25mm above the design grade line may require re-excavation. Excavation below design grade up to 150mm is recommended so that sediment accumulation during or following excavation will not place the ditch bottom above the design grade at completion. Under some circumstances the Engineer may direct that over excavation greater than 200mm will have to be backfilled. No additional payment will be made if backfilling is required to remedy over excavation.

410.3.6 Excavated Material

Excavated material (spoil) shall be deposited on either or both sides of the drain within the specified working area as directed in the Special Provisions. The Contractor shall verify the location for the spoil with each landowner before commencing work on their property. If not specified, spoil shall be placed on the low side of the ditch or opposite trees and fences. The spoil shall be placed a minimum 1m from the top of the bank. No excavated material shall be placed in tributary drains, depressions, or low areas such that water is trapped behind the spoil bank. Swales shall be provided through the leveled or piled spoil at approximately 60m intervals to prevent trapping water behind the spoil bank.

The excavated material shall be placed and leveled to a maximum depth of 250mm; unless otherwise instructed. If excavating more than 450mm topsoil shall be stripped, stockpiled separately and replaced over the leveled spoil, unless stated otherwise in the Special Provisions. The edge of the spoil bank furthest from the ditch shall be feathered down to existing ground. The edge of the spoil bank nearest the ditch shall have a maximum slope of 2:1. The material shall be leveled such that it may be cultivated with conventional equipment without causing undue hardship on farm machinery.

Wherever clearing is necessary prior to leveling, the Contractor shall remove all stumps and roots from the working area. No excavated material shall cover any logs, brush or rubbish of any kind. Large stones in the leveled spoil that are greater than 300mm in diameter shall be moved to the edge of the spoil bank nearest to the ditch but in general no closer than 1m to the top of bank.

Lateral channels that outlet into the drain shall be tapered over a distance of 10m to match the grade of drain excavation. No additional payment will be made for this work.

Where the elevation difference between the lateral channel and the drain is greater than 450mm, a rock chute or similar bank protection approved by the Engineer shall be provided. Additional payment may be allowed for this work.

Where it is specified to straighten any bends or irregularities in the alignment of the ditch or to relocate any portion of an existing ditch, the excavation from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and old ditch, no additional payment will be allowed for backfilling the existing ditch.

The Contractor shall contact the Engineer if a landowner indicates in writing that spoil on the owner's property does not need to be leveled. The Engineer may release the Contractor from the obligation to level the spoil and the Engineer shall determine the credit to be applied to the Contractor's payment. No additional compensation is provided to the owner if the spoil is not leveled.

The Engineer may require the Contractor to obtain written statements from any or all of the landowners affected by the leveling of the spoil. Final determination on whether or not the leveling of spoil meets the specification shall be made by the Engineer.

410.3.7 Excavation at Existing Bridge and Culvert Sites

The Contractor shall excavate the drain to the specified depth under all bridges and to the full width of the structure unless specified otherwise in the Special Provisions. All necessary care and precautions shall be taken to protect permanent structures. Temporary bridges may be removed and left on the bank of the drain. In cases where the design grade line falls below the top of footings, the Contractor shall take care to not over-excavate below the grade line. The Contractor shall notify the Engineer if excavation of the channel exposes the footings of the bridge or culvert, so the Engineer can make an evaluation.

The Contractor shall clean through all pipe culverts to the grade line and width specified on the profile. The Contractor shall immediately contact the Engineer after a culvert cleanout if it is found that the culvert bottom is above the grade line or where the structural integrity of the culvert is questionable.

Material resulting from cleanout through bridges or culverts shall be levelled on the adjacent private lands or hauled offsite at the expense of the bridge/culvert owner.

410.3.8 Bridges and Culverts

The size and material for any new ditch crossings shall be as outlined in the Special Provisions.

For culvert installation instructions, refer to the General Specifications for Drain Construction and the Drawings.

Any crossings assembled on-site shall be assembled in accordance with the manufacturer's specifications.

If directed on the drawings that the existing crossing is to be salvaged for the owner, the Contractor shall carefully remove the existing crossing and place it beside the ditch or haul to a location as specified by the owner. If the existing crossing is not to be saved then the Contractor shall remove and dispose of the existing crossing. Disposal by burying on-site must be approved by the Engineer and the owner.

All new pipe crossings shall be installed at the invert elevations as specified on the Drawings, usually a minimum of 50mm below design grade. If the ditch is over excavated greater than 200mm below design grade the Contractor shall confirm with the Engineer the elevations for installation of the new pipe crossing.

For backfill and surface restoration, refer to the General Specifications for Drain Construction and the Drawings.

Installation of private crossings during construction must be approved by the Engineer.

410.3.9 Obstructions

All trees, brush, fallen timber and debris shall be removed from the ditch cross-section and as required for spreading of the spoil. The roots shall be left in the banks if no bank excavation is required as part of the new channel excavation. In wooded or heavily overgrown areas all cleared material may be pushed into piles or rows along the edge of the cleared path and away from leveled spoil. All dead trees along either side of the drain that may impede the performance of the drain if allowed to remain and fall into the ditch, shall be removed and put in piles, unless directed otherwise by the Engineer.

410.3.10 Tile Outlets

The location of all existing tile outlets may not be shown on the profile for the drain. The Contractor shall contact each owner and ensure that all tile outlets are marked prior to commencing excavation on the owner's property. If a marked tile outlet or the tile upstream is damaged due to construction, it shall be replaced at the Contractor's expense. Additional payment will be allowed for the repair or replacement of any unmarked tile outlets encountered during excavation. In all cases, if an existing tile outlet requires replacement the Contractor shall confirm the replacement tile outlet with the Engineer. Where riprap protection exists at any existing tile outlet such protection shall be removed and replaced as necessary to protect the outlet after reconstruction of the channel.

If any tile outlet becomes plugged as a result of construction, the Contractor shall remove the obstruction.

410.3.11 Completion

At the time of final inspection, all work in the contract shall have the full dimensions and cross-sections specified.

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420 STANDARD SPECIFICATIONS FOR TILE DRAINS**420.1 DESCRIPTION**

Work under this specification will consist of supplying, hauling, laying and backfilling subsurface drainage conduit with the conduit materials as described on the Drawings and in the location, depth and invert grade as shown on the Drawings. In this specification the word "tile" will apply to all described conduit materials. Lengths are in millimeters (mm) and meters (m).

The work shall include the supplying of all labour, tools, equipment and extra materials required for the installation of the tile; the excavation and backfilling of the trenches; the hauling, handling, placing and compaction of the excavated material for backfill, the loading, hauling, handling and disposal of surplus excavation material; the removal and replacing of topsoil and sod where required by the Engineer.

All existing laterals crossed by the new line shall be reconnected in an approved manner. Either special manufactured connections shall be used or another method of sealing connections as approved by the Engineer. The Contractor shall also construct catchbasins, junction boxes and other structures where directed by the Engineer.

Except where complete removal of an existing pipe is required by new construction, existing pipes to be abandoned shall be sealed with a concrete or mortar plug with a minimum length of 300mm to the satisfaction of the Engineer.

Sections 6 and 7 of the current version of the *Drainage Guide for Ontario*, OMAFRA Publication 29 shall provide a general guide to all methods and materials to be used in the construction of tile drains except where superseded by this Contract.

The licensing requirements of the *Agricultural Tile Drainage Installation Act, 1990* will not be applicable to this Contract unless specified otherwise by this Contract.

420.2 MATERIALS

Refer to Section 400, Standard Specifications for Drain Construction for any materials required for tile drain construction.

420.3 CONSTRUCTION**420.3.1 Outlet**

A tile drain outlet into a ditch or creek shall be protected using a 6m length of rigid pipe with a hinged grate for rodent protection. Maximum spacing between bars on the rodent grate shall be 50mm. Material for rigid pipe will be specified in the Special Provisions, plastic pipe is preferred. The joint between the rigid pipe and the tile drain shall be wrapped with filter fabric. All outlets will be protected with rock riprap to protect the bank cut and as a splash apron. In some locations riprap may also be required on the bank opposite the outlet. The quantity of riprap required will be specified in the Special Provisions. A marker stake as approved by the Engineer shall be placed at each tile outlet.

420.3.2 Line

The Engineer will designate the general location of the new drain. A landowner may indicate a revised location for the drain which must be approved by the Engineer. Where a change in alignment is required that is not accommodated in a catchbasin, junction box or similar structure the alignment change shall run on a curve with a radius not less than the minimum installation radius specified for the tile material.

The Contractor shall exercise care to not disturb any existing tile drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where an existing tile is disturbed or damaged the Contractor shall perform the necessary correction or repair with no additional compensation.

NOTE: It is the Contractor's responsibility to ascertain the location of, and to contact the owners of all utility lines, pipes and cables in the vicinity of drain excavations. The Contractor shall be completely responsible for all damages incurred.

420.3.3 Grade Control

Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times during tile installation. The tile invert elevation should be checked every 50m and compared to the elevation on the profile.

Benchmarks are identified on the Contract Drawings. The Engineer will confirm all benchmark elevations prior to construction.

420.3.4 Variation from Design Grade

No reverse grade will be allowed. A small variation in grade can be tolerated where the actual capacity of the drain exceeds the required capacity. The constructed grade should be such that the drain will provide the capacity required for the drainage area. Constructed grade should not deviate from design grade by more than 10% of the internal diameter for more than 25m. Grade corrections shall be made gradually over a distance not less than 10m.

420.3.5 Installation

At each work stoppage, the exposed end of the tile shall be covered by a tight fitting board or metal plate. No installed tile shall be left exposed overnight. Any tile damaged or plugged during construction shall be replaced or repaired at the Contractor's expense.

Topsoil over the trench shall be stripped, stockpiled separately and replaced after the trench is backfilled. Where installation is across a residential lawn, existing sod over the trench shall be cut, lifted and replaced in a workmanlike manner or new sod laid to match pre-construction conditions.

420.3.5.1 *Installation of Concrete Tile*

Concrete tile shall be installed by a wheel trencher unless an alternate method of construction is noted on the Drawings.

Digging of the trench shall start at the outlet end and proceed upstream. The location and grade shall be as shown on Drawings but shall be liable to adjustment or change by the Engineer on site with no additional payment allowed except where the change involves increased depth of cut beyond the limitation of the wheel trencher in use at the time of the change. The trench width measured at the top of the tile should be at least 150mm greater than the tile diameter.

The bottom of the trench is to be cut accurately to grade and shaped so that the tile will be embedded in undisturbed soil or in a compacted bed at least for 10% of its overall height. Where hard shale, boulders or other unsuitable bedding material is encountered, the trench shall be excavated to 75mm below grade and backfilled with granular material compacted to a shaped, firm foundation. If the trench is overcut below the proposed grade, it is to be backfilled with granular material to the correct grade and compacted to a shaped, firm foundation.

Where the depth for the tile installation exceeds the depth capacity of the wheel trencher the Contractor shall excavate a trench of sufficient depth so that the wheel trencher can install the tile at the correct depth

and grade. The tender price shall include the cost of the additional excavation and backfilling and stripping and replacing topsoil over the trench.

The inside of the tile is to be kept clean during installation. All soil and debris should be removed before the next tile is laid. Maximum spacing at joints between tiles should be about 3mm. Directional changes can be made without fittings or structures provided the centre-line radius of the bend is not less than 15m radius. The tiles are to be beveled, if necessary, to ensure close joints on all bends.

All tile joints and connections with other pipe materials are to be fully and tightly wrapped with a minimum 300mm width of geotextile drain wrap. A 150mm overlap on top is required. No additional payment will be made for joint wrapping.

420.3.5.2 *Installation of Corrugated Plastic Tubing*

Corrugated plastic tubing shall be installed by a drainage plow or wheel trencher unless an alternate method of construction is specified on the Drawings. For other installation methods, proper bedding and backfill is required to maintain the structural integrity of the plastic tubing so that surface and earth loads do not deflect the tubing by more than 20% of its nominal diameter.

For all installation methods:

- the plastic tubing should not be stretched by more than 7% of its normal length
- protect tubing from floating off grade when installing in saturated soil conditions
- directional changes can be made without fittings provided the centre-line radius of the bend is not less than five times the tubing diameter

Drainage plow equipment should construct a smooth bottomed opening in the soil and maintain the opening until the tubing is properly installed. The size of the opening in the soil should conform closely to the outside diameter of the tubing.

420.3.5.3 *Installation of Concrete Sewer Pipe or Plastic Pipe*

The Contractor may install pipe using a wheel trencher. For concrete sewer pipe, the bells must be recessed.

The Contractor may install pipe using an excavator by shaping the bottom of the trench to receive and support the pipe over 10% of its diameter if the trench is backfilled with native material. Shaping the trench bottom is not required where 150mm of granular bedding is placed to the satisfaction of the engineer.

420.3.6 Backfilling

All tile should be blinded by the end of the day's work to protect and hold them in place against disturbances. After tile is inspected, it shall initially be backfilled with a minimum cover of 300mm.

For blinding and initial backfilling use clean native soil with no organic matter. Initial backfill shall be tamped around the pipe by backhoe bucket or similar if directed by the Engineer.

The tile shall be backfilled with native material such that there is a minimum cover of 600mm. In addition, a sufficient mound must be placed over the trench to ensure that no depression occurs after settling along the trench.

420.3.7 Tile Connections

All lateral drains encountered along the route of the new tile drain are to be connected to the new drain if the intercepted tile are clean and do not contain polluted water. Lateral drains that are full of sediments or contain polluted waters will be addressed by the Engineer at the time of construction. All lateral drains are to be connected to the new tile using a pipe material and size that will provide the same flow capacity as the existing lateral drain unless a different connection is described in the Special Provisions. Corrugated plastic tubing can be used for all tile connections. Tubing can be solid or perforated, filter sock is not required.

Contractor is responsible for installation and backfilling in a manner than maintains the structural integrity of the connection. Manufactured fittings should be used to ensure tight connections. Where an opening must be made in the new tile drain for a connection, the opening shall be field cut or cored. After the opening is cut in the new tile any gaps or voids around the connection shall be sealed with mortar, low-expanding spray foam or geotextile. Lateral tubing shall not protrude more than 25mm beyond the inside wall of the new tile drain. The Contractor shall ensure than any material used to seal the connection does not protrude beyond the inside wall of the new tile drain.

All connections that are described in the Special Provisions are considered to be part of the original Contract price. For all other connections the Contractor will be paid in accordance with the price established in the Schedule of Tender Prices. The Contractor must list all connections on the Lateral Connection Summary sheet, if included in the Special Provisions, in order to qualify for payment. The Lateral Connection Summary sheet describes all tile encountered based on location (station), side of trench, size and type of tile and approximate length and type of material used for the connection.

420.3.8 Stones and Rock

The Contractor shall immediately contact the Engineer if bedrock or stones of sufficient size and number are encountered such that installation by wheel trencher cannot continue. The Engineer may direct the Contractor to use some other method of excavation to install the tile. The basis of payment for such extra work shall be determined by the Engineer. Stones greater than 300mm in diameter that are removed during excavation shall be disposed of by the Contractor at an offsite location. No additional payment for excavating or hauling these stones will be provided.

420.3.9 Brush, Trees and Debris

Unless stated otherwise in the Special Provisions, the following requirements shall apply for installation of a tile drain in a wooded area. The Contractor will clear and grub a minimum corridor width of 30m centered on the tile drain alignment. The resulting debris shall be placed in a windrow along the edge of the working area. No additional payment will be made for such work.

420.3.10 Subsoil Instability

If poor subsoil conditions are encountered during tile installation by wheel trencher an attempt shall be made to install the tile with a continuous geotextile underlay in the trench bottom. The cost of the underlay, if approved by the Engineer, will be paid as an extra. If the continuous geotextile underlay is not sufficient then the tile will be installed by backhoe or excavator on a bedding of 19mm clear crushed stone (300mm depth) to achieve trench bottom stability for the new tile. If approved, the above work will be paid based on the unit price provided on the Form of Tender. The unit price shall include the cost to supply and place the stone. If more than 300mm depth of stone is required for bottom stability, additional payment will be allowed for the additional depth of stone. The additional quantity of stone shall be supported by weigh tickets and the suppliers invoice.

If poor subsoil conditions are encountered during tile installation by backhoe or excavator, the tile shall be installed on stone bedding as noted above. For this installation only the material cost of the stone will be paid as an extra. Supply of stone and cost to be supported by weigh tickets and supplier's invoice.

If the subsoil is a fine grained soil it may necessary to place the stone on a geotextile with the geotextile wrapped over the stone before laying the tile. Additional payment will be allowed to supply and install the geotextile.

420.3.11 Broken or Damaged Tile

The Contractor shall dispose of all damaged or broken tile and broken tile pieces off-site.

420.3.12 Excess Tile

All excess tile shall be removed from the job site.

420.3.13 Catchbasins**420.3.13.1 General**

All catchbasins shall have minimum inside dimensions matching the dimensions shown on the Drawings. Contractor is responsible for ordering catchbasins to match the inlet and outlet connections and top elevations required by the Special Provisions and the Drawings.

420.3.13.2 Materials

Requirements in this section apply to catchbasins in non-travelled locations. Where catchbasins are proposed for travelled locations, refer to the Special Provisions and the Drawings for applicable OPSD information.

Precast concrete catchbasins shall be manufactured by as Coldstream Concrete or approved equal. Minimum wall thickness for catchbasins without reinforcement is 150mm and with reinforcement 100mm. The joints between precast catchbasin sections shall be protected with geotextile to prevent soil material from entering into the catchbasin. Joint protection using mortar or water tight barrier is also acceptable. Grates are to be birdcage grates as manufactured by Coldstream Concrete or approved equal unless specified otherwise on the Drawings. All grates to be secured with corrosion resistant hardware.

HDPE catchbasins shall be as fabricated by ADS, Armtec, Hancor or approved equal. Steel catchbasins shall be the Heavy Duty Steel Catch Basin as manufactured by AgriDrain or approved equal. PVC catchbasins shall be Nyloplast as manufactured by ADS or approved equal. HDPE, steel and PVC catchbasins shall be supplied with integral stubouts fabricated by the manufacturer and sized according to the pipe connections shown on the Drawings. Grates for HDPE, steel or PVC catchbasins shall be in accordance with the Special Provisions and manufacturer recommendations.

Marker stakes as supplied by Coldstream Concrete or equal are to be placed beside each catchbasin unless specified otherwise on the Drawings.

420.3.13.3 Installation

All tile or pipe connected to concrete catchbasins shall be mortared or secured in place so that no gaps remain at the connection. Mortar is to be applied on both the inside and outside wall surfaces.

Backfill around all new catchbasins is recommended to be 19mm clear crushed stone to avoid future settlements. The Contractor shall be responsible for backfilling all settlement areas around catchbasins during the contract warranty period. No additional payment will be provided for adding backfill to settlement areas around catchbasins.

All catchbasin sumps to be fully cleaned by the Contractor after completion of drain installation and backfilling.

420.3.14 Junction Boxes

Junction boxes shall be precast concrete to the same specification as above for catchbasins except that the junction box shall have a solid lid. The lid shall be a minimum of 125mm thick with wire mesh reinforcement and 2 lifting handles. The top of the junction box should have a minimum ground cover of 450mm.

STANDARD SPECIFICATIONS

for

JACKING AND BORING**TABLE OF CONTENTS**

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430 STANDARD SPECIFICATIONS FOR JACKING AND BORING**430.1 DESCRIPTION**

This specification covers the installation of pipes by jacking and boring. The Contractor shall be fully responsible for complying with any further specifications of the authority having jurisdiction over the lands or roads involved with the crossing.

430.2 MATERIALS

Unless specified elsewhere the pipe shall be new smooth wall welded pipe manufactured from steel according to ASTM A252, Grade 2 Steel and have a minimum wall thickness of 6.35mm.

Pipe ends shall be bevel edged on the outside to an angle of 30 degrees for butt weld splicing.

The following information shall be clearly marked on the inside of each section of pipe:

- 1) The name or trademark of the manufacturer.
- 2) The heat number.

430.3 PRE-CONSTRUCTION

The Contractor shall not commence work until required permits have been obtained. The Engineer may apply for required permits prior to Construction.

The Contractor shall give the authority responsible for the lands or roads being crossed at least 72 hours' notice before commencing any work on the crossing.

The authority having jurisdiction over the lands or roads involved with the crossing will supply no labour, equipment or materials for the construction of the crossing unless otherwise stated.

430.4 CONSTRUCTION**430.4.1 Traffic Control**

No construction equipment is to be operated on the shoulders or asphalt of the road without the prior approval of the road authority.

Work within public road allowances shall be done in accordance with the Ontario Traffic Manual Book 7, latest edition. Any required traffic control measures shall be the responsibility of the Contractor and the cost of traffic control is to be included in the tender price for boring and jacking.

430.4.2 Installation

The pipe or casing shall be installed by means of continuous flight augering inside the casing and simultaneous jacking to advance the casing immediately behind the tip of the auger.

The pipe shall be of sufficient length so that no part of any excavation shall be closer than 3m to the edge of pavement, shoulder or ballast of the embankment being crossed. Excavation slopes shall be no less than 1:1.

Upon completion, there shall be a continuous length of welded steel casing across the full width of the right-of-way. Portions of the casing may be installed by open cut where approved by the Engineer.

Pipe when installed shall match the invert elevations and grade specified. Installed pipe not matching the grade and invert elevations specified may be rejected by the Engineer in whole or in part. Any work required to correct an unacceptable variation in grade or invert elevations shall be the responsibility of the Contractor.

430.4.3 Bore Pits

The location of the bore pit shall be as specified in the special provisions and if not specified shall be confirmed with the Engineer prior to commencing construction.

The bore pits shall be excavated so that the top edge of the pit shall not be closer than 3m to the edge of pavement, shoulder or ballast of the embankment being crossed. The bank slope of the pit shall not be steeper than 1:1. Shoring, sheeting, or other trench support if required shall be in accordance with the applicable and most recent Provincial Statutes. No additional payment will be allowed for trench wall support within the bore pit unless approved by the Engineer due to unstable subsoil.

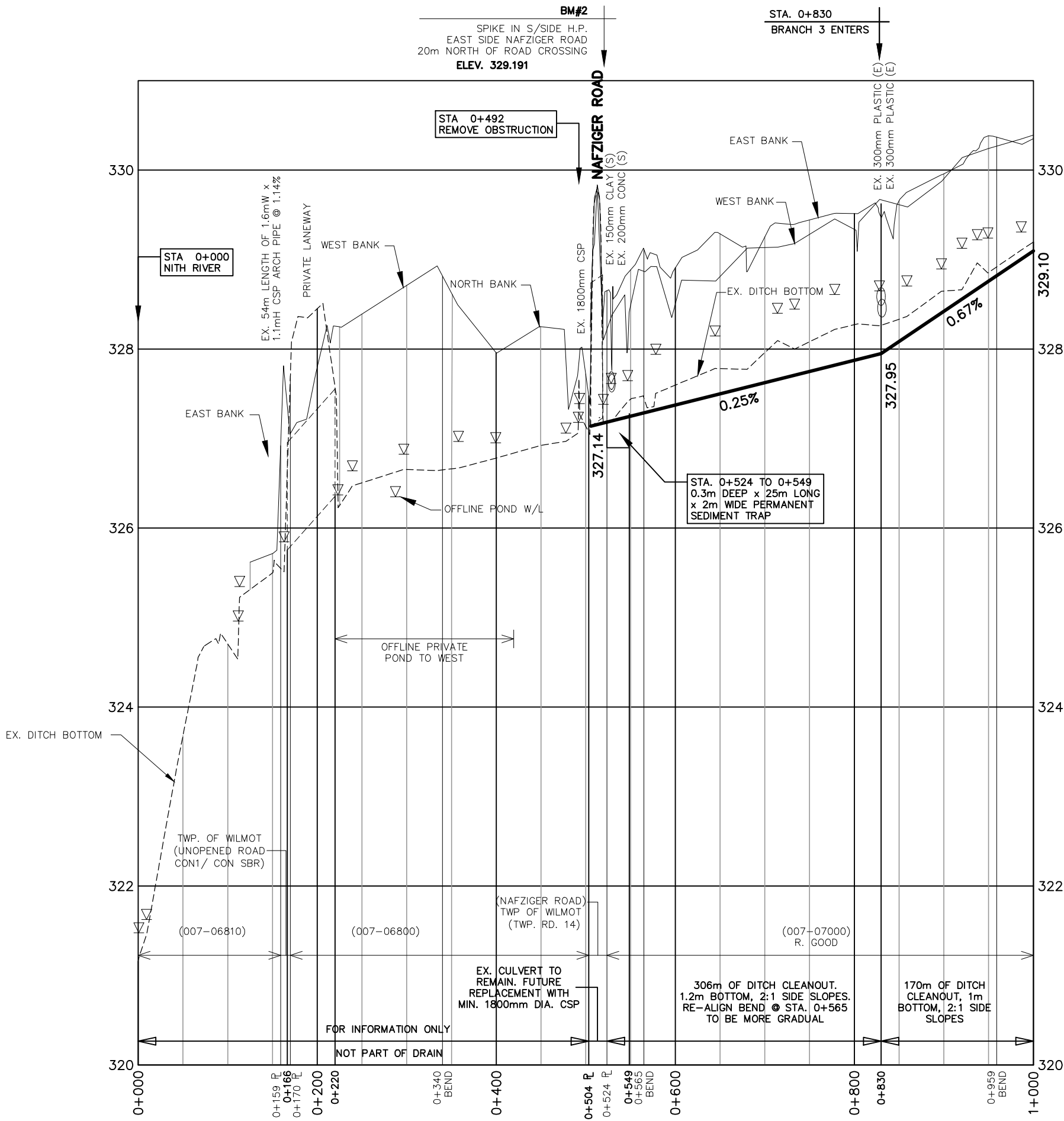
The Contractor is to minimize the duration that bore pits are left open. If possible, casing installation should be scheduled so that pit excavation, placement of pipe and backfilling takes place in one working day. If a bore pit is left unattended, the pit shall be secured by the Contractor to the satisfaction of the Engineer. No additional payment will be made for securing the pit.

Dewatering of the bore pit is the responsibility of the Contractor and no additional payment will be made for dewatering. If unstable subsoil is encountered in the bottom of the pit, the Engineer shall be notified and a foundation of 19mm clear crushed stone (300mm minimum depth) may be approved to achieve pit bottom stability. If stone is approved by the Engineer, extra payment will be made for the material cost of the stone based on weigh tickets.

Any tile, catchbasin, junction box or any other structures, placed in the bore pit should be placed on a foundation of 19mm clear crushed stone (300mm minimum depth). The price for such structures shall include the cost of stone foundation.

430.4.4 Restoration

Prior to bore pit excavation, topsoil shall be separately stripped and saved for replacement on completion of the backfilling operation. If this is not possible or practical, the Contractor shall import and place a minimum of 150mm of good quality topsoil over all backfilled and disturbed areas. The finished work shall be left in a clean and orderly condition flush or slightly higher than the adjacent ground so that after settlement it will conform to the surrounding ground. Excess earth (if any) shall be disposed of as directed by the Engineer and no additional payment will be allotted for such work. Disturbed areas to be seeded after placement of topsoil in accordance with the specification for seeding.



SPECIAL PROVISIONS – CONSTRUCTION NOTES

MAIN DRAIN

(ROLL NO. 007–07068)

STA. 0+492 – REMOVE OBSTRUCTION FROM DITCH

NAFZIGER ROAD (TOWNSHIP OF WILMOT)

STA. 0+504 TO 0+524 – NO WORK REQUIRED. FUTURE CULVERT REPLACEMENT TO BE 1800mmØ CSP

R. GOOD (ROLL NO. 007–07000)

STA. 0+524 TO 0+549 – CONSTRUCT PERMANENT SEDIMENT TRAP, 0.3m DEEP x 25m LONG x 2m WIDE. LEVEL SPOIL IN LANDOWNER–APPROVED LOCATION. INCLUDES TEMPORARY HEAVY DUTY SILT FENCE AT D/S END.

STA. 0+524 TO 0+830 – CLEANOUT DITCH, 1.2m BOTTOM AND 2:1 SIDE SLOPES. RE–ALIGN APPROX. 50m OF DITCH NEAR BEND @ STA. 0+565 TO BE MORE GRADUAL. INCLUDES INCIDENTAL CLEARING. PILE DEBRIS IN LANDOWNER–APPROVED LOCATION, LEVEL SPOIL AND SEED BANKS.

STA. 0+830 TO 1+000 – DITCH BOTTOM CLEANOUT. 1m BOTTOM WIDTH AND 2:1 SIDE SLOPES. LEVEL SPOIL AND PILE DEBRIS IN LANDOWNER–APPROVED LOCATION

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

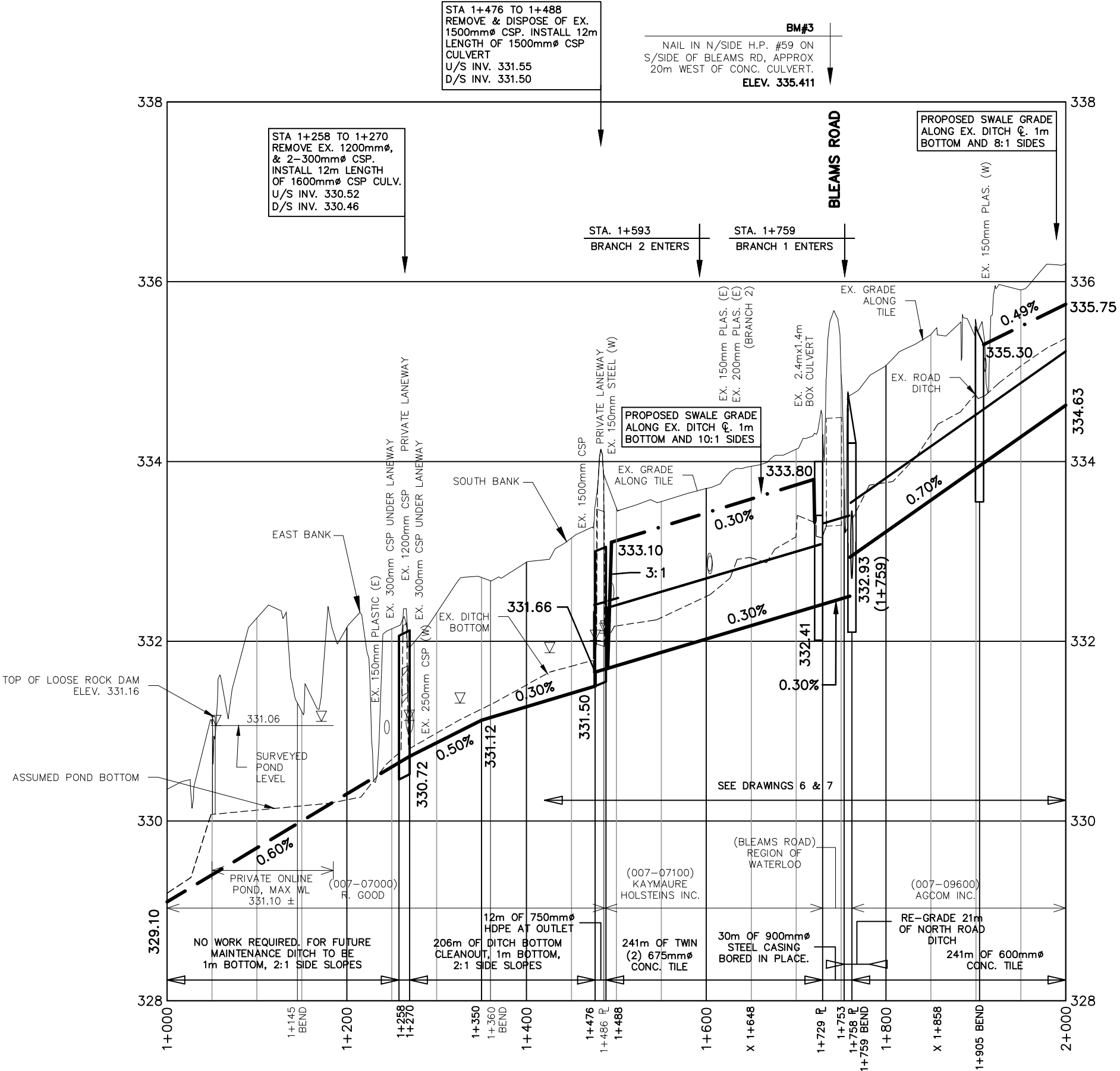
LEGEND

▽ – EXISTING WATER LEVEL SURVEYED JUNE 26, 2018

— PROPOSED GRADE

DESIGNED BY: J.E.M.		SCALE 50 100m (SCALE 1 : 5000) HORZ. 0 1m (SCALE 1 : 50) VERT. (ON 11"x17")
CHECKED BY: J.E.M.		
DRAWN BY: A.M.P.		
CHECKED BY: J.E.M.		

SNYDER DRAIN	
REGION OF WATERLOO TOWNSHIP OF WILMOT	
MAIN DRAIN PROFILE 1	SEPT. 22, 2021
K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY	REVISED:
	JOB NUMBER: 17–374
	DRAWING 2 OF 11



SPECIAL PROVISIONS – CONSTRUCTION NOTES

MAIN DRAIN

R. GOOD (ROLL NO. 007-07000)

STA. 1+000 TO 1+260 – NO WORK REQUIRED FOR DITCH OR PRIVATE ONLINE POND AND DAM. MAX POND WATER LEVEL TO BE 331.10 ±. IF DAM REMOVED, DITCH TO BE 1m BOTTOM WIDTH AND 2:1 SIDE SLOPES.

STA. 1+258 TO 1+270 – REMOVE EX. CULVERTS AND INSTALL 12m LENGTH OF 1600mmØ GALVANIZED CSP (125x25mm CORRUGATIONS, 2.0mm WALL THICKNESS) WITH 5m² RIPRAP ON GEOTEXTILE AT EACH END

STA. 1+269 TO 1+476 – DITCH BOTTOM CLEANOUT. 1m BOTTOM WIDTH AND 2:1 SIDE SLOPES. WORK AREA AND SPOIL LEVELING ON NORTH SIDE OF DRAIN. KEEP OWNER'S CEDAR TREES AN. PILE DEBRIS IN LANDOWNER-APPROVED LOCATION

STA. 1+476 TO 1+488 – SEE DRAWINGS 6 & 7

KAYMAURE HOLSTEINS INC. (ROLL NO 007-07100)

STA. 1+488 TO 1+729 – SEE DRAWINGS 6 & 7

BLEAMS ROAD (REGION OF WATERLOO)

STA. 1+729 TO 1+759 –SEE DRAWINGS 6 & 7

AGCOM INC. (ROLL NO. 007-09600)

STA. 1+759 TO 1+922 – SEE DRAWINGS 6 & 7

STA. 1+759 TO 2+252 – 493m OF 600mmØ CONC. TILE WITH JOINT WRAP

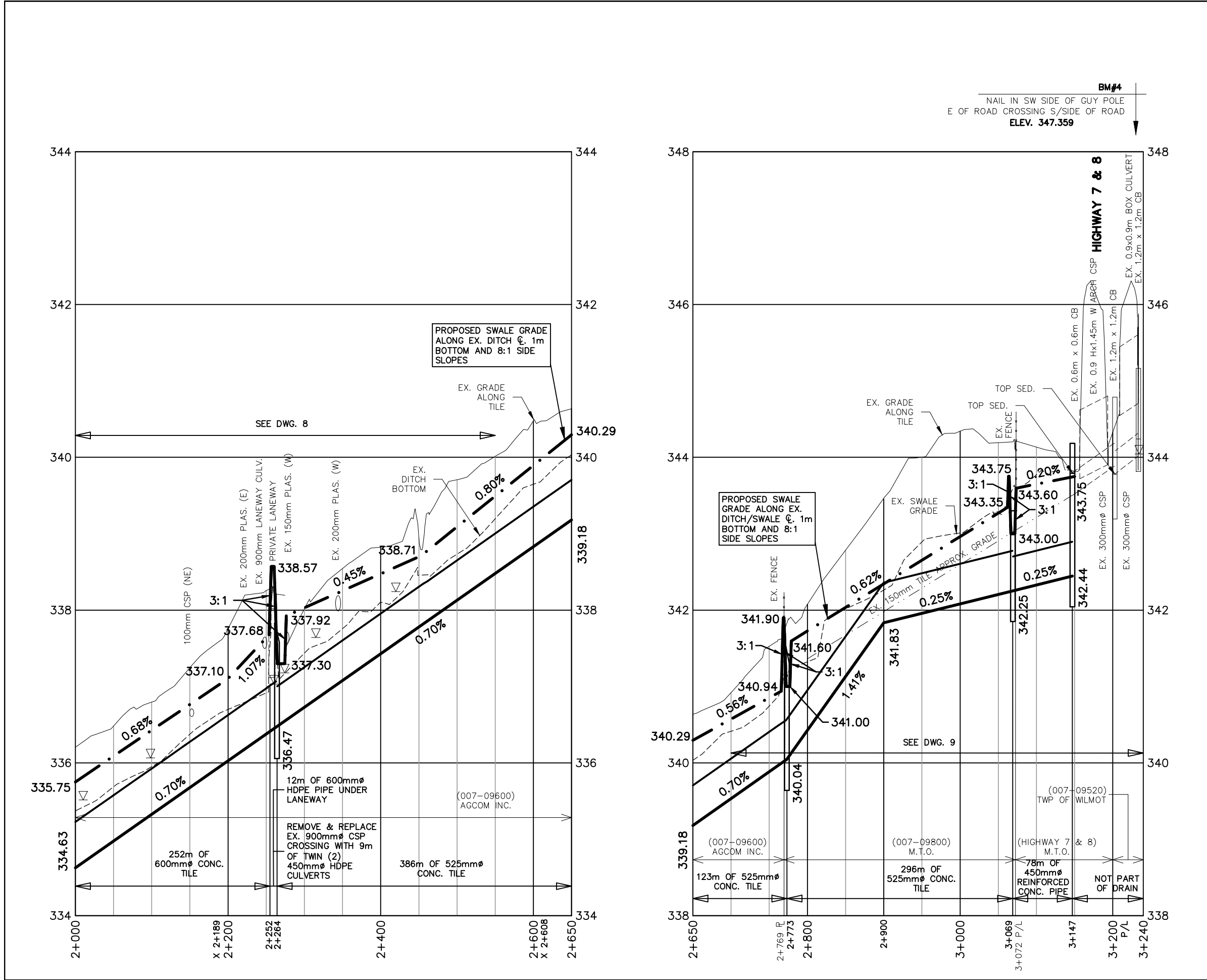
STA. 1+905 TO 2+254 – BACKFILL EXISTING DITCH AND GRADE OVERFLOW SWALE WITH 1m BOTTOM AND 8:1 SIDE SLOPES

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

- LEGEND**
- X — — EXISTING FENCE
 - ▽ — EXISTING WATER LEVEL SURVEYED JUNE 26, 2018
 - — PROPOSED GRADE
 - - - - - — GRADE FOR FUTURE MAINTENANCE
 - . - . - — GRADE FOR PROPOSED SWALE

DESIGNED BY: J.E.M.		SCALE 0 50 100m (SCALE 1 : 5000) HORZ.
CHECKED BY: J.E.M.		0 1m (SCALE 1 : 50) VERT.
DRAWN BY: A.M.P.		
CHECKED BY: J.E.M.		

SNYDER DRAIN	
REGION OF WATERLOO TOWNSHIP OF WILMOT	
MAIN DRAIN PROFILE 2	SEPT. 22, 2021
K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY	REVISED:
	JOB NUMBER: 17-374
	DRAWING 3 OF 11



SPECIAL PROVISIONS – CONSTRUCTION NOTES

MAIN DRAIN

AGCOM INC. (ROLL NO. 007-09600)

STA 2+000 TO 2+769 – SEE DWG'S. 8 & 9

M.T.O. (ROLL NO. 007-09800)

STA. 2+769 TO 3+072 – SEE DWG. 9

M.T.O. (HIGHWAY 7 & 8)

WORK ON HIGHWAY 7 & 8 RIGHT OF WAY SUBJECT TO M.T.O. DESIGN STANDARDS AND PROVISIONS OF ENCROACHMENT PERMIT.

STA. 3+072 TO 3+147 – SEE DWG. 9

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

LEGEND

- x — — EXISTING FENCE
- ▽ — EXISTING WATER LEVEL SURVEYED JUNE 26, 2018
- — PROPOSED GRADE
- . - — GRADE FOR PROPOSED SWALE

DESIGNED BY: J.E.M.		SCALE	
CHECKED BY: J.E.M.		0 50 100m	
DRAWN BY: A.M.P.		(SCALE 1 : 5000)	
CHECKED BY: J.E.M.		0 1m	
		(SCALE 1 : 50)	
		VERT.	
		(ON 11"x17")	

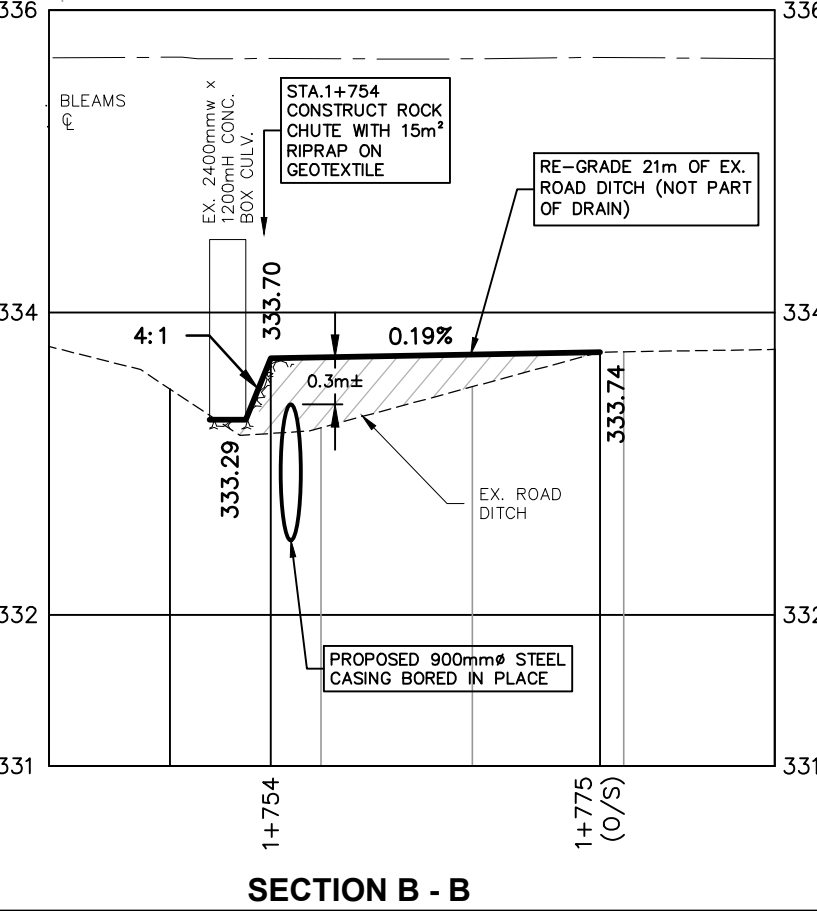
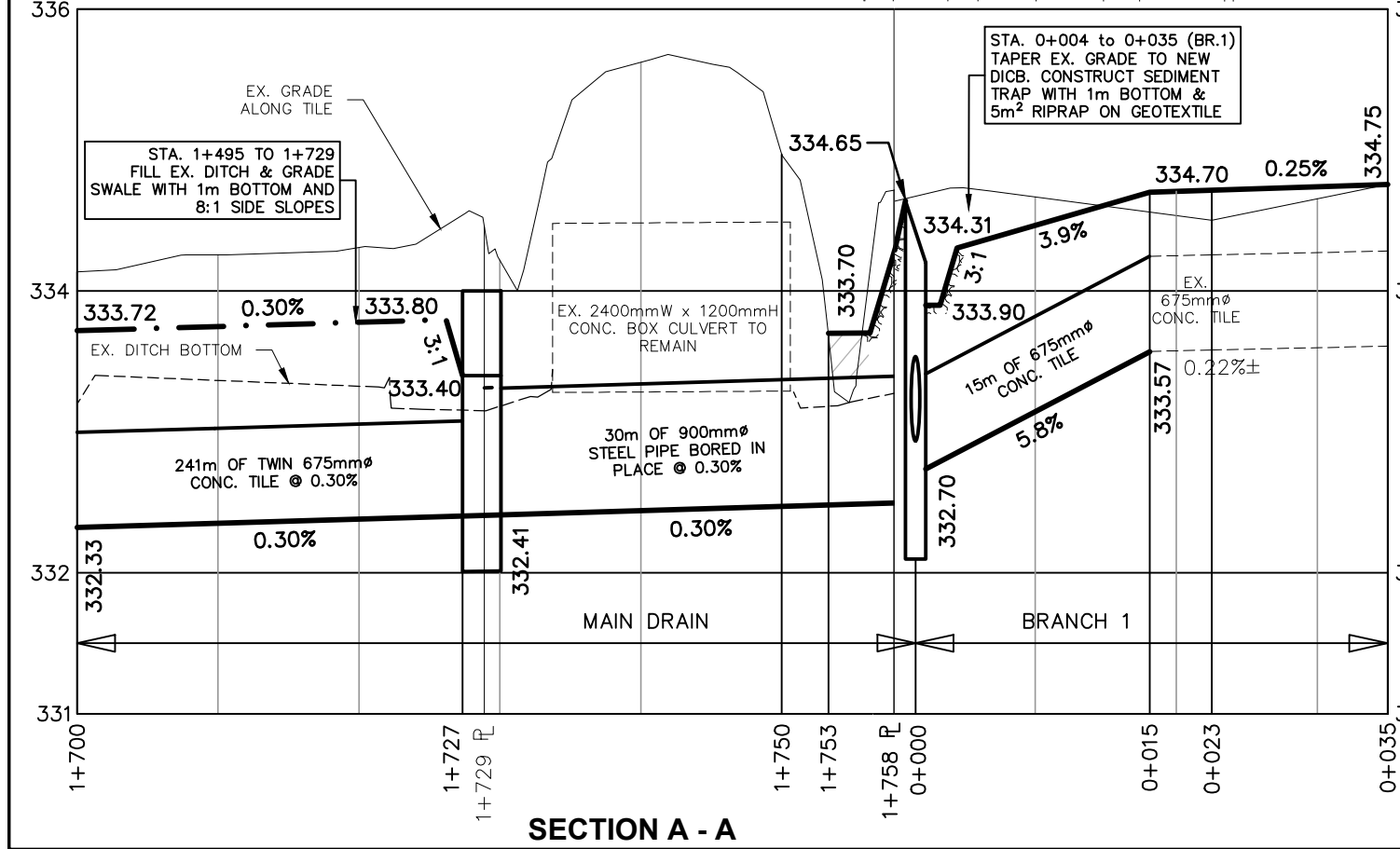
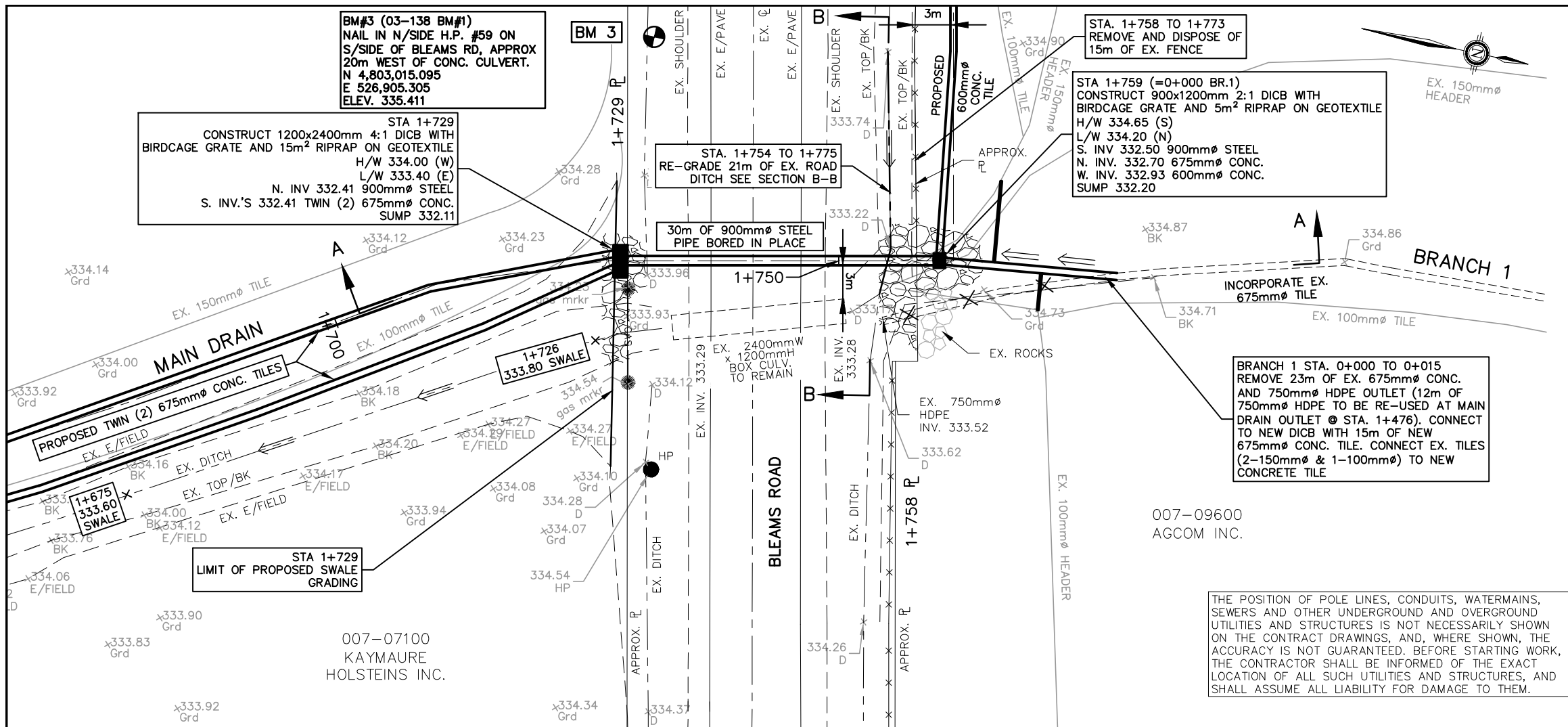
SNYDER DRAIN

REGION OF WATERLOO TOWNSHIP OF WILMOT

MAIN DRAIN PROFILE 3	SEPT. 22, 2021
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	K. SMART ASSOCIATES LIMITED	REVISED:
	CONSULTING ENGINEERS AND PLANNERS	JOB NUMBER: 17-374
	KITCHENER SUDBURY	DRAWING

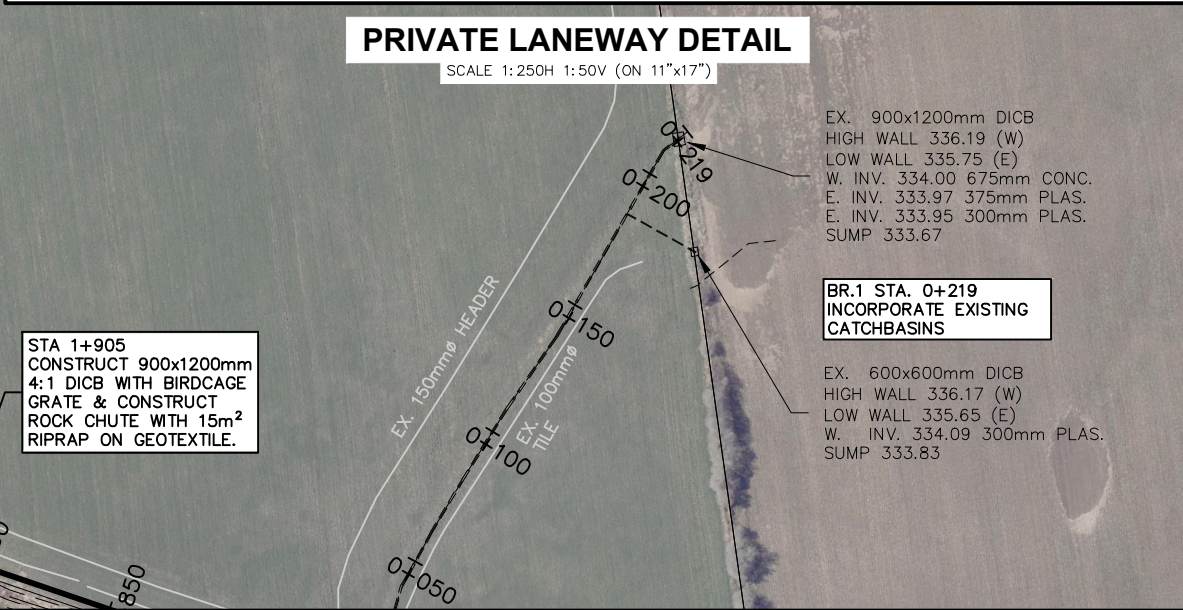
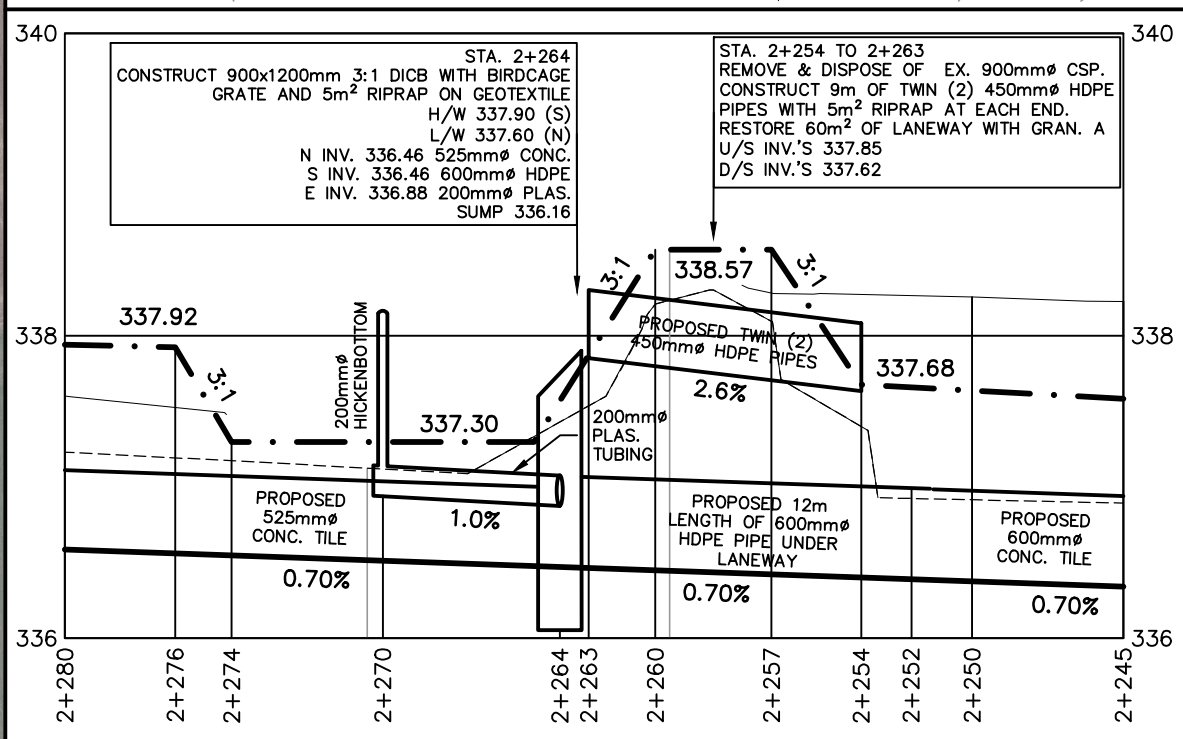
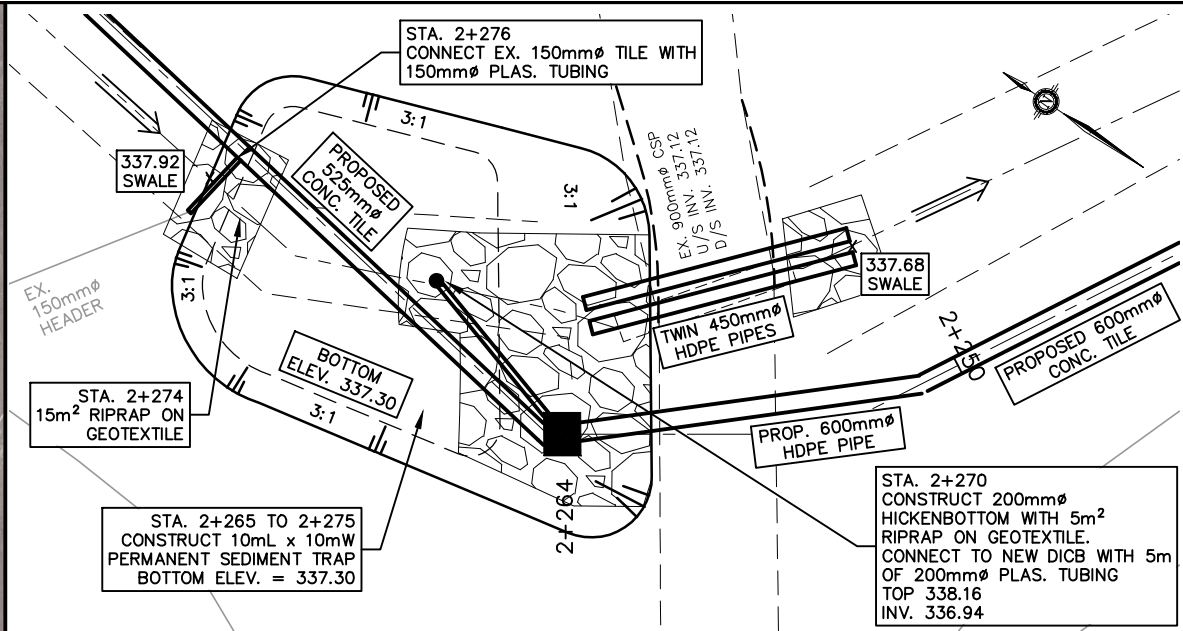
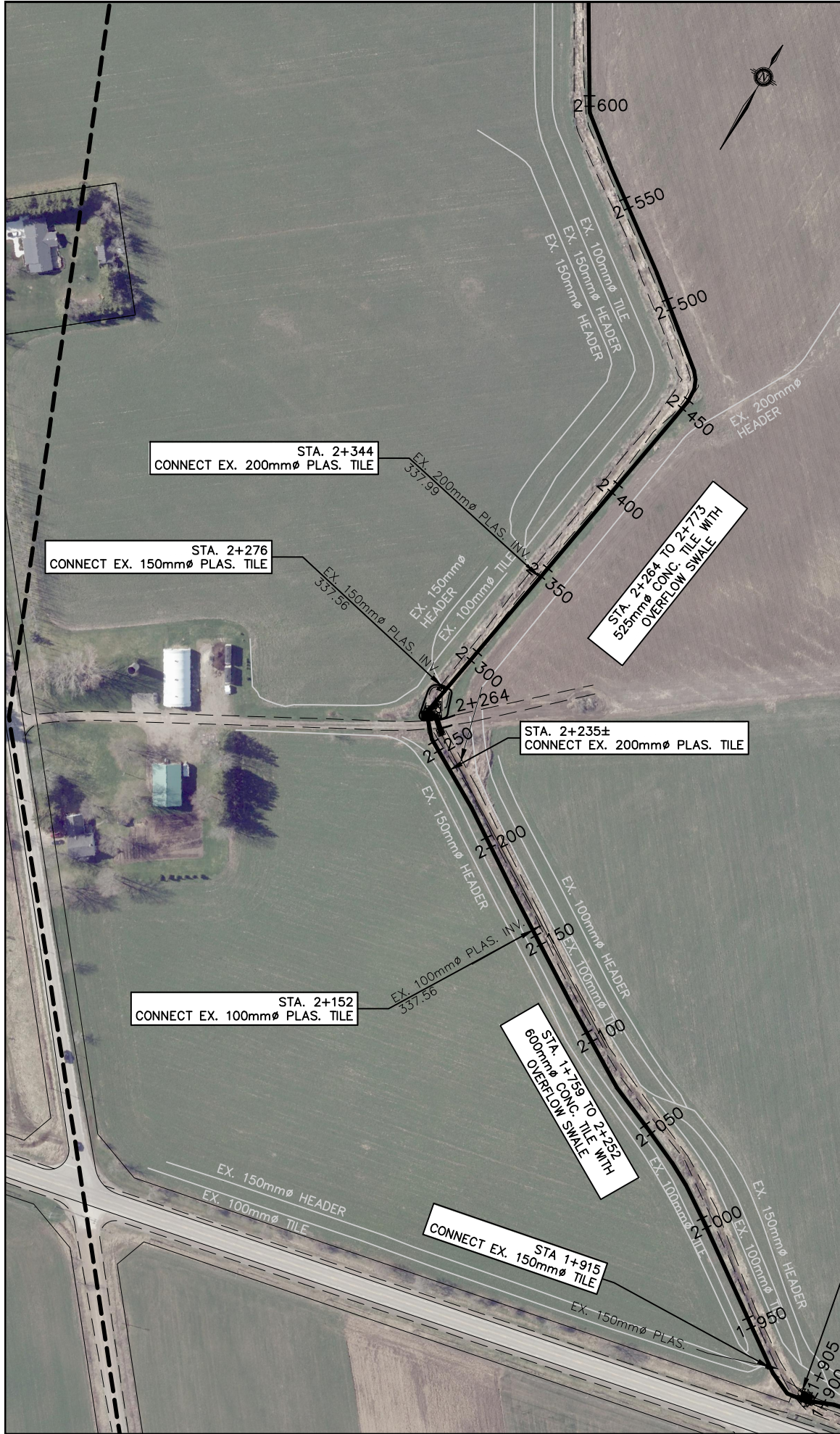
4 OF 11



- SPECIAL PROVISIONS – CONSTRUCTION NOTES
- MAIN DRAIN**
- KAYMAURE HOLSTEINS INC. (ROLL NO. 007-071000)
- STA. 1+488 TO 1+729 – BACKFILL EXISTING DITCH AND GRADE OVERFLOW SWALE WITH 1m BOTTOM AND 8:1 SIDE SLOPES
- STA. 1+488 TO 1+729 – 241m OF TWIN (2) 675mmØ CONCRETE TILES WITH JOINT WRAP
- STA. 1+729 – CONSTRUCT 1200x2400mm DICB WITH BIRDCAGE GRATE AND 5m² RIPRAP
- BLEAMS ROAD (REGION OF WATERLOO)**
- STA. 1+729 TO 1+759 – 30m OF 900mmØ STEEL PIPE (9.5mm WALL) UNDER BLEAMS ROAD BY JACKING AND BORING
- STA. 1+759 – CONSTRUCT 900x1200mm 2:1 DICB WITH BIRDCAGE GRATE AND 5m² RIPRAP
- STA. 1+755 TO 1+758 – CONSTRUCT ROCK CHUTE WITH 15m² RIPRAP ON GEOTEXTILE
- STA. 1+757 TO 1+778 – RE-GRADE 21m OF ROADSIDE DITCH ALONG NORTH SIDE OF BLEAMS ROAD WITH NATIVE MATERIAL. ENSURE POSITIVE DRAINAGE TO EX. BOX CULVERT
- AGCOM INC. (ROLL NO. 007-09600)
- STA. 1+759 TO 2+252 – 493m OF 600mmØ CONC. TILE WITH JOINT WRAP
- BRANCH 1**
- AGCOM INC. (ROLL NO. 007-09600) & 1210918 ONTARIO INC.
- STA. 0+000 TO 0+015 – REMOVE 23m OF EXISTING TILE AND HDPE PIPE AT BRANCH 1 OUTLET AND CONNECT TO NEW DICB WITH 15m OF 675mmØ CONC. TILE WITH JOINT WRAP. REMOVED 12m OF 750mmØ HDPE PIPE TO BE RE-USED AT MAIN DRAIN OUTLET AT STA. 1+476. CONNECT EX. TILES (2-150mmØ & 1-100mmØ) WITH 150mmØ & 100mmØ PLAS. TUBING
- STA. 0+002 TO 0+020 – TAPER EX. GRADE TO NEW DICB. CONSTRUCT SEDIMENT TRAP WITH 1m BOTTOM & 10m² RIPRAP ON GEOTEXTILE
- STA. 0+015 TO 0+219 – NO WORK REQUIRED. INCORPORATE 204m OF EXISTING 675mmØ TILE

- LEGEND**
- x — EXISTING FENCE
 - HP EXISTING HYDRO POLE
 - PROPOSED ROCK RIPRAP
 - 007-09600 ASSESSMENT ROLL NUMBER
 - 333.65 PROPOSED GRADE
 - PROPOSED GRADE (PROFILE)
 - . - GRADE FOR PROPOSED SWALE (PROFILE)

DESIGNED BY: J.E.M.		SCALE	
CHECKED BY: J.E.M.		0 5 10m	
DRAWN BY: A.M.P.		(1:500H ON 11"x17")	
CHECKED BY: J.E.M.		0 0.5 1m	
		(1:50V ON 11"x17")	
SNYDER DRAIN			
REGION OF WATERLOO		TOWNSHIP OF WILMOT	
DETAIL AT BLEAMS ROAD		SEPT. 22, 2021	
 K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY		REVISED:	
		JOB NUMBER: 17-374	
		DRAWING	
		7 OF 11	



SPECIAL PROVISIONS – CONSTRUCTION NOTES

MAIN DRAIN

BLEAMS ROAD (REGION OF WATERLOO)

SEE DRAWING'S 6 & 7

AGCOM INC. (ROLL NO. 007–09600)

STA. 1+759 TO 2+252 – 493m OF 600mmø CONC. TILE WITH JOINT WRAP

STA. 1+905 – CONSTRUCT 900x1200mm 4:1 DICB WITH BIRDCAGE GRATE. CONSTRUCT BANK PROTECTION AND ROCK CHUTE TO ROAD DITCH WITH 15m² RIPRAP ON GEOTEXTILE.

STA. 2+252 TO 2+264 – 12m OF 600mmø HDPE PIPE UNDER LANEWAY

STA. 2+255 TO 2+264 – REMOVE & DISPOSE OF EX. 900mmø CSP & CONCRETE BLOCK HEADWALL. DISPOSE OF CSP PIPE, PLACE CONCRETE BLOCKS IN LANDOWNER APPROVED LOCATION.

STA. 2+254 TO 2+263 – 9m OF TWIN (2) 450mmø HDPE PIPES WITH 5m² RIPRAP ON GEOTEXTILE AT EACH END. RESTORE 60m² OF LANEWAY WITH 150mm DEPTH OF GRANULAR "A".

STA. 2+264 – CONSTRUCT 3:1 900x1200mm DICB WITH BIRDCAGE GRATE AND 5m² RIPRAP ON GEOTEXTILE.

STA. 2+270 – CONSTRUCT 200mmø HICKENBOTTOM WITH 5m² RIPRAP ON GEOTEXTILE. CONNECT TO NEW DICB WITH 5m OF 200mmø PLAS. TUBING

STA. 2+265 TO 2+275 – CONSTRUCT PERMANENT SEDIMENT TRAP WITH 10mW x 10mL (APPROX.) BOTTOM AND 15m² RIPRAP ON GEOTEXTILE

STA. 2+264 TO 2+773 – 509m OF 525mmø CONC. TILE WITH JOINT WRAP

STA. 2+452 – CONSTRUCT 900x1200mm JB

STA. 2+276 TO 2+768 – BACKFILL EXISTING DITCH AND GRADE OVERFLOW SWALE WITH 1m BOTTOM AND 8:1 SIDE SLOPES

STA. 1+915 – CONNECT EX 150mmø TILE USING 150mmø PLAS. TUBING

STA. 2+152 – CONNECT EX. 100mmø TILE USING 100mmø PLAS. TUBING

STA. 2+235± – CONNECT EX. 200mmø TILE USING 200mmø PLAS. TUBING

STA. 2+276 – CONNECT EX. 150mmø TILE USING 150mmø PLAS. TUBING

STA. 2+344 – CONNECT EX. 200mmø TILE USING 200mmø PLAS. TUBING

BRANCH 1

AGCOM INC. (ROLL NO. 007–09600) & 1210918 ONTARIO INC. (ROLL NO. 007–09500)

STA. 0+219 – INCORPORATE EXISTING CATCHBASINS

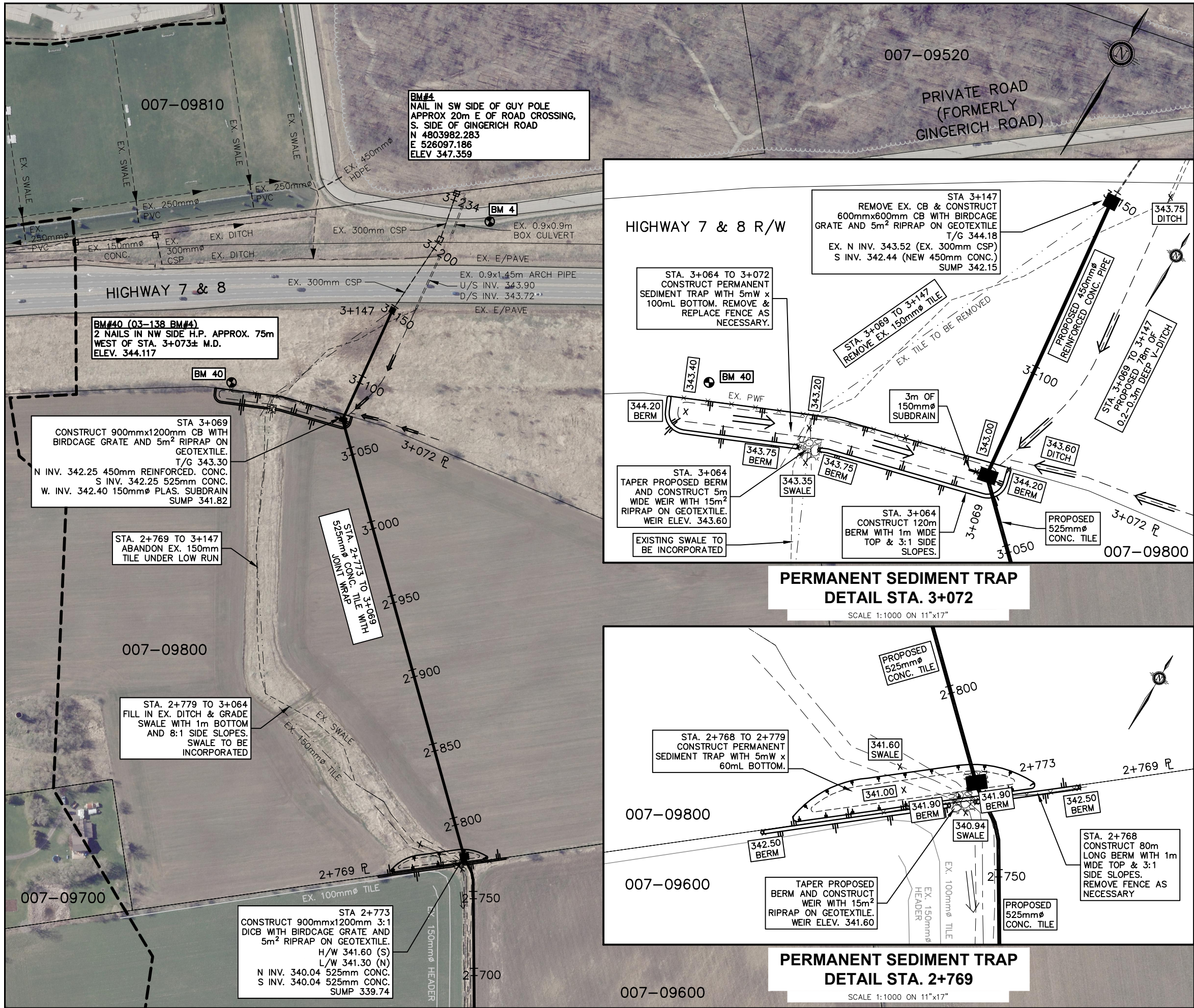
THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

LEGEND

- WATERSHED BOUNDARY
- EXISTING FENCE
- EXISTING TREELINE
- EXISTING CB
- PROPOSED CB

DESIGNED BY: J.E.M.		<p>SCALE</p> <p>0 25 50m</p> <p>1:2500 ON 11"x17"</p> <p>(UNLESS OTHERWISE NOTED)</p>
CHECKED BY: J.E.M.		
DRAWN BY: A.M.P.		
CHECKED BY: J.E.M.		

SNYDER DRAIN	
REGION OF WATERLOO	TOWNSHIP OF WILMOT
DETAIL AT 007-09600	SEPT. 22, 2021
K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY	REVISED:
	JOB NUMBER: 17–374
	DRAWING 8 OF 11



SPECIAL PROVISIONS – CONSTRUCTION NOTES

MAIN DRAIN

M.T.O. (ROLL NO. 007-09800)

- STA. 2+768 – CONSTRUCT 80m LONG BERM WITH 1m WIDE TOP, 3:1 SIDE SLOPES AND 5m WIDE WEIR WITH 15m² RIPRAP ON GEOTEXTILE. REMOVE & DISPOSE OF AFFECTED FENCE.
- STA. 2+773 – CONSTRUCT 900x1200mm 3:1 DICB WITH BIRDCAGE GRATE AND 5m² RIPRAP ON GEOTEXTILE
- STA. 2+768 TO 2+779 – CONSTRUCT PERMANENT SEDIMENT TRAP WITH 5mW x 60mL BOTTOM. CONSTRUCT 80m LONG BERM WITH 1m WIDE TOP, 3:1 SIDE SLOPES AND WEIR WITH 15m² RIPRAP ON GEOTEXTILE.
- STA. 2+773 TO 3+069 – 296m OF 525mmØ CONC. TILE WITH JOINT WRAP
- STA. 2+779 TO 3+064 – FILL IN EXISTING DITCH AND GRADE OVERFLOW SWALE WITH 1m BOTTOM AND 8:1 SIDE SLOPES
- STA. 3+069 – CONSTRUCT 900x1200mm CB WITH 5m² RIPRAP ON GEOTEXTILE. INCLUDES 3m OF 150mm PLAS. SUBDRAIN IN CLEAR STONE ENVELOPE
- STA. 3+064 TO 3+072 – CONSTRUCT PERMANENT SEDIMENT TRAP WITH 5mW x 100mL BOTTOM. CONSTRUCT 120m LONG BERM WITH 1m WIDE TOP, 3:1 SIDE SLOPES AND WEIR WITH 15m² RIPRAP ON GEOTEXTILE. INCLUDES 10m OF EX. FENCE REMOVAL AND REPLACEMENT. PROTECT REMAINING FENCE. FILL TO BE USED FOR BERM WORK. PLACE ANY EXCESS MATERIAL ALONG 3+072 PROPERTY LINE.

M.T.O. (HIGHWAY 7 & 8)

- WORK ON HIGHWAY 7 & 8 RIGHT OF WAY SUBJECT TO M.T.O. DESIGN STANDARDS AND PROVISIONS OF ENCROACHMENT PERMIT.
- STA. 3+069 TO 3+147 – INSTALL 78m OF 450mmØ REINFORCED CONCRETE PIPE & REMOVE EX. 150mmØ TILE
- STA. 3+069 TO 3+147 – CONSTRUCT 78m OF 0.2-0.3m DEEP V-DITCH FROM EX. ARCH CSP CULVERT TO NEW SEDIMENT TRAP
- STA. 3+147 – REMOVE EXISTING CB AND CONSTRUCT 600x600mm CB (OPSD 705.010) WITH BIRDCAGE GRATE AND 5m² RIPRAP ON GEOTEXTILE

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

LEGEND

- WATERSHED BOUNDARY
- x-x- EXISTING FENCE
- ~ EXISTING TREELINE
- EXISTING CB
- PROPOSED CB

DESIGNED BY: J.E.M.

CHECKED BY: J.E.M.

DRAWN BY: A.M.P.

CHECKED BY: J.E.M.



SCALE
0 25 50m
1:2500 ON 11"x17"
(UNLESS OTHERWISE NOTED)

SNYDER DRAIN

REGION OF WATERLOO

TOWNSHIP OF WILMOT

DETAIL AT 007-09800

SEPT. 22, 2021



K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

REVISED:

JOB NUMBER: 17-374

DRAWING





9 OF 11

NOTES

1. STRIP TOPSOIL OVER THE TRENCH AND WITHIN SWALE GRADING LIMITS AND STOCKPILE SEPARATELY. SPREAD TOPSOIL ACROSS TRENCH AND SWALE AFTER BACKFILLING.
2. RE-GRADE EXISTING DITCH AS SWALE USING ADJACENT SUBSOIL. VARY SWALE SIDE SLOPES AS NEEDED TO PROVIDE POSITIVE DRAINAGE WITHOUT IMPORTING OFFSITE MATERIAL.

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL BE INFORMED OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

LEGEND

-  - EXISTING WATER LEVEL SURVEYED JUNE 26, 2018
-  - PROPOSED GRADE
-  - PROPOSED CUT
-  - PROPOSED FILL

DESIGNED BY: J.E.M.

CHECKED BY: J.E.M.

DRAWN BY: A.M.P.

CHECKED BY: J.E.M.



SCALE
0 1 2m
(1:100 ON 11"x17")

SNYDER DRAIN

REGION OF WATERLOO

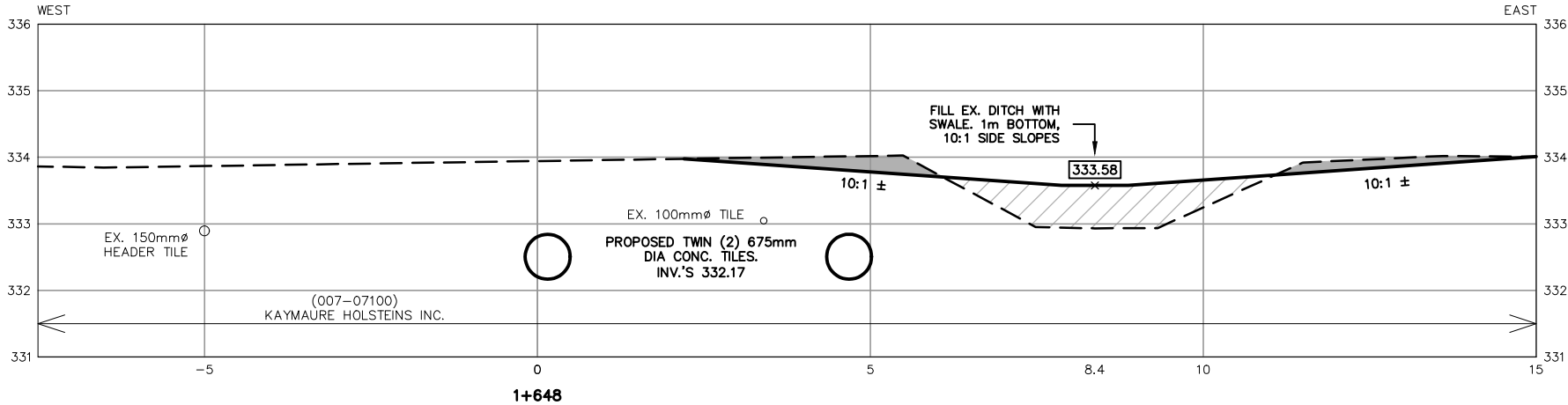
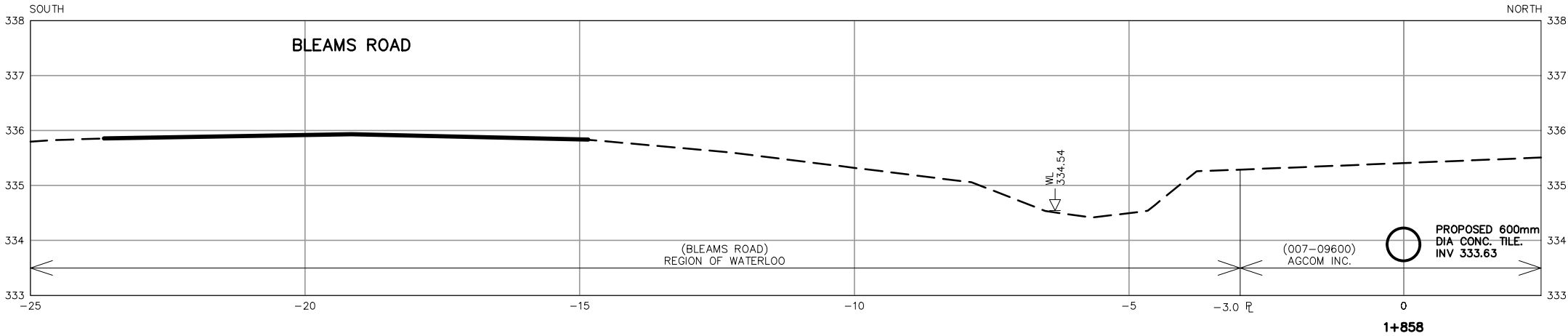
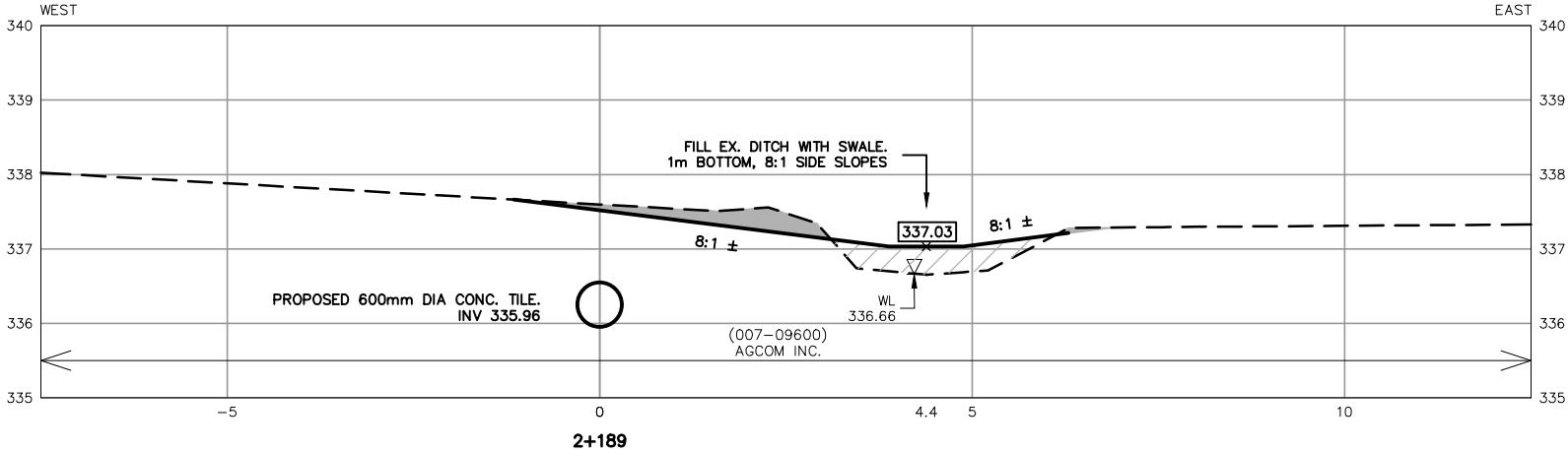
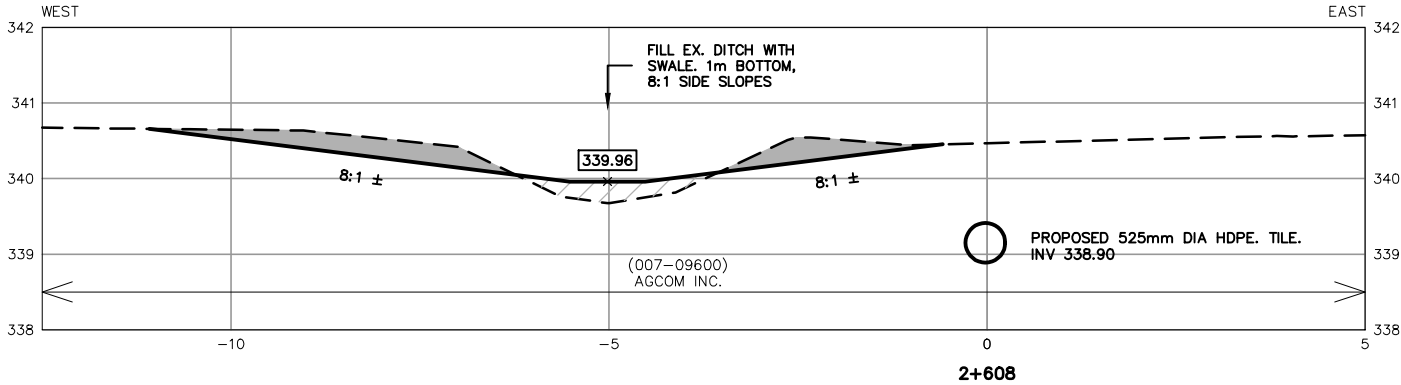
TOWNSHIP OF WILMOT

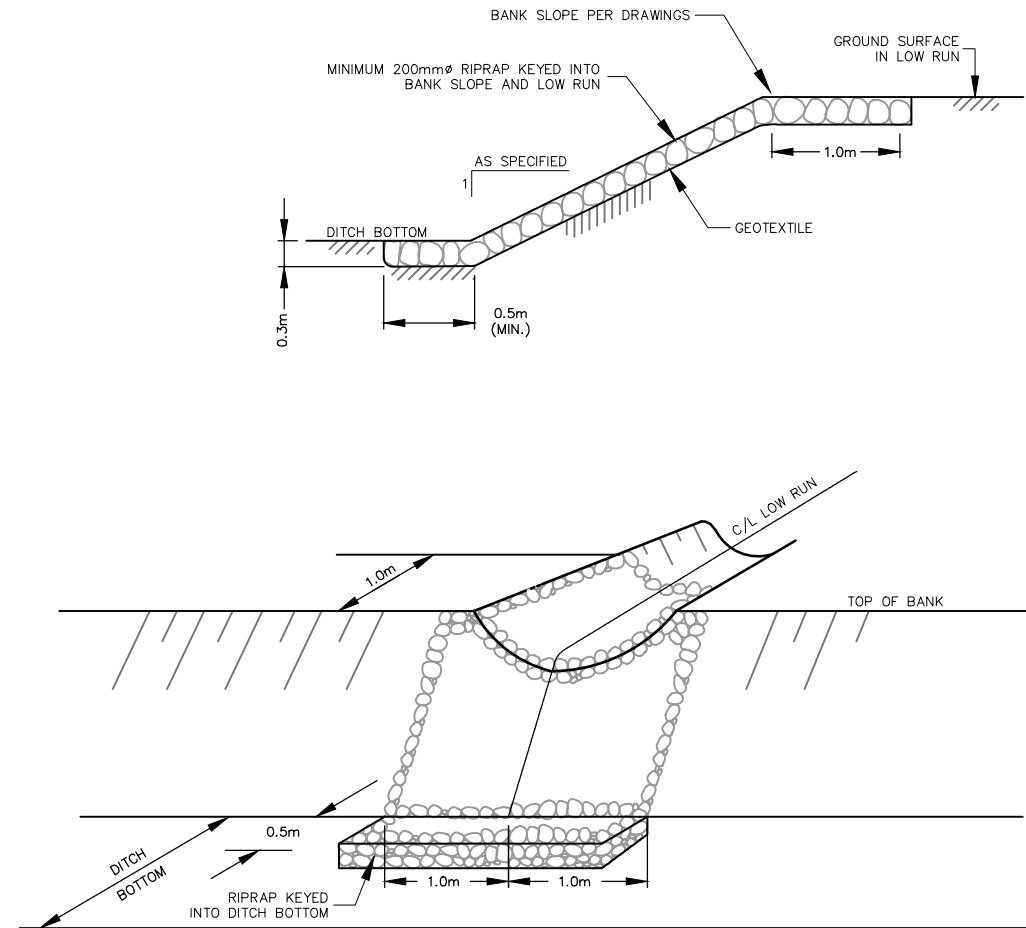
MAIN DRAIN SECTIONS

SEPT. 22, 2021

 **K. SMART ASSOCIATES LIMITED**
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

REVISED:
JOB NUMBER: **17-374**
DRAWING
10 OF 11





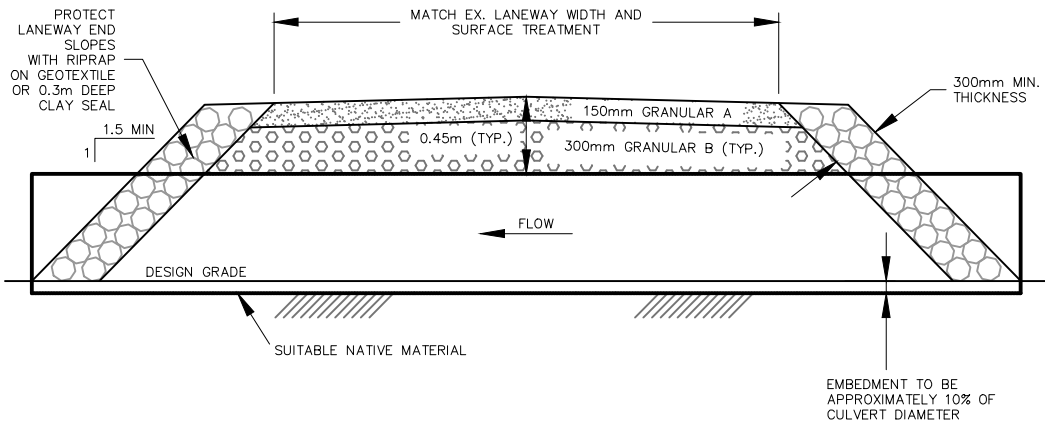
ROCK CHUTE
NOT TO SCALE

NOTE:
EROSION CONTROL MATS OR CABLE CONCRETE MAY BE USED IF APPROVED BY THE ENGINEER.



K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

DETAIL
DRAWING NO.
SD-5



LANEWAY CULVERT
NOT TO SCALE

NOTES:

1. GRANULAR MATERIAL TO BE COMPACTED TO 98% SPMD WITH A MECHANICAL VIBRATORY COMPACTOR
2. END SLOPE GEOTEXTILE TO BE FITTED AROUND THE FULL CIRCUMFERENCE OF PIPE
3. NO ROCKS GREATER THAN 100mm DIAMETER SHALL BE USED FOR BACKFILL
4. IF NATIVE SUBSOIL IS UNSUITABLE, INSTALL CULVERT ON 300mm THICKNESS OF 19mm CLEAR STONE WRAPPED IN GEOTEXTILE
5. MINIMUM PIPE COVER MAY BE 300mm SUBJECT TO APPROVAL OF ENGINEER



K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

DETAIL
DRAWING NO.
SD-11

SPECIAL PROVISIONS – GENERAL NOTES

1. WORKING AREA
FOR A CLOSED DRAIN UP TO 2m DEEP THE WORKING AREA SHALL BE A 10m WIDTH ON EITHER SIDE OF THE TRENCH OR ANY COMBINATION NOT EXCEEDING 20m. FOR CLOSED DRAINS DEEPER THAN 2m THE WORKING AREA SHALL BE INCREASED TO 30m. IF ANY PART OF THE DRAIN IS CLOSE TO A PROPERTY LINE THEN THE PROPERTY LINE SHALL BE ONE OF THE LIMITS OF THE WORK AREA. WHERE ANY PART OF THE DRAIN IS ON A ROAD ALLOWANCE, THE ROAD ALLOWANCE SHALL BE THE WORKING AREA. RESTRICTED OR INCREASED WORKING AREAS WILL BE DESCRIBED IN DETAIL IN THE SPECIFIC CONSTRUCTION NOTES.

2. ACCESS
ACCESS TO THE WORKING AREA SHALL BE FROM ROAD ALLOWANCES AND AS DESIGNATED ON THE DRAWINGS AND/OR SPECIFIC NOTES. NO OTHER ACCESS ROUTES SHALL BE USED UNLESS FIRST APPROVED BY THE ENGINEER AND THE AFFECTED LANDOWNER. SPECIFICATIONS RELATED TO CONSTRUCTION WILL APPLY TO THE ACCESS ROUTES. CONTRACTOR SHALL MAKE GOOD ANY DAMAGES CAUSED BY USING THE DESIGNATED ACCESS ROUTES. THE CONTRACTOR SHALL CONTACT EACH OWNER PRIOR COMMENCING CONSTRUCTION ON EACH PROPERTY.

3. CONTACT INFORMATION

ROLL NO.	OWNER	PHONE NUMBER
007-07000	RICHARD GOOD	(PROVIDED AT PRE-CON. MEETING)
007-07100	MAURICE GOOD	(PROVIDED AT PRE-CON. MEETING)
007-07200	DON STEINMANN	(PROVIDED AT PRE-CON. MEETING)
007-09500	HANS WEISS	(PROVIDED AT PRE-CON. MEETING)
007-09600	STEWART SNYDER	(PROVIDED AT PRE-CON. MEETING)
007-09800	SARAH JEWELL (MTO)	(PROVIDED AT PRE-CON MEETING)

TOWNSHIP OF WILMOT BRYAN BISHOP, MANAGER OF ENGINEERING
519-634-8519 X239
TOWNSHIP OF WILMOT JOHN KUNTZE, DRAINAGE SUPERINTENDENT
OFFICE AND CELL: 519-748-1199 X227
REGION OF WATERLOO JOSH GRAHAM, SUPERVISOR, CORRIDOR
519-575-4757 EXT.3580 MANAGEMENT
ENGINEER JOEL MILLER, P.ENG.
OFFICE AND CELL: 519-748-1199 X228

4. PRE AND POST CONSTRUCTION MEETINGS
THE CONTRACTOR MAY BE REQUIRED TO ATTEND PRE-AND POST-CONSTRUCTION SITE MEETINGS WITH THE ENGINEER AND LANDOWNERS BEFORE STARTING AND AFTER FINISHING THE WORK IF REQUESTED.

5. TOPSOIL
STRIP TOPSOIL OVER THE TRENCH AND WITHIN SWALE GRADING LIMITS AND STOCKPILE SEPARATELY. SPREAD TOPSOIL ACROSS TRENCH AND SWALE AFTER BACKFILLING.

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DESIGNED BY: J.E.M.		NOT TO SCALE
CHECKED BY: J.E.M.		
DRAWN BY: A.M.P.		
CHECKED BY: J.E.M.		

SNYDER DRAIN	
REGION OF WATERLOO	TOWNSHIP OF WILMOT
STANDARD DETAILS	SEPT. 22, 2021
	REVISED:
	JOB NUMBER: 17-374
	DRAWING: 11 OF 11

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INFORMATION AND LEGISLATIVE SERVICES *Staff Report*

REPORT NO: ILS 2021-40

TO: Council

SUBMITTED BY: Dawn Mittelholtz, Director of Information and Legislative Services /
Municipal Clerk

PREPARED BY: Tracey Murray, Manager of Information and Legislative Services /
Deputy Clerk
Erin Merritt, Manager of Municipal Law Enforcement
Kelly Baird, Communication Specialist

REVIEWED BY: Sharon Chambers, CAO

DATE: November 8, 2022

SUBJECT: Combined Quarterly Activity Report

RECOMMENDATION:

THAT the Information and Legislative Services Quarterly Activity Report for July 1, 2021, to September 30, 2021, be received for information.

SUMMARY:

Attachments 1, 2 and 3 are submitted by the Director of Information and Legislative Services, the Manager of Municipal Law Enforcement and the Communications Specialist of the Information and Legislative Services Department to summarize their activities from July 1 to September 30, 2021.

Priorities of the Information and Legislative Services department continued to focus on the Township's response to the 2019 Novel Coronavirus pandemic, as well as implementation of the 2021 Work Program.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

By providing these quarterly updates to Council, the Township is active communications as a part of achieving the goals of responsible governance,

ACTIONS TOWARDS UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS:

By nature of the Information and Legislative Services department, this department is often the conduit through which Council and the corporation has the capacity to impact in a positive way several of the United Nations Sustainable Development Goals. Specific to the actions of the department itself, goal 10, Reduced Inequalities, and 16, Peace, Justice and Strong Institutions, are impacted in a positive manner.

FINANCIAL CONSIDERATIONS:

None.

ATTACHMENTS:

Attachment 1: Municipal Law Enforcement Quarterly Activity Report
Attachment 2: Corporate Communications Quarterly Activity Report
Attachment 3: Inclusion and Diversity Quarterly Activity Report

Type of Call	July/Sept 2021	July/Sept 2020
Property Standards/Clean Yards	38	34
Parking/Traffic	59	86
Animal Control Complaints	71	44
Noise Complaints	24	32
Fire Complaints	8	11
Grass and Weeds	34	15
Signs	15	9
General Inquires	39	59
Dumping	4	3
Zoning	6	5
Livestock Valuation	2	0
Pools	3	6
Fences	2	3
Discharge of Firearms	0	1
Graffiti	0	2

Property Standards and Clean Yard:

- 38 properties were investigated by the Township
- 35 have been resolved, 2 working with owners to gain compliance, 1 in ongoing legal proceedings

Parking/Traffic:

- 24 warnings were issued
- 3 parking tickets were issued

Animal Control:

- 2 dogs were impounded, 4 returned to their owners
- 32 warnings given for dogs/livestock running at large, no tickets issued

Noise Complaints:

- 24 complaints investigated ranging from loud stereos, barking dogs, noisy vehicles, construction noise

This information is available in accessible formats upon request

- all complaints have been investigated and appropriate warnings have been issued, no tickets issued

Fire Complaints:

- 8 complaints regarding open burning/burning without a permit, warnings were given

Grass and Weeds

- 34 complaints received, all were cut by the owners and are now in compliance

Signs:

- 15 complaints received, the complaints were investigated, and the signs were removed by voluntary compliance by the property owner or by township staff
- 8 complaints were regarding election campaign signs
- ongoing monitoring of illegal signage is occurring, and removal carried out on a regular basis by By-law (67 signs removed this quarter by By-law Officers)

General Inquires

- Out of the 39, 29 were regarding Covid-19 related matters. These include questions, complaints, requests for information, enforcement activity through education

This information is available in accessible formats upon request

Corporate Communications Specialist

Select activities include:

Marketing and Corporate Communications

- Brand asset requests are ongoing. To date, I've received (and have completed) 42 internal logo requests (includes staff and third party, initiated via staff) as well as 12 external requests. Please note: Most requests accompany a series of email exchanges/phone calls to clarify and/or approve intentions of use.
- Continued to assist staff with (new) brand identity requests and processes.
- Continued to write, edit and/or contribute to various forms of pandemic related messaging.
- Wrote, edited and/or contributed to 14 Township news and/or regional media releases.
- Assisted various departments with the creation of various forms of messaging, editing, video and photography requests. Such endeavours included: installation of speed enforcement units, railway safety, flooding events, and others.
- Ongoing participation on the Region of Waterloo Communications Committee, Municipal Communicators Committee, Reconciliation Action Plan Working Group Communications & Events Sub-Committee and Township Communicators group. Our ongoing collective aim is further exploration of common challenges, joint messaging opportunities and resources. Ongoing participation on ECG committee and ILS departmental meetings.

Social Media

- Assisted Township departments and the Region to create awareness messaging such as: Fire Prevention Week, Firefighter Recruitment campaign, Taste The Countryside, Indigenous History Month, Zero Waste Month, Check before you Rec, Truth and Reconciliation Day, Every Child Matters, Dress Purple Day, and others.
- Sourced a videographer to help create a seasonal promotional video for Wilmot Township, for use on our digital platforms. For release in November.
- Created daily messaging (combination of original content and retweets/shares – approximately 4 – 6 messages) for social media channels. Cultivated content and/or edited and sourced accompanying tags, hashtags, and images and/or video. Scheduled and posted.
- Daily monitoring of local and regional accounts, engage when appropriate, respond to inquiries and watch trends.
- The Township Twitter account has 3,615 followers and the Facebook business page 1.1K followers.
- The 2021 social media content calendar continues to be updated as the pandemic evolves.
- Ongoing efforts are made to enhance the image and video gallery. Images have been requested for use by internal departments as well as external organizations.

This information is available in accessible formats upon request

Director of Information and Legislative Services / Municipal Clerk

Summary of activities for inclusion and diversity:

- Presentation of the findings from the First Peoples Group based on the community engagement findings. Council adopted the recommendations as follows:

THAT staff arrange for the immediate removal and temporary storage of the four remaining statues on the Prime Ministers Path and discontinue any future expansion or investment in the Prime Ministers Path as it exists today;

THAT staff work with the Township solicitor to activate the termination clause in the agreement with Createscape;

AND FURTHER, THAT staff be directed to report back to Council with an implementation plan for the incorporation of the remaining recommendations from First Peoples Group, including:

- a) Creating a working group comprised of a balanced representation of the individuals and communities within Wilmot Township to discuss, develop and suggest plans for the implementation of next steps centred in community cohesion and healing.*
- b) Committing to transforming community engagement and consultation processes in Wilmot Township in a way that encourages greater openness, accountability and citizen participation in decision making.*

Staff connected with the same contractor involved in the removal and storage of the Sir John A. Macdonald statue in advance of the meeting to ensure the removal of the remaining statues could be acted upon immediately, as directed in the resolution, if approved. Following the removal, staff continued to field calls and emails relative to the Prime Ministers Path and involvement with the working group.

- Further activities towards the Anti-Racism, Inclusion and Diversity Advisory Committee and the application for the Canadian Coalition of Inclusion Municipalities continue to be deferred until the Chief Administrative Officer is in office and has a sufficient opportunity to review the portfolio.
- Continued staff attendance at and support to the Grand River Accessibility Advisory Committee.

This information is available in accessible formats upon request



PARKS, FACILITIES AND RECREATION SERVICES

Staff Report

REPORT NO: PFRS 2021-017

TO: Council

PREPARED BY: Sandy Jackson, Director Parks, Facilities & Recreation
Manny Jones, Manager Community Development & Customer Service
Geoff Dubrick, Manager of Parks and Facilities
Angela Bylsma – Anderson, Manager of Aquatics

SUBMITTED BY: Sandy Jackson, Director Parks, Facilities & Recreation Services

REVIEWED BY: Sharon Chambers, CAO

DATE: November 8, 2021

SUBJECT: **Parks, Facilities and Recreation Services Third Quarter Activity Report**

RECOMMENDATION:

THAT the Parks, Facilities and Recreation Services Activity Reports for the third quarter of 2021 be received for information.

SUMMARY:

Parks, Facilities and Recreation Services (PFRS) Division Manager Reports for the third quarter of 2021 are attached for information.

BACKGROUND:

Providing quarterly reports for outline of operations and services provided by the PFRS department for Council information.

REPORT:

During the third quarter of 2021, the Parks, Facilities and Recreation Services Department continued to navigate the impacts from the COVID-19 pandemic. Through most of this quarter, the province and the Region of Waterloo were in Step 3 of the Roadmap to Reopen with limited programming and rentals that are anticipated to gradually increase during the fourth quarter.

The Aquatic Centre reopened July 26th with limited programming due to staff shortages and covid restrictions for capacities. Due to minimal demand for ice in the summer, the ice rinks reopened on September 7th and are now operating at near full capacity.

On September 22, 2021, the new provincial vaccination regulations came in to effect which required all persons entering facilities for non-essential services such as sports and recreation, to provide proof of full vaccination plus 14 days beyond the second dose. This created the need to reinstate security guards to assist staff and ensure safety for patrons and employees. Minor sport groups have been instrumental in working with staff to ensure a smooth transition through this and every stage of Covid-19 over the past 18 months.

Capital projects progressed as planned although some delays with supply of equipment and increases in pricing for several projects resulted due to COVID-19.

Another impact of Covid-19 was a significant loss of part time staff including over 50% of aquatics and 80% of customer service representatives moving to other jobs while our facilities remained closed. Summer day camp programs, however, were very successful with all nine weeks reaching full registration capacity. As more services and capacity levels continue to expand in the fourth quarter, revenue recovery is anticipated to improve significantly.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

Quarterly reporting aligns with active communication as a part of Responsible Governance in the Townships Strategic Plan.

ACTIONS TOWARDS UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Goal 3: Ensure healthy lives and promote well-being for all at all ages.

Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

FINANCIAL CONSIDERATIONS:

N/A

ATTACHMENTS:

Customer Service & Community Development Quarterly Report

Aquatics Quarterly Report
Parks & Facilities Quarterly Report

**Recreation and Community Services Division
Quarterly Activity Report (July - Sept 2021)**

Community Groups

- Planning committee for Grand Opening of the Artificial Turf.
- Met with the Garden Coordinator at the Hamilton Rd Community Garden; and participated in an on line meeting with the Waterloo Region Community Garden Network.
- Helped plan Wilmot Lions Club Splash Pad BBQ in recognition of final payment of donation
- Worked with Wilmot Agricultural Society re: livestock show September 18 Norm Hill Park in lieu of the annual fair
- Worked with TCP who held their shows in August – New Hamburg Arena Floor
- Assisted arrangements with Wilmot Family Resource Centre for use of the New Hamburg Community Centre July and August for day camps.

Rentals

- Worked with the Finance Department and Activenet to streamline the deposit process for special events and implement for large community centre rentals.
- Concert/Fundraiser Terry Fox – New Dundee bandshell in September
- 60 in attendance for public skating that started in September
- Over 100 players have attended noon hour shinny since it resumed in September
- Elections utilized WRC, St Agatha CC, New Hamburg CC Sept 10-13 & Sept 20
- Two ball tournaments totaling 38 hours of booked diamond time
- Over 300 hours of ice time booked in September
- Over 350 hours of booked soccer field use in the quarter

Covid Protocols

- Ice and pool user groups meetings to outline protocols for the re-opening of WRC and ongoing Covid changes
- Arranged security at both the aquatics and arena entrances to WRC for evenings and weekends when vaccine proof requirements came into effect Sept 22
- Communicated mandatory vaccine guidelines with the user groups and the subsequent updates/letters of instruction.
- Participated in Special Events and Recreation regional sub-group committees on a regular basis to make recommendations to the CAO's group for special events planning during covid.

Cemeteries

- Reviewed and revised the Cemetery By-Law and worked with Township Solicitor to finalize
- Interments 6 (cremated)
- Lots Sold: 2 Foundations 6 + 2 markers

Recreation Programming

- Successfully ran 9 weeks of Summer Day Camp at the WRC beginning July 5-Sept 3 with a total of 129 registered participants
- Collaborated with local headquarters of Waterloo Region Library to implement library books and

story walks. Provided three story walks and two large boxes of books for Summer Camp programs

- Indoor fall recreation programs are underway. Body sculpt has a total of 12 participants. Wonder tots Dance has a total of 9 participants.
- Planning and recruitment of Athletic Engagement facilitators to reinstate the Township of Wilmot pickleball program is in progress.

Manuela Jones

Manager of Customer Service and Community Development

Aquatics Division Quarterly Activity Report (July - Sept 2021)

Lessons and Programming:

- The Aquatic Centre reopened on July 26, 2021 for recreational swims. Lessons resumed the week of August 2, 2021.
- The following Aquatic Leadership courses were offered in July with a total of 73 participants.
- In August the first Learn-to-Swim programs in over a year were offered. To maximize participation while adhering to COVID protocols and capacities, 2 Mini-sessions of 4 lessons were offered. A total of 142 Learn-to-Swim plus 121 in-water guardians participated.
- By comparison the Summer 2019 session (the last year we offered summer lessons) had a total of 703 participants in various programs.
- There were 3,469 admissions for our recreational swim programs. These programs include length swims, open and family swims and Aquafit classes. In 2020 there were 2,136 admissions for recreational swim programs (August and September only).

Staffing:

- During this quarter there were 4 full-time staff members and 22 part-time staff members. Fourteen part-time staff members resigned this quarter and twelve new staff members have been hired this quarter. This is significantly lower than past years due to the impact of COVID-19 and loss of qualified staff.
- The ability to host Leadership courses June and July prior to the facility to reopen greatly reduced our Fall staffing shortage. Other municipalities were required to delay their Fall lesson as they did not have enough certified staff members.
- Isla Romano was presented with the Ben Grosso Award. This award is given to an Aquatic staff member in memory of Ben and mental health awareness. Recipients of this award are nominated by their co-workers. This award is to help remind staff to be kind, understanding, accepting, inclusive and friendly.

Customer Service:

- Customer Service desk responsibilities and staffing transferred to the Aquatics Division in September to balance Manager's workloads.
- Most staff both full and part time are new hires due to turn over and COVID-19 impacts.
- A Level of Service request for the 2022 budget will be requested to support the need for a full time Customer Service Representative on an afternoon shift to reduce impacts of part time staff turnover.

Facility Rentals:

- The ACES swim team returned to the pool on August 3rd with COVID restrictions and had 374 participants. In September, they were able to increase their registered numbers and swim levels and had 1,437 participants.
- Due to COVID protocols, there were no private rentals for birthday parties or private organizations.

Angela Bylsma Anderson
Aquatics Manager, Wilmot Aquatic Centre

**Parks and Facilities Division
Quarterly Activity Report (July - Sept)**

Parks Operations

- Completed annual fire inspection for NHCC
- Participated in onsite artificial turf training session with all parks staff
- Worked with a local resident to create and promote Fishing Line Recycling Tubes at our waterways where fishing line hazards exist
- Monitored the Nith River flood in park land in September.
- Worked with consultants regarding the Parks Operations Centre study.

Facility Services

- Numerous capital projects completed per recent capital project update
- Family changeroom and single stall washroom signage were replaced with Universal Washroom signage at WRC and the Baden Admin Complex to improve gender inclusivity.
- Emergency roof replacement for the NH Library was completed due to roof system failure and need to replace HVAC unit
- Covid protocols and signage addressed for community centres
- Worked with consultants regarding third ice pad study.

Forestry

- Working with Let's Tree Wilmot, met on-site at Baden Park, Petersburg Park, Mannheim Park and ND Park to discuss where we can plant multiple trees in these 4 parks.
- Arranged contractor to fell 5 very large dead poplar trees at Petersburg Park. Parks staff chipped and removed the tree logs
- Assisted Terry Fox committee with installing a sign at a newly planted White Pine at the trail head at WRC
- Worked with Let's Tree Wilmot and Home Hardware to plant over 80 trees at Baden Park on Sept 21st, 2021. Further plantings planned for fourth quarter.

Horticulture

- Cleared overgrown and aged plant material at Castle Kilbride, and met with Wilmot Horticulture to plan replacement planting of native flowers and in the side flowerbed. Redesign of the floral bed has been contracted out and concept drawings will be reviewed with Wilmot Horticulture.

Geoff Dubrick
Parks and Facilities Manager



INFORMATION AND LEGISLATIVE SERVICES *Staff Report*

REPORT NO: ILS 2021-41

TO: Council

SUBMITTED BY: Dawn Mittelholtz, Director of Information and Legislative Services /
Municipal Clerk

PREPARED BY: Dawn Mittelholtz, Director of Information and Legislative Services /
Municipal Clerk

REVIEWED BY: Sharon Chambers, Chief Administrative Officer

DATE: November 1, 2021

SUBJECT: Proposed Procedural By-law Amendment

RECOMMENDATION:

THAT Report No. ILS 2021-40 be received for information.

SUMMARY:

Council is being asked to consider proposed amendments to the by-law that governs procedures for meetings of Council and Committees for the Township. The amendments are focused on changing Land Acknowledgement to Territorial Acknowledgement and a time allotment for applicants speaking on a Planning Act matter.

BACKGROUND:

The Municipal Act, 2001, requires all municipalities in the Province of Ontario to pass a Procedural By-law to govern the calling, place and proceedings of meetings of the municipality and its local boards. The current Township of Wilmot Procedural By-law was approved by Council on July 12, 2021. On September 27, 2021, Council and the public were provided notice

of a Public Meeting to hear comments on the proposed amendments which took place on October 18.

REPORT:

Report No. 2021-38 provided the initial discussion for the proposed amendments which served as the starting point for discussion at the October 18, 2021, Public Meeting. Whereas no members of the public attended this meeting, one piece of correspondence was received.

The correspondence received (Attachment A) asks many questions of Council for consideration on the general nature of democracy and public engagement topics worthy of further discussion and contemplation. However, the purpose of this report is to focus on the amendments being proposed, and whereas the comments made should remain top of mind, they will not be specifically addressed here. As the Township moves forward on establishing a formalized community engagement strategy, the comments contained within the correspondence will be considered for further response.

Below is an outline of the proposed amendments to Procedural By-law 2021-36. The report will address the questions or concerns raised

Territorial Acknowledgement

As part of staff due diligence, the Reconciliation Action Plan Waterloo Region working group was consulted and confirmed that Territorial Acknowledgement is the preferred term. This amendment is recommended for the by-law and will cause other documentation and materials to be changed, such as the Township website.

Applicants

The concerns raised in the correspondence received have been discussed with Development Services staff. They indicated support for a fifteen-minute time limit as proposed by the member of the public and offered further comment on the matter.

'Extension of staff report' was used by the Clerk to address that rather than staff presenting the application in detail (which in the past the public has treated as an endorsement of the application by staff) it is preferable for staff to present and highlight the ongoing planning process and let the applicant describe their proposal.

The correspondence also noted that a five-minute time limit for the public is quite short for them to articulate their concerns. Where this concern is understandable, five minutes is consistent with many other municipalities and encourages a concise, fact-based presentation. Delegations are provided the opportunity to submit additional written materials to further expand on their concerns. As has also been witnessed, in many Public Meetings where the proposed development has raised concerns with neighbours, there are frequently more than one Delegation. In those instances, it is common for a somewhat organized approach where

each Delegation may focus on a different element of concern as not to be repetitive and optimize the Delegation time allotment.

Clarifying Language

At the October 18, 2021, Council meeting, staff noted some clarifying language regarding delegation materials which have been incorporated into the proposed amending by-law.

The Township solicitor has reviewed the proposed amendments and their suggestions have been incorporated.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

The engagement for the proposed Procedural By-law conforms with the Strategic Plan goals for community engagement and responsible government.

ACTIONS TOWARDS UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS:

As the Township continues to respond to municipal matters in a responsible way that is mindful of the United Nations Sustainable Development Goals, the Procedural By-law, its amendments and through its application, the following goals are advanced:

- | | |
|---------|--|
| Goal 11 | Make cities and human settlements inclusive, safe, resilient and sustainable. |
| Goal 16 | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. |

FINANCIAL CONSIDERATIONS:

None

ATTACHMENTS:

Appendix A: Proposed Procedural By-law Amendments

**THE CORPORATION OF THE TOWNSHIP OF WILMOT
BY-LAW NO. 2021-50
BEING A BY-LAW TO AMEND PROCEDURAL BY-LAW 2021-36, A BY-LAW TO
PROVIDE FOR
THE RULES OF ORDER AND PROCEDURE
FOR THE MUNICIPAL COUNCIL OF
THE CORPORATION OF THE TOWNSHIP OF WILMOT**

WHEREAS Section 5(1) of the *Municipal Act, 2001*, S. O. 2001 c. 25, as amended, states the powers of a municipality shall be exercised by its council;

AND WHEREAS Section 5(3) of the *Municipal Act, 2001*, S. O. 2001 c. 25, as amended, states a municipal power shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

AND WHEREAS Section 8(1) of the *Municipal Act, 2001*, S. O. 2001 c. 25, as amended, states the powers of a municipality under that or any other Act shall be interpreted broadly so as to confer broad authority on the municipality to enable the municipality to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues;

AND WHEREAS Section 238(2) of the *Municipal Act, 2001*, S.O. 2001, c.25, as amended, requires that every municipality and local board shall pass a procedural by-law for governing the calling, place and proceedings of meetings;

AND WHEREAS it is deemed expedient to adopt by by-law, rules governing the order and procedure of the Council of The Corporation of the Township of Wilmot.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF WILMOT ENACTS AS FOLLOWS:

1. **THAT** Township By-law 2021-36 (the "**Procedural By-law**") be amended to include the following definition in Part 1 of the Procedural By-law and that the subsequent definitions in Part 1 of the Procedural By-law be renumbered accordingly:
 - 1.7 "**Applicant**" means a property owner, their agent, or representative in a matter relative to a Zone Change, Official Plan Amendment, Plan of Subdivision application, or any other development application under the *Planning Act* submitted to the Township of Wilmot.
2. **THAT** the definition of "Land Acknowledgment" found in Part 1 of the Procedural By-law be deleted and that the remaining definitions in Part 1 of the Procedural By-law be renumbered accordingly.
3. **THAT** the following definition be added to Part 1 of the Procedural By-law and that the other definitions in Part 1 of the Procedural By-law be renumbered accordingly:

"Territorial Acknowledgement" means a statement made, at minimum, to insert awareness of treaty and traditional Indigenous rights at the beginning of a Meeting or event.
4. **THAT** any reference to "Land Acknowledgment" found in the Procedural By-law be amended to read "Territorial Acknowledgment".
5. **THAT** subsections 7.9.2, 7.9.3, the first 7.9.4 and 7.9.6 of the Procedural By-law be deleted and replaced with the following:

7.9.2 Persons desiring to verbally present information on matters of fact, or make a request of Council, relative to matters on the Agenda:

RULES OF PROCEDURE – BY-LAW 2021-50

- a) shall give notice to the Clerk in writing, not later than four (4) hours before the commencement of the Council Meeting and may be heard with leave of the Mayor or Chair;
- b) shall be limited in speaking to not more than five (5) minutes;
- c) Delegations consisting of five (5) or more persons may be permitted to have two (2) spokespersons address Council, in which case each such spokesperson shall be limited to speaking for not more than five (5) minutes combined;
- d) Delegations shall be permitted to speak only once on an Agenda item; and,
- e) Applicants shall be limited to speaking for not more than fifteen (15) minutes and may elect to address Council before any Delegation, if preferred.

7.9.3 Audio and visual materials submitted by a Delegation or Applicant may include, but are not limited to, audio recordings, slideshows, photos, videos and handouts but does not include the presenter's speaking notes.

7.9.4 All audio and visual materials presented to Council shall be submitted to the Clerk, subject to the following:

- a) for Delegation's and Applicant's audio or visual materials to appear in the Council Agenda Package that is circulated in advance of the Council Meeting and heard or shown as part of the Council Meeting, Delegations and Applicants are required to provide their materials not less than five (5) Business Days before the commencement of the Council Meeting;
- b) audio and visual materials for Delegations and Applicants received less than five (5) Business Days but not less than one (1) Business Day prior to the commencement of the Council Meeting shall be circulated to Council in advance of the Council Meeting, shall be heard or shown as part of the Council Meeting, and shall be included as an attachment to the Council Minutes, subject to all other requirements in this by-law;
- c) audio and visual materials received less than one (1) Business Day in advance of Council Meeting shall not be heard or shown in the Council Meeting but, shall be included as an attachment to the Council Minutes;
- d) audio or visual materials containing negative allegations or comments towards members of the public or profanity shall be returned to the Delegation or Applicant to remove the inappropriate allegations, comments, or language and must be returned to the Township not less than one (1) Business Day prior to the commencement of the Council Meeting;
- e) audio or visual materials containing hate speech will be rejected; and,
- f) audio or visual materials containing negative allegations or comments of personal nature against Members of Council or staff shall be returned to the presenter to remove the allegations or comments and must be returned to the Township not less than one (1) Business Day prior to the commencement

RULES OF PROCEDURE – BY-LAW 2021-50

of the Council Meeting.

7.9.6 Where any provisions or regulations of or under any Act in relation to Presentations, Delegations, Applicants or written submissions which apply to municipal Councils contradict any of the provisions of this by-law, the provisions of the Act shall prevail.

6. **THAT** the second subsection 7.9.4 of the Procedural By-law be renumbered to correctly read 7.9.5 and that all subsections of the Procedural By-law thereafter be renumbered accordingly, including subsection 7.9.6, which was amended pursuant to section 5 of this by-law, above.
7. **THAT** this by-law shall come into force and effect on the date of passage.

READ a first and second time on the 8th day of November, 2021.

READ a third time and passed in open Council on the 8th day of November, 2021.

Mayor

Clerk

Report IC2021 - 06
to the Council of the Township of Wilmot
in relation to an investigation under the
Code of Conduct for Members of Council related to
Council Code of Conduct Inquiry 2021-06

=====

Robert J. Williams, Ph.D.
Integrity Commissioner
Township of Wilmot
October 20, 2021

Summary

1. Report IC2021-06 of the Township of Wilmot Integrity Commissioner dated October 20, 2021 advises Wilmot Township Council that an investigation under the Township of Wilmot's Code of Conduct for Council (the Code) as a result of an application for an investigation (Inquiry 2021-06) concludes that no contravention has occurred.

A. Context

2. Amendments to the *Municipal Act, 2001* passed in 2006 added a new part to the Act entitled "Accountability and Transparency" which authorized municipalities to establish codes of conduct for members of the council and to appoint an Integrity Commissioner. The Township of Wilmot adopted a Code of Conduct for Elected Officials on November 19, 2007.

3. The Township of Wilmot retained me in January 2014 to serve as its Integrity Commissioner under the terms of what are now section 223.3 of the Ontario *Municipal Act, 2001*. Under that section, the Integrity Commissioner is responsible for performing in an independent manner the functions assigned by the municipality including "the application of the code of conduct for members of council" and "the application of any procedures, rules and policies of the municipality ... governing the ethical behaviour of members of council."

B. The Request for an Investigation

4. A resident of Wilmot Township filed an application for an investigation in accordance with the proper procedure for the submission of a formal complaint under the Township of Wilmot Code of Conduct for Elected Officials.

5. The appellant's submission makes a number of allegations against Councillor Angie Hallman based on four parts of the Code in the following order:

- the Statement of Principle
- Conduct at Council/Committee Meetings
- Conflicts of Interest
- Encouragement of Respect for Municipality, its Bylaws and Policies

As discussed in Reports IC2021-04 and IC2021-05, the statement of principle found in the Code creates no legally enforceable obligations and therefore cannot be applied to evaluate certain allegations made by the appellant (see Paragraph 15 below). I will first address the contentions made in relation to three substantive rules included in the Code noted above and will afterwards consider those made in this request under the statement of principle. In the present political

climate in the Township of Wilmot, I believe that it is in the interests of members of Council and the community to consider all allegations made in this submission and two others filed by the same resident to help to clarify the scope and applicability of the Township's Code of Conduct.

6. The appellant contends that Councillor Hallman's actions during the April 26, 2021 meeting of Council and other evidence "given to me" constitute violations of the provisions of the Code that warrant a number consequences including an apology to two delegates and demonstrate that she should be "suspended, or at the very least, removed from any work in regard to the Prime Ministers Path." The applicant also asserts that she "needs to be removed from council or suspended until a complete investigation can be done." However, as will be discussed later in this report (Paragraphs 22 and 23), some of these actions are outside the legislated mandate of the Integrity Commissioner and even of Wilmot Council itself.

A Note on Confidentiality:

7. The *Municipal Act, 2001* (s.223.6 (2)) directs that an Integrity Commissioner shall only disclose "such matters as in the Commissioner's opinion are necessary for the purposes of the report." In keeping with the responsibility of the Integrity Commissioner to respect confidentiality during the conduct of an inquiry, I will continue to hold the name of the appellant in confidence in this report.

C. Background

8. I spoke with the appellant and Councillor Hallman by phone to clarify some of the matters raised in the submission. I shared an anonymized copy of the resident's submission with Councillor Hallman and requested that she provide me with a written response. To understand the allegations submitted by the appellant, I viewed the video recordings of the April 26, 2021 and July 27, 2020 Council meetings a number of times, in particular the portion of each meeting when members of the public appeared as delegations since one of the Code provisions that I have been asked to consider relates to Councillor Hallman's actions during the April 26 presentations and another is related to statements she is alleged to have made at the July 27 meeting. I have also clarified certain points made in the applicant's submission with the Clerk's Office.

D. The Allegations

Conduct at Council/Committee meetings

9. The appellant states that during presentations at the April 26, 2021 Council meeting "by delegates who opposes the removal of the statues," Councillor Hallman, among other things,

“continued to do other things and not listen to the presentations,” such as “checking and typing emails, checking her phone ... purposefully turns off her camera.” The submission includes a general description of what the appellant observed and a detailed list of eight examples of these actions between approximately 2:50 and 3:15 on the video timer.

10. I reviewed the video of the entire meeting, paying particular attention to the period when the eight incidents listed by the appellant occurred. While I concur that Councillor Hallman was not looking directly at a camera throughout this time and was perhaps more restless than other members of Council, her actions were not obviously selective (that is, occurring only when certain viewpoints were being expressed by delegations or Council colleagues) or blatantly disrespectful. In addition, the video offers no confirmation that Councillor Hallman was actually “checking and typing emails” or “checking her phone” or “not listening to the presentation.”

In her written response to me, Councillor Hallman responded to these allegations: “As in chambers I have utilized two or more computers/devices to ensure I can follow along with the agenda, staff reports and presentation materials. This has continued throughout the virtual council meetings. I do periodically write down questions to seek clarification. I also periodically make corrections to statements or prepared questions when new information is presented in real time. ... With respect to the April 26th council meeting, I confirm that ... I was writing down questions and notes as the presentation progressed.” Councillor Hallman also included an image from a meeting in Council Chambers in May 2019 that shows two devices open in front of her during Council deliberations.

She also states that from time to time during meetings both virtual and live meetings, and specifically during the April 26 meeting, she has had to “momentarily excuse myself for matters not relevant to this complaint and of a personal nature and the Clerk can verify this.” The Clerk has done so.

11. My examination of the April 26 Council meeting and the explanations offered by Councillor Hallman (verified by Township staff) do not sustain the allegation that these actions constitute a violation of the Wilmot Code of Conduct for Elected Officials.

Conflicts of Interest

12. The appellant submits a photocopy of what is claimed to be an email “given to me” which “clearly shows a conversation between from Cheyanne Chaniece and Councillor Hallman.” The

appellant further claims that the Councillor “was having at least one conversation with the group who threw paint on the SJAM statue” and that “she is working behind the scenes” with the group.

First, the image in the photocopy included in the application is not an email but an undated social media posting by Cheyanne Chaniece to members of a group advocating for the removal of the Macdonald statue. I have located and reviewed the full post and conclude that the applicant is basing this allegation strictly on Ms. Chaniece’s understanding of an exchange she had with Councillor Hallman and which she communicated to members of her group (apparently not including the appellant). In other words, nothing written or spoken by Councillor Hallman herself appears in the material submitted to me or in responses to the original post.

This allegation amounts to hearsay evidence: the report of another person's words by a third party, which is usually disallowed as evidence in a court of law. Since the affidavit filed with an application for an investigation specifically cautions against “providing false information or hearsay as fact,” evidence found to be hearsay is not admissible under the Code.

Moreover, in Councillor Hallman’s written response to me, she states that “I did not reply to it, comment on it, share it or interact with it in any way. I was not aware of it and was only aware of it when I searched for it when I received this complaint.” I am prepared to accept this explanation and conclude that the social media post is not a verifiable indication that Councillor Hallman was “working behind the scenes” with the group in question.

The applicant’s submission also makes other allegations that arise out of misconstruing the social media post and that are confusing and highly speculative. They will not be considered in this inquiry.

My investigation does not sustain the allegation that this episode demonstrates that Councillor Hallman is in violation of the Wilmot Code of Conduct for Elected Officials.

Encouragement of Respect for Municipality, its Bylaws and Policies

13. The appellant states that during “the Council meeting on July 27¹, Councillor Hallman referred to the paint on the Sir John A. McDonald [sic.] statue as protest not vandalism” and goes on to assert that this “is not in line with the bylaws of the township which strictly prohibit damage

¹ NOTE: This allegation refers to events that occurred ten months before the other matters addressed in this Inquiry.

to township property, etc. This is clearly vandalism and cannot be condoned as protest. She clearly has given permission to anyone wanting to throw paint on something out of 'protest' and not fear any type of punishment, etc. This is a clear lack of encouraging respect for the Municipality, its bylaws and policies."

14. To investigate this allegation as laid out in the application for an inquiry, I twice reviewed the entire video recording and minutes of the July 27, 2020 Council meeting to locate specific comments made by Councillor Hallman in reference to a "protest" over the statue as referred to by the applicant. When I found none, I requested that the appellant provide me with some idea of the time when such statements were made so that I could give proper consideration to the allegation as filed. In reply, the appellant indicated that the request was not actually based exclusively on the July 27, 2020 meeting but on "all her inappropriate behaviour, going back to that point." I was directed by the appellant to "ignore that portion of the complaint and focus on the others" and will do so.

There are, however, procedural and substantive issues that arise from this allegation that I will address in a separate report to Council.

The Statement of Principle

15. As was explained in IC Reports 2021-04 and 2021-05, it is the responsibility of the Integrity Commissioner to apply the substantive rules included in the Code to the facts of the situation brought to his attention by the appellant to determine whether the actions or words of an elected official can be deemed to be a violation of those rules. However, under what may be called the ordinary principles of statutory interpretation, a statement of principle does not create a clear enforceable obligation.² Rather, it establishes a framework for expected behavior and decision-making that may be used to interpret substantive obligations that are found elsewhere in the Code that can be applied to the behaviour of an individual Member.

16. The appellant contends that Councillor Hallman has violated the portion of the statement of principle that states "All members to whom this Code of Conduct applies shall serve their constituents in a conscientious and diligent manner." The allegation relates to her failure to respond to two email requests from a constituent (one on April 22, 2021 and one on April 24, 2021) who asked her to "have an email blast go out to her constituents regarding the First Peoples

² See, for example, Township of Madawaska Valley Integrity Commissioner File 2016-03, August 9, 2018.

Group being hired and presenting at the April 26th council meeting.” The appellant states that in the first instance the request “went purposefully unacknowledged by Councillor Hallman and no email was sent out” and in the second case the request “was ignored and unacknowledged and no email as sent out to the people of her ward.”³ The appellant refers as well to a third email (also dated April 24) sent by the same constituent “on a completely different topic” that Councillor Hallman replied to “within 24 hours, yet failed to acknowledge the 2 email requests.”

17. This allegation – like some others submitted by the applicant – attributes motivations to Councillor Hallman that cannot be verified independently: that the original email request “went purposefully unacknowledged” [emphasis added] and that, by failing to send out an email related to the presentation by the First Peoples Group, “People in her ward were purposefully left out of hearing” the presentation by the First Peoples Group [emphasis added]. On these grounds, Councillor Hallman’s decision on these messages is considered by the applicant to be an indication that she failed to serve her “constituents in a conscientious and diligent manner”.

As opposed to speculations about Councillor Hallman’s alleged rationale, there is no ambiguity about the facts: Councillor Hallman did not respond to the first two emails that requested she send out a message but did respond to the third one that addressed a specific matter in her ward.

18. If the statement of principle were actually applicable (but see Paragraphs 5 and 15), this allegation would be untenable on at least two grounds.

- As discussed in IC Report 2020-03 (March 15, 2021) at Paragraph 18: “The decision to respond to every email sent to an elected official is discretionary and contextual. By that I mean it is up to the individual elected official to determine whether to answer email messages and, if so, which ones. Many factors enter into that decision such as the volume of messages, the information or concerns being conveyed and, sometimes, the tone of the message.” The conclusion in that inquiry was that “an individual member of council may choose to respond or not to ... messages” and that a failure to do so does not in itself constitute a violation of the Code of Conduct. The same conclusion applies in this inquiry.
- Wilmot Township has a communication specialist employed to ensure the public and media are accurately informed in a timely manner on all matters being addressed by Council. It is

³ Note: the appellant did not initiate these requests; the resident who made the request identifies herself during the April 26 meeting. In addition, on the recording of the meeting the resident is heard to state that the request was to send a message “to her email list” not to “the people in her ward” as declared in the submission.

not up to members of Council themselves to communicate notifications or other information to constituents except as a matter of courtesy and perhaps as a supplement to what the municipality itself has circulated, and then only to those residents who have agreed to share their contact information. Furthermore, because of privacy concerns, a member of Council does not have access to a comprehensive database of constituents, so in any event would not be able to comply with the request as characterized in this submission (that is, to send a message to “her constituents” or “the people of her ward”). A decision not to do so does not constitute a violation of the Code of Conduct.

19. Councillor Hallman was asked publicly by the constituent during the April 26 meeting why she did not send out the message as requested and also provided me with a written explanation. She has determined that, for some Township residents she is acquainted with, communicating in an email blast about “certain issues” (primarily associated with the debate over the PMP) would be “unnecessarily traumatic” and that she believes that it would be consistent with “upholding the Township’s values of diversity and inclusion” to respect those “fears” (her word). Basing her response to this request on firm convictions that may differ from those held by other members of Council or the broader community does not constitute a violation of the Code of Conduct.

20. Councillor Hallman informed me that she later addressed the concerns expressed by some residents at the April 26 meeting who felt that they were unaware of various developments in Wilmot because they did not routinely visit the Township website. She did this by sending an email to those on her mailing list with information on how to receive notifications on various topics. I view this as an example of serving her constituents conscientiously, albeit after concerns were registered.

21. Since there is no obligation on a Councillor to respond to every email or to undertake the request made by the resident and the statement of principle is not applicable, there is no violation of the Code of Conduct for Elected Officials.

E. Sanctions

22. It was noted in Paragraph 6 (above) that the applicant urged that a number sanctions be imposed on Councillor Hallman including an apology to two delegates (“for her lack of attention

and unprofessional behaviour”), suspension or removal “from any work in regard to the Prime Ministers Path” and that she “be removed from council or suspended.”

Under section 223.2 (1) of the *Ontario Municipal Act, 2001*, “A municipality shall establish codes of conduct for members of the council of the municipality” and under 223.4 (5) of the same *Act*, the municipality “may impose either of the following penalties on a member of council or of a local board if the Commissioner reports to the municipality that, in his or her opinion, the member has contravened the code of conduct:

1. A reprimand.
2. Suspension of the remuneration paid to the member in respect of his or her services as a member of council ... for a period of up to 90 days”

Only a judge has the power to declare the seat of a member of a municipal council vacant and that can only happen when that member has contravened the provisions of the *Municipal Conflict of Interest Act*.

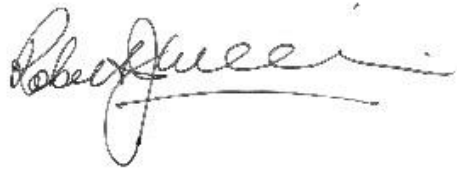
23. On the basis of Ontario legislation, two of the sanctions advocated by the appellant (removal from council or suspension) are not permitted and those that are found in legislation are only open to Council when an Integrity Commissioner has determined that a violation of the Code has occurred. It is presumably possible for a Council to remove one of its members from a committee or other working group under its Procedural Bylaw but such a decision is not predicated on the recommendation of the Integrity Commissioner.

In any case, I do not find that the allegations made against Councillor Hallman provide plausible and convincing evidence that she is in violation of the Township Code of Conduct for Elected Officials and therefore no sanctions are recommended.

24. Based on the foregoing, I find that Councillor Angie Hallman has not violated the Township of Wilmot Code of Conduct for Elected Officials. The application is dismissed.

Recommendation

That Council receive for information the Integrity Commissioner’s Report 2021 – 06 dated October 20, 2021.

A handwritten signature in black ink, appearing to read "Robert J. Williams". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert J. Williams, Ph.D.
Integrity Commissioner, Township of Wilmot



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Rural Ontario
Municipal Association

Message from the Chair



The Rural Ontario Municipal Association (ROMA) is dedicated to strengthening Ontario's rural municipal communities. As the rural arm of the Association of Municipalities of Ontario (AMO), ROMA advocates through AMO on rural matters to the provincial and federal governments.

In 2020, our commitment to promoting, supporting and enhancing strong and effective rural governments only grew stronger. We started the year with one of our largest annual conferences yet, welcoming more than 1,300 participants to connect, learn and advocate on behalf of their communities. It would be the last time municipal leaders could gather in person before the global COVID-19 pandemic.

In response to the pandemic, ROMA's Board met more frequently to ensure leadership and support was in place for rural municipalities, and we communicated more often with members to share our work and learning.

About 430 of Ontario's 444 municipalities are rural or have rural areas inside their borders. The Board includes 10 zone representatives from all corners of the province, and at-large members, drawn from AMO Board's Rural Caucus. Reflecting a broad cross-section of rural Ontario, the Board is prepared to address the challenges being faced by Ontario's diverse rural communities.

With rural communities' small tax bases and few tools to generate revenues, addressing financial needs was a major priority for the Board in 2020. ROMA supported AMO and worked with other municipal organizations in pressing for critical funding support. This single, unified municipal voice helped achieve the *Safe Restart* funding agreement with both the federal and provincial governments, securing \$4 billion to support municipalities through the COVID-19 pandemic in 2020. 2020 also saw the Government of Ontario commit to maintaining stable funding for the *Ontario Community Infrastructure Fund*, which provides smaller, rural and remote communities with reliable dollars for important core infrastructure. ROMA appreciated this move.

Broadband was another top priority for the Board in 2020. Rural communities were already struggling when the pandemic hit, and the pandemic only served to highlight the impact of poor rural connectivity on education, the economy and quality of life rural communities. Again, ROMA supported AMO and joined our municipal peers in advocating strongly for broadband funding from federal and provincial governments.

In addition, ROMA provided practical support for municipal leaders by developing two resource guides tailored specifically to help Ontario's rural municipal officials understand approaches to improving broadband access, breaking down the technical, legal and regulatory complexities.

Given the pandemic, ROMA provided a rural lens to other major policy priorities such as public health, long-term care and community paramedicine. We continued to engage on non-pandemic matters. We provided input on Ontario's new farm safety legislation, the *Security from Trespass and Protecting Food Safety Act*, which aims to secure safety on farms, while respecting people's rights to express their views. Environmental matters, such as flooding and waste diversion were also top of mind and part of the Board's advocacy efforts in 2020.

2020 was one of ROMA's busiest years ever, and I want to thank my colleagues on the Board for their dedication and commitment. While busy serving their own communities during an unprecedented global crisis, they came together to provide leadership and advocate for solutions that would serve all rural municipalities. Thank you for the honour of serving as your Chair.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Allan Thompson', with a long, sweeping horizontal line extending to the right.

Allan Thompson
ROMA Chair

Broadband was another top priority for the Board in 2020. Rural communities were already struggling when the pandemic hit, and the pandemic only served to highlight the impact of poor rural connectivity on education, the economy and quality of life rural communities.

2020 Board Members



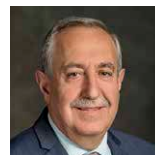
Allan Thompson

ROMA Chair/
AMO Rural Caucus/
Zone 4 Representative
Mayor, Town of Caledon



Chris White

1st Vice Chair/
Zone 2 Representative
Mayor, Township of
Guelph Eramosa



Eli El-Chantiry

2nd Vice Chair/
Zone 8 Representative
Councillor, City of
Ottawa



Dennis Crevits

Zone 1 Representative
Councillor, Municipality
of Central Elgin



Peter Emon

AMO Rural Caucus
Reeve, Town of Renfrew



Lloyd Ferguson

Zone 3 Representative
Councillor, City of
Hamilton



Kevin Holland

Zone 10 Representative
Mayor, Township of
Conmee



Robin Jones

AMO Rural Caucus
Mayor, Village of
Westport



Kim Love

Zone 6 Representative
Mayor, Township of
Madawaska Valley



Christa Lowry

AMO Rural Caucus
Mayor, Municipality of
Mississippi Mills



Christine Robinson

AMO Rural Caucus
Mayor, Municipality of
West Grey



Pam Sayne

Zone 5 Representative
Councillor, Township of
Minden Hills



Bill Vrebosch

AMO Rural Caucus/
Zone 9 Representative
Councillor, City of
North Bay



Cameron Wales

Zone 7 Representative
Councillor, City of
Brockville

ROMA Zones

ZONE 1

- City of Chatham-Kent
- Elgin County
- Essex County
- Lanark County
- Middlesex County

ZONE 2

- Bruce County
- Grey County
- Huron County
- Perth County
- Wellington County
- Region of Waterloo

ZONE 3

- County of Brant
- Haldimand County
- City of Hamilton
- Niagara Region
- Norfolk County
- Oxford County

ZONE 4

- Dufferin County
- Halton Region
- Peel Region
- Simcoe County
- York Region

ZONE 5

- Durham Region
- Haliburton
- City of Kawartha Lakes
- District of Muskoka
- Northumberland County
- Peterborough County

ZONE 6

- Frontenac County
- Hastings County
- Lennox and Addington
- Prince Edward County
- Renfrew County

ZONE 7

- Leeds & Grenville
- Stormont, Dundas and Glengarry

ZONE 8

- Lanark County
- City of Ottawa
- Prescott and Russell, United Counties

ZONE 9

- Algoma District
- Cochrane District
- City of Greater Sudbury
- Manitoulin District
- Nipissing District
- Parry Sound District
- Sudbury District
- Timiskaming District

ZONE 10

- District of Kenora
- Rainy River District
- Thunder Bay District

2020 Highlights



ROMA Conference

The 2020 ROMA Conference was the last time that municipal leaders in Ontario gathered in person before the COVID-19 pandemic. More than 1,300 participants gathered to connect, learn and advocate. Key session topics related to rural health care including public health and paramedics, while other sessions focused on broadband expansion and social issues like the opioid crisis. There were also more than 350 delegation meetings with local leaders and provincial officials.

Broadband Resource Guides

The pandemic highlighted the critical need to improve broadband connectivity in rural areas. To help municipal leaders get on the learning curve and carve a path forward, ROMA created two comprehensive guides tailored specifically for Ontario's rural municipalities. The *Municipal Primer* gives an overview of the broadband landscape, including Canada's regulatory framework. The *Municipal Roadmap*, then lays out components of a municipal connectivity plan that municipal councils and staff can implement to create local solutions.

The documents reflect extensive research and the input of leaders across Ontario who have been working in this area. Municipal input was broad, including the wardens' caucuses, municipal associations and broadband projects such as the Eastern Ontario Regional Network (EORN), Southwestern Integrated Fibre Technology (SWIFT) and Blue Sky Net, among others. The resources also reflect insights from leading researchers at the University of Guelph and Ryerson University who specialize in rural broadband.



Policy Priorities



Municipal fiscal relief: Alongside AMO and FCM at the federal level, ROMA advocated for fiscal relief to help municipalities manage the additional costs of services during COVID and the loss in revenues. Rural communities have a small tax base to begin with and few tools to raise funds. The Safe Restart agreement with the federal and provincial government, valued at \$4 billion in 2020, was critical to maintaining services and financial sustainability.



Broadband funding: During the pandemic and beyond, broadband is essential to daily life. People in all communities depend on it to work, learn, socialize and create economic opportunity. For rural communities in particular, it can help overcome the challenges of great distances and small populations. It also provides opportunity to grow communities through remote work. ROMA worked along side others in the municipal sector to advocate for substantial, expedited funding to address the need. Canada's Universal Broadband Fund, and the provincial ICON program represent large and important investments.



Farm safety regulations: ROMA supported measures by the Ontario Government to help secure safety on farms, while respecting people's rights to express their views. In 2020, it provided the Province with input on the regulation under the *Security from Trespass and Protecting Food Safety Act*. ROMA advocated for clear definitions and rules that minimize red tape to achieve the Act's goals. Peaceful protests should also ensure the safety of farms, farm families and their staff, and our food supply.



Climate change: Many rural communities in particular are hard hit by annual flooding driven by increased extreme weather. ROMA has been advocating for greater investments in water and stormwater infrastructure, and flood mitigation and preparedness.



Blue Box and Waste Diversion: ROMA continued to work on the transition of waste diversion programs to full producer responsibility. Full producer responsibility places the accountability for end-of-life management for products and packaging with the party most able to influence their sustainability – the producers who make them. ROMA has worked with AMO and other stakeholders to advocate for this transition and to identify future programs and items that should be designated for waste diversion programs.

Rural Ontario Municipal Association
Financial Statements
For the year ended December 31, 2020

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Independent Auditor's Report

To the Directors of Rural Ontario Municipal Association

Opinion

We have audited the financial statements of Rural Ontario Municipal Association ("ROMA"), which comprise the statement of financial position as at December 31, 2020, and the statements of operations, changes in net assets and cash flows for the year then ended, and a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of ROMA as at December 31, 2020, and its results of operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of ROMA in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing ROMA's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate ROMA or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing ROMA's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.



Auditor's Responsibilities for the Audit of the Financial Statements (continued)

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of ROMA's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on ROMA's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause ROMA to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants
Oakville, Ontario
June 11, 2021

Rural Ontario Municipal Association Statement of Financial Position

December 31	2020	2019
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Assets

Current

Cash	\$ 107,271	\$ 71,786
Investments (Note 3)	916,281	1,113,848
Accounts receivable	815	2,213
Prepaid expenses (Note 5)	35,930	90,316
Due from Association of Municipalities of Ontario (Note 4 (a))	1,023	-
	\$ 1,061,320	\$ 1,278,163

Liabilities and Net Assets

Current

Accounts payable and accrued liabilities	\$ 57,644	\$ 51,571
Government remittances payable	15,443	43,539
Due to Association of Municipalities of Ontario	-	5,824
Deferred revenue (Note 5)	244,900	621,265
	317,987	722,199

Net assets

Internally restricted funds		
Teeny Tiny	32,000	32,000
Conference	300,000	300,000
Unrestricted	411,333	223,964
	743,333	555,964
	\$ 1,061,320	\$ 1,278,163

On behalf of the Board:

_____ Director

_____ Director

The accompanying notes are an integral part of these financial statements.

Rural Ontario Municipal Association Statement of Operations

For the year ended December 31	2020	2019
Revenue		
Conference fees	\$ 947,920	\$ 813,600
Interest income	11,492	18,301
	959,412	831,901
Expenditures		
Conference (Note 4 (b))	555,657	533,461
Administration (Note 4 (b))	158,835	81,196
Office and general	24,385	64,467
Sponsorship	20,000	38,000
Professional fees	12,916	7,684
Other	250	1,342
	772,043	726,150
Excess of revenue over expenditures	\$ 187,369	\$ 105,751

The accompanying notes are an integral part of these financial statements.

Rural Ontario Municipal Association Statement of Changes in Net Assets

For the year ended December 31

	<u>Internally Restricted Funds</u>			Total 2020	Total 2019
	Teeny Tiny	Conference	Unrestricted		
Balance, beginning of year	\$ 32,000	\$ 300,000	\$ 223,964	\$ 555,964	\$ 450,213
Excess of revenue over expenditures	-	-	187,369	187,369	105,751
Balance, end of year	\$ 32,000	\$ 300,000	\$ 411,333	\$ 743,333	\$ 555,964

The accompanying notes are an integral part of these financial statements.

Rural Ontario Municipal Association Statement of Cash Flows

For the year ended December 31	2020	2019
Cash provided by (used in)		
Operating activities		
Excess of revenue over expenditures	\$ 187,369	\$ 105,751
Changes in non-cash working capital balances		
Accounts receivable	1,398	(1,507)
Prepaid expenses	54,386	(21,052)
Accounts payable and accrued liabilities	6,073	32,058
Government remittances payable	(28,096)	4,276
Due (from) to Association of Municipalities of Ontario	(6,847)	4,411
Deferred revenue	(376,365)	150,605
	(162,082)	274,542
Investing activity		
Redemption (purchase) of investments	197,567	(305,842)
Increase (decrease) in cash during the year	35,485	(31,300)
Cash, beginning of year	71,786	103,086
Cash, end of year	\$ 107,271	\$ 71,786

The accompanying notes are an integral part of these financial statements.

Rural Ontario Municipal Association

Notes to Financial Statements

December 31, 2020

1. Basis of Presentation

Rural Ontario Municipal Association ("ROMA") is the rural municipal voice of the Province of Ontario. ROMA is affiliated with the Association of Municipalities of Ontario ("AMO") and a number of its Board members serve on the AMO Board of Directors. ROMA brings the rural perspective to the policy work of AMO, focusing on matters which affect rural communities so that they are brought to the attention of the provincial and federal governments. Policy and research activities undertaken by ROMA are performed by the staff of AMO and from time to time, consultants.

2. Significant Accounting Policies

These financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations. Accounting standards for not-for-profit organizations require entities to select policies appropriate for their circumstances from choices provided in the specific standards. The following are details of the choices selected by ROMA and applied in these financial statements.

Funds

The Teeny Tiny reserve was established by ROMA to provide financial support for the Teeny Tiny summit initiative, which is designed to help the smallest of communities make the most of their potential through an asset based approach.

The Conference reserve was established to sponsor other not-for-profit organizations at various conferences.

These funds are internally restricted by the Board of Directors. Funds are not available for general purposes and require the approval of the Board prior to use.

Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the year. Actual results could differ from those estimates.

Financial Instruments

Financial instruments are recorded at fair value when acquired or issued. In subsequent periods, financial instruments are reported at cost or amortized cost less impairment. Financial assets are tested for impairment when changes in circumstances indicate the asset could be impaired. Transaction costs incurred on the acquisition, sales or issue of financial instruments are expensed for those items re-measured at fair value at each statement of financial position date and charged to the financial instrument for those measured at amortized cost.

Revenue Recognition

Conference fees are recognized as revenue when the event occurs. Interest income is recognized as revenue in the period it is earned.

Rural Ontario Municipal Association

Notes to Financial Statements

December 31, 2020

3. Investments

	<u>2020</u>	<u>2019</u>
One Investment High Interest Savings Account (HISA) bearing interest at bank prime rate less 1.535% (2019 - bank prime rate less 1.535%)	\$ 916,281	\$ 1,113,848

4. Related Party Balance and Transactions

- a) Amounts due from AMO are unsecured, receivable on demand and are non-interest bearing.
 - b) Included in administration expense is \$69,461 (2019 - \$63,194) of administration and occupancy costs charged by AMO. Included in conference expenses is \$35,000 (2019 - \$35,000) of administration and support costs charged by AMO. These transactions are measured at the exchange amount, which is the amount of consideration established and agreed to by both parties.
-

5. Annual Conference

The registration and sponsorship fees received in fiscal 2020 relating to the 2021 conference are reflected as deferred revenue. The deposits and advances paid by ROMA to its suppliers and vendors for the 2021 conference in fiscal 2020 are reflected as part of prepaid expenses.

Rural Ontario Municipal Association

Notes to Financial Statements

December 31, 2020

6. Financial Instruments Risks

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows from a financial instrument will fluctuate because of market changes in interest rates. ROMA is exposed to interest rate risk on its investments.

Liquidity risk

Liquidity risk is the risk that ROMA will encounter difficulty in meeting the obligations associated with its financial liabilities. ROMA is exposed to this risk mainly in respect of its accounts payable and accrued liabilities and government remittances payable. ROMA reduces exposure to liquidity risk by ensuring that it maintains adequate cash reserves to pay creditors.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. ROMA's main credit risks relate to its accounts receivable, investments, and amounts due from AMO. Based on creditworthiness of ROMA's counter parties, no allowance for doubtful accounts is required.

It is management's opinion that ROMA is not exposed to significant interest rate, credit or liquidity risk arising from its financial instruments.

7. COVID-19

On March 11, 2020, the World Health Organization declared the outbreak of a novel coronavirus ("COVID-19") as a global pandemic which continues to spread throughout Canada and the world. In the current year, ROMA's conference was held in person prior to the outbreak of COVID-19, however the 2021 conference was held virtually subsequent to year-end.

Given the daily evolution of the COVID-19 outbreak and the global responses to curb its spread, ROMA is not able to estimate all of the effects of the COVID-19 outbreak on its results of operations, financial condition, or liquidity at this time.



Rural Ontario
Municipal Association

**Rural Ontario
Municipal Association
(ROMA)**

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