

**CORPORATION OF THE TOWNSHIP OF EAST ZORRA-TAVISTOCK COUNCIL
2022 - 2026**

AGENDA

**for the Meeting to be held on Wednesday July 5, 2023 at the
Innerkip Community Centre, 695566 17th Line, Innerkip, Ontario, at 9:00 a.m.**

1. Call to order and opening remarks
2. Approve Agenda
3. Disclosure of Pecuniary Interest and General Nature Thereof
4. General Business:
 - a) Confirm June 21, 2023, Council Meeting Minutes
5. Delegations & Appointments:
 - a) 9:15 a.m. – Court of Revision (McLean Drain 2023)
 - b) 9:30 a.m. – MVA Application A-5-2023 (Maurer)
6. Reports of Municipal Officers and Committees:
 - a) Conferences and Seminars
 - b) County Council – Updates & Questions
 - c) Staff Reports – Updates & Questions
 - d) Staff Report - #CIO2023 – 04 re: Tavistock Spray Pad Bid Award
 - e) Staff Report - #CBO2023 – 07 re: Building, Development & Drainage Reporting
 - f) Staff Report - #PW2023 – 07 re: Public Works Reporting
7. By-laws:
 - a) By-law #2023-23 – Tavistock Drain 1 Abandonment By-law
 - b) By-law #2023-24 – ZBA Application ZN2-23-03 (Twp. of EZT) –
Additional Residential Units (ARUs)
 - c) By-law #2023-19 – McLean Drain 2023 Provisional By-law (3rd Reading only)
8. Other and Unfinished Business:
9. Closed to the Public Session *as authorized under s. 239 of the Municipal Act*:
10. Confirming By-law
11. Adjourn

Placeholder Page for Agenda Item 1 –
Call to order and opening remarks

Use this page to note any opening remarks
you wish to make.

2.

Placeholder Page for Agenda Item 2 – Approval of the Agenda

Use this page to note items you would like added to the agenda.

3.

Placeholder Page for Agenda Item 3 –
Disclosure of Pecuniary Interest

Use this page to note any Pecuniary Interests
you wish to declare at the meeting.

The Council of the Township of East Zorra-Tavistock met at the Innerkip Community Centre, Innerkip, Ontario at 7:00 p.m. on Wednesday June 21, 2023.

Members Present: Mayor Phil SCHAEFER, Deputy Mayor Brad SMITH and Councillors Matthew GILLESPIE, Scott RUDY, Jeremy SMITH, Steven VAN WYK and Scott ZEHR.

Members Absent: None.

Staff Present: CAO-Treasurer Karen DePrest, Clerk Will Jaques, Public Works Manager Tom Lightfoot and CBO John Scherer.

Mayor SCHAEFER welcomed everyone to the meeting. Councillor SMITH noted that June 21st is National Indigenous Peoples Day, as well as the 2023 Summer Solstice. Councillor SMITH also offered his congratulations to Terra Nova Nordic Spa on winning the Best New Tourism Product Award through Tourism Oxford. Lastly, Councillor SMITH noted the upcoming Innerkip & District Lions Club Canada Day Long Weekend event, to be held June 30th - July 2nd in Innerkip Park.

Approve
Agenda

1. Moved by: Brad SMITH
Seconded by: Scott ZEHR
Resolved that Council approve the agenda for the June 21, 2023, meeting as printed and circulated.

CARRIED.

PECUNIARY INTERESTS:

- None.

Confirm
Minutes -
Council

2. Moved by: Jeremy SMITH
Seconded by: Scott RUDY
Resolved that Council confirm the Minutes of the June 7, 2023, Council Meeting, as printed and circulated.

CARRIED.

Correspondence & Reports – No Resolutions:

- Blandford-Blenheim – Terminate Building Services Agreement
- WSP – Secondary Plan Project Update Memo
- Staff Report - #BCO2023 – 05 re: By-law Compliance Reporting
- Staff Report - #CSM2023 – 08 re: Corporate Services Reporting
- Staff Report - #CAO2023 – 07 re: CAO-Treasury Reporting

Correspondence & Reports – Resolutions Following:

| | |
|---|---|
| Blandford - Blenheim – Terminate Building Services Agreement | Council reviewed the correspondence from the Township of Blandford-Blenheim regarding terminating the building services agreement with the Township of East Zorra-Tavistock. |
| WSP – Secondary Plan Project Update Memo | Council reviewed the correspondence from WSP, the planning consultants for the Township of East Zorra-Tavistock Secondary Plan project, regarding the status of the project. |
| Conferences and Seminars | The Association of Municipalities of Ontario (AMO) Conference is being held in London from August 20-23, 2023. |
| County Council- Updates & Questions | Mayor Schaefer provided an update on Oxford County Council activities. |
| Staff Report #BCO2023 – 05 re: By-law Compliance Reporting | Council reviewed the Monthly By-law Compliance Report from By-law Compliance Officer Melanie Shiell. |
| Staff Report #CSM2023 – 08 re: Corporate Services Reporting | Clerk Will Jaques reviewed the Monthly Corporate Services Report with Council. |
| Public Meeting - Open | 3. Moved by: Scott ZEHR Seconded by: Matthew GILLESPIE Resolved that Council does now adjourn to a Public Meeting in accordance with the provisions of the Planning Act at <u>7:15 p.m.</u> |

CARRIED.

Public Meeting
for ZN2-23-03
(Township of
East Zorra-
Tavistock)

PUBLIC MEETING – TOWNSHIP OF EAST
ZORRA-TAVISTOCK ZONE CHANGE
APPLICATION ZN2-23-03 (ENTIRE
TOWNSHIP).

Meghan House from the County of Oxford Planning Department was in attendance to present and comment on her report #CP2023-178, regarding the Township-wide Zone Change Application for Additional Residential Units (ARUs).

Council asked questions of the planner and Staff. No members of the public who were present asked questions or made comments. Council reviewed and considered the comments made in making its decision regarding this application.

Council
Reconvene

- 4. Moved by: Steven VAN WYK
Seconded by: Scott RUDY
Resolved that the Public Meeting does now adjourn and Council reconvenes at 7:34 p.m.

CARRIED.

- 5. Moved by: Jeremy SMITH
 Seconded by: Scott ZEHR
 Resolved that the Council of the Township of East Zorra-Tavistock approve-in-principle the proposed Zoning By-Law amendment (File No. ZN2-23-03) to introduce amendments to Township Zoning By-Law No. 2003-18 and that the By-law be brought back to a subsequent Council meeting;

And further that Council direct Township staff to work with County staff to implement a process to confirm servicing capacity, which is acceptable to both the County and Township, prior to approval of any Building Permit to establish an Additional Residential Unit;

And further that Council direct Township staff to review and report back to Council regarding implementation of a licensing/registration system or other process to confirm compliance with all municipal requirements;

And further that Planning staff be requested to report back to Council once the amended By-law provisions have been in effect for at least six months to identify any implementation or interpretation issues and the number and nature of Minor Variance applications submitted to facilitate Additional Residential Units.

CARRIED.

At 7:39 p.m., John Cockburn presented to Council regarding his concerns with excess water-flow and flooding in the Innerkip Meadows subdivision.

Staff Report
 #CAO2023 – 07
 re: CAO-
 Treasury
 Reporting

CAO-Treasurer Karen DePrest reviewed the Monthly CAO-Treasury Report with Council.

By-law:

 1st & 2nd
 Reading

- 6. Moved by: Scott ZEHR
 Seconded by: Steven VAN WYK
 Resolved that the following by-law be read a first and second time:
 - 2023-21 – Agreement with Tavistock and District Curling Club

CARRIED.

By-law: 7. Moved by: Matthew GILLESPIE
 3rd & Final Seconded by: Jeremy SMITH
 Reading Resolved that the following by-law be read a third
 and final time:
 • 2023-21 – Agreement with Tavistock and
 District Curling Club

CARRIED.

Confirming 8. Moved by: Jeremy SMITH
 By-law Seconded by: Brad SMITH
 Resolved that By-law #2023-22 being a by-law to
 confirm the proceedings of Council held
 Wednesday June 21, 2023, be read a first, second
 and third time this 21st day of June, 2023;

And further that the Mayor and Clerk are hereby
 authorized to sign the same and affix the corporate
 seal thereto.

CARRIED.

Adjourn 9. Moved by: Scott RUDY
 Seconded by: Steven VAN WYK
 Resolved that Council does now adjourn at
8:29 p.m.

CARRIED.

Will Jaques, Clerk

Phil Schaefer, Mayor

Prior to adjourning to the COR, East Zorra-Tavistock will appoint three (3) members, and name a Chairperson for the COR.

AGENDA for COURT OF REVISION
McLean Drain 2023

1. Court opens (by resolution)
2. Written appeals received to the drain? (Clerk)
3. Chair Asks Engineer for comments

If there are verbal appeals:

4. Court must pass a resolution to accept any late appeals, or any verbal/written appeals from landowners present
 - Asks landowner(s) to state concerns
 - Asks Engineer for comments
5. After all appeals are heard (if any):
 - Deliberation by members of COR
 - Clarification from appellants or Engineer, if required to make decision
6. Court determines how appeals will be settled
 - Accept recommendation of Engineer?
 - Members agree on alternate recommendation?

If no verbal appeals:

7. Resolution(s) passed to adopt recommendations, amend assessments, etc.
8. Chair informs appellants that if they are not satisfied with the decision of the COR, they have 21 days in which to appeal to the Drainage Tribunal. (last day to submit appeal to the Clerk will be July 26, 2023)

If no appeals:

9. Resolution passed to sustain assessments.
10. Court adjourns and Council reconvenes (by resolution).

Understanding Court of Revision Procedures Under the Drainage Act

Sharon McCartan, OMAFRA

FEBRUARY 2010

INTRODUCTION

The Court of Revision is an appeal body established under the Drainage Act and administered by the local municipality. The Court of Revision allows landowners to challenge their drainage assessments quickly and informally. Unlike the Drainage Tribunal or the Drainage Referee, the Court of Revision has one power – to re-allocate funds in a drainage assessment schedule.

To learn more about assessments under the Drainage Act, refer to fact sheet Agdex 557 Order # 92-035, “Understanding Drainage Assessments.”

STEPS LEADING UP TO THE COURT OF REVISION

The Drainage Act sets out a democratic process for constructing new drains or improving existing drains. The following is a very basic outline of how a typical report would get to the Court of Revision. Refer to the Drainage Act for specific process requirements.

- One or more property owners submit a petition for drainage to their municipality. A project to improve an existing drain can also be initiated with a landowner request to council.
- The Council reviews the petition or request and decides whether to accept it.
- If accepted, Council sends a notice to the petitioner(s) and the local Conservation Authority, or, where a Conservation Authority does not exist, to the Minister of Natural Resources.
- After a 30 day period Council appoints an engineer to prepare a report.
- After completion of all meetings, surveys, design calculations or possible preliminary reports, the Engineer submits a final report which includes an assessment schedule that levies a share of the project cost on individual properties.
- The report is considered by council at a “meeting to consider the report”. The property owners affected by

- the drain are invited to this meeting and have an opportunity to influence council’s decision.
- If council decides to proceed with the project, they give two readings of a bylaw adopting the report; at this stage, the bylaw is known as a ‘provisional bylaw’.
- A copy of the provisional by-law and a notice of the date and time of the Court of Revision hearing is sent to all involved property owners.
- The Court of Revision must be held before the third and final reading of the bylaw.

As you can see, quite a few steps must occur before a municipality can hold the Court of Revision’s first sitting.

APPEALS PROCEDURE AND TIMELINES

1 – Notice of the Sitting of Court

The municipal clerk must send notice of the first sitting of the Court to all landowners in the watershed of the proposed drain. The notice must be sent not more than 30 and not less than 20 days before the Court date. The notice must also be sent within 30 days of the second reading of the provisional bylaw. This notice must include:

- Date and time of the Court of Revision
- A copy of the provisional bylaw
- Procedure for Filing an Appeal

2 – Appeal Notice

Owners must send their appeal notices to the municipal clerk at least 10 days in advance of the date for the Court.

However, at their first sitting, the Court may, by resolution, agree to hear appeals that were not filed 10 days prior to the hearing date. **(by resolution)**

3 – Hearing

The municipality holds the hearing. For more detail on how to run a Court of Procedure hearing, refer to “Suggested Procedure,” below.

4 – Appeals from the Court of Revision

All decisions made can be appealed to the Agriculture, Food and Rural Affairs Appeal Tribunal within 21 days of the pronouncement of the Court of Revision’s decision.

5 – Authorizing Bylaw

After all assessment appeals to the Court of Revision, Tribunal or Referee are exhausted, Council gives third reading to the authorizing bylaw. Due to the appeals process, 40 days is the minimum amount of time that must pass between mailing the notice of the Court’s first sitting, to giving the by-law its third reading. If landowners file appeals, the process will likely take longer.

THE ROLE OF THE CLERK

- The municipal clerk receives all notices of appeal to the Court of Revision.
- In advance of the Court of Revision hearing, the clerk should make a list of all appeals specifically listing the name of the appellant, the property of the appellant, the amount of the assessment and a summary of the grounds for the appeal
- If the Court of Revision is considering the reduction of a property assessment and is considering adding this reduction to a property whose owner is not in attendance, the court must adjourn. The clerk schedules a second sitting of the Court and notifies all property owners affected by the reduction.
- The clerk also alters any assessments changed by the Court and amends the provisional bylaw.

THE ROLE OF THE MEMBERS OF THE COURT OF REVISION

- Members of the Court may hear appeals on three grounds:
 - 1) Land or road has been assessed too high or low.
 - 2) Land or road should have been assessed but has not.
 - 3) Due consideration has not been given to the land’s use.
- The members of Court must hear these appeals and decide whether they are valid. The members must comply with the *Statutory Powers Procedure Act*, and they must conduct themselves fairly and without bias.
- The Court only has authority to change the schedule of assessments; they cannot make changes to the technical aspects of the report and they cannot refer the report back to the engineer for modifications.

- Total costs of the project must remain the same, which means that if the Court reduces an assessment, the Court re-allocates the shortfall among other assessed property owners.
- If the Court is considering adding to the assessment of one or more properties whose owners are not in attendance, the Court must adjourn and send notice to assessed property owners who were not at the Court of Revision at the time of the re-allocation. This allows the re-assessed landowners to appeal their new assessments.

THE ROLE OF THE APPELLANT

- If a landowner feels an assessment against their lands is too low, that land should have been assessed but has not, or that consideration has not been given to land use, they can file an appeal with the Court of Revision.
- Appeals must be filed with the clerk at least 10 days before the date of the Court of Revision.
- If a landowner wishes to appeal, but misses the date for filing the appeal, they can appear at the first sitting of the Court of Revision and request to have their appeal heard.
- At the sitting of the Court, the list of appellants will be read out and the Engineer will give evidence. When his or her time to present their case comes, the appellant must explain their reasons for appealing the assessment schedule.
- After the Court of Revision pronounces their decision, affected property owners have 21 days to appeal this decision to the Agriculture, Food and Rural Affairs Appeal Tribunal and the Tribunal’s decision on this appeal is final.

COMPOSITION OF THE COURT OF REVISION

- If a drainage works only affects the initiating municipality, the initiating municipality’s council appoints 3 to 5 members to make up the Court of Revision.
- If a drainage works affects two or more municipalities, the council of the initiating municipality appoints two members of the Court; and every other involved municipality appoints one person to be a member. One of the members appointed by the initiating

- municipality is the chair of the Court of Revision.
- To be eligible to sit as a Court of Revision member, the individual must be eligible to seek election as a member of council.
- Members of council may be appointed as members of the Court. However, the two roles must be kept separate – if a council member wishes to hear information or pass resolutions outside of the scope of the Court of Revision, they must close the Court, then open a new council meeting.

SUGGESTED PROCEDURE

- Opening of the Court of Revision
- Oaths
 - Members may take an oath, but it is not legally required.
 - Members are still legally required to act fairly and impartially, whether they declare this publicly as an oath or not.
- Order of Appeals
 - The appeals and the order in which they will be held are read out.
- Engineer Gives Evidence
 - The engineer gives his or her evidence regarding each appeal before the Court, per s. 55 of the Act.
- Appellants Present their Case
 - The landowners orally make a case for why their land was improperly assessed before the members of court.
 - The engineer may rebut the landowner's case.
- Late Appeals
 - If the Court of Revision members choose, they agree to entertain late appeals, per s. 52(2) of the Act.
- Deliberations
 - The Court of Revision members should retreat to deliberate these appeals and make decisions in private.
 - If court is considering reducing an assessment and adding it to a property whose owner is not present, then they must adjourn the Court of Revision, send notice to the absent parties to allow them to appeal the change, then reconvene, per s. 53 of the Act.
- Closing the Court of Revision and Rendering a Decision
 - The Court of Revision may give oral decisions on each appeal but this oral decision should be followed up with a decision in writing.
- Choosing which schedule to adopt

- The Court of Revision should document whether they decided to adopt an altered version of the assessment schedule, or whether they chose to adopt the schedule as presented by the engineer.
- A sample decision is included below.

FURTHER INFORMATION

Related Factsheets

Understanding Drainage Assessments, Agdex 557
Drainage Act Appeals, Agdex 557

Author Information

These Court of Revision guidelines were authored by Sharon McCartan, OMAFRA, Environmental Management Branch, Guelph, Ontario.
Reviewed by Sid Vander Veen, Drainage Coordinator, and by Andy Kester, Drainage Inspector.

Sample Decision of the Court of Revision:

DECISION of the COURT OF REVISION

RE: _____ Municipal Drain

Decisions Pronounced on the ____ day of _____, 20____

Appeal #1 – Appellant: _____ Property: _____

Appeal Summary: Assessment should be lowered because a portion of the property drains into another municipal drain.

Decision: That the assessment of costs on Lot 19, Con 84, Roll #0330 be reduced by two thirds from \$300.00 to \$100.00 and that the difference of \$200.00 be assessed to municipal road.

Appeal #2 – Appellant: _____ Property: _____

Appeal Summary: The crop damage allowance is insufficient and should be increased.

Decision: The appeal is dismissed as it is outside the jurisdiction of the Court of Revision. Property owners have the right to appeal their allowances to the Agriculture, Food and Rural Affairs Appeal Tribunal.

Appeal #3 – Appellant: _____ Property: _____

Appeal Summary: Assessment should be lowered because the engineer has calculated the assessment based on 100% agricultural land use; actual use is 50% agriculture and 50% bush.

Decision: The assessment on this property is reduced by \$300 and the reduction is added to the assessment on property _____. The owner of this property was present at the hearing of the court of revision.

Appeal #4 – Appellant: _____ Property: _____

Appeal Summary: Assessment should be lowered because the owner has no intention of using the land for agricultural purposes.

Decision: That the appeal be dismissed. Property still has the potential to be used for agriculture and has been assessed at similar rates to nearby agricultural properties.

Appeal #5 – Appellant: _____ Property: _____

Appeal Summary: Assessment on all private properties should be reduced and an environmental agency should be charged \$5000 for the cost of studies that were required for the agency's approval of the project.

Decision: The appeal is dismissed. The Drainage Act only allows properties to be assessed and the environmental agency is not a property owner.

FURTHER APPEAL RIGHTS

If dissatisfied with the Decisions of the Court of Revision which were pronounced on the ____th day of _____, 20____, anyone may appeal this decision to the Agriculture, Food and Rural Affairs Appeal Tribunal by filing a notice of appeal with Clerk of the municipality within 21 days of the date of this decision.

Signed:

(name), Chair
Court of Revision for the _____ Municipal Drain

Dated this ____th day of _____, 20____.

_____, Clerk
Municipality of _____

Sample Court of Revision Decision. A written decision should be mailed to every appellant after the hearing concludes.

For more information:
Telephone: 1-888-466-2372
E-mail: about.omafra@ontario.ca

www.ontario.ca/omafra

ENGINEERING REPORT

For

McLEAN DRAIN 2023

Township of East Zorra-Tavistock

Oxford County

Date: April 28, 2023

File No. 20-068



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Definitions:

- “Act” or “Drainage Act” means The Drainage Act RSO 1990
- “CSP” means corrugated steel pipe
- “Drain” means McLean Drain 2023
- “Grant” means grant paid under the Agricultural Drainage Infrastructure Program
- “HDPE” means high-density polyethylene
- “KSAL” means K. Smart Associates limited
- “Municipality” or “Township” means Township of East Zorra-Tavistock
- “OMAFRA” means the Ontario Ministry of Agriculture, Food and Rural Affairs
- “Tribunal” or “Drainage Tribunal” means Agriculture, Food and Rural Affairs Appeal Tribunal
- “ø” means diameter of a pipe or tile

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April 28, 2023

File No. 20-068

McLEAN DRAIN 2023

TOWNSHIP OF EAST ZORRA-TAVISTOCK

1 EXECUTIVE SUMMARY

This report is prepared pursuant to Section 4 of the Drainage Act RSO 1990 (the Act).

On January 23, 2020, the Township of East Zorra-Tavistock received a *Petition for Drainage Works by Owner* signed by seven (7) properties located in the area of Lots 11-12, Concession 18, as well as Lots 11-14, Concession 17, in the Township of East Zorra-Tavistock. On February 5, 2020, K. Smart Associates Limited was appointed by resolution of Council to prepare a report on the petition received.

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

Main Drain

- 203m of power brushing and ditch deepening
- One (1) – 750mm \varnothing solid plastic pipe crossing 18th Line by open cut
- 1,802m of new closed tile drain (250mm \varnothing to 525mm \varnothing)
- Seven (7) concrete junction boxes/catchbasins (600x600mm to 900x1500mm)
- Restoration of all berms to existing conditions

Branch B

- 17m of new closed tile drain (300mm \varnothing)
- One (1) – 300mm \varnothing solid plastic pipe crossing 18th Line by open cut
- Two (2) - 600x600mm concrete catchbasins

The estimated cost of this project is **\$327,000**.

The total watershed area is approximately 100.1 hectares (247 acres).

Assessment schedules included for construction/future maintenance of the Drain are as follows:

- Schedule A shows the assessment of the total estimated cost
- Schedule B is for prorating future maintenance cost
- Schedule C is for levying the final cost of the Drain
- Appendix A shows the calculation of assessments outline in Schedules A & B.

2 BACKGROUND

On January 23, 2020, the Township of East Zorra-Tavistock received a *Petition for Drainage Works by Owner* signed by the following seven (7) properties: William A. Chesney & Sons Ltd. (William S. Chesney), Paul Menary, Otterside Farm Ltd. (Maurie Clayton), 1474526 Ontario Ltd. (Lynn Chesney), Keith & Elizabeth Leeson, and two properties owned by William & Cornelia Vink. The petition was signed for the construction of a new tile drain within the McLean Drain watershed. Pursuant to Section 8 of the Act, on February 5, 2020, K. Smart Associates Limited was appointed by resolution of Council to prepare a report on the petition.

3 DRAINAGE HISTORY

The McLean Drain has been improved, in sections, several times over the previous 50 years. Most notably, the drain was improved in its entirety from the outlet at the Thames River to the most upstream property in 1972. Then, in 1996, an upsizing was undertaken adding additional capacity to the Drain at the bottom end through the properties currently owned by “Blaak” and “1474526 Ontario Ltd.”. A few years later, in 2001, this upsizing was extended through the southerly “Vink” property.

The visual below outlines the different stages of improvement to the drain and the capacity provided to each property.

| <u>Property Owner (From Upstream to Downstream)</u> | <u>Drainage Coefficient (design) the current McLean Drain provides</u> | <u>Current Tile Size (diameter) & Year</u> | <u>Graphic of Stages of Improvement</u> |
|---|--|--|---|
| Otterside Farms Ltd. | 3/8" | 150mm (6") -1972 | |
| Czerniawski | 3/8" | 150mm (6") -1972 | |
| Vink (020-11900) | 1" | 200mm (8") -1972 | |
| Vink (020-11910) | 1" | 250mm (10") -2001 & 200mm (8") -1972 | |
| 1474526 Ontario Ltd. (020-12100) * | 1" | 250mm/300mm (10"-12") -1996 & 200mm/250mm (8"-10") -1972 | |
| 1474526 Ontario Ltd. (020-12301) * | 1" | 350mm (14") -1996 & 300mm (12") -1972 | |
| Blaak | 1" | 350mm (14") -1996 & 300mm (12") -1972 | |

* Properties merged at time of report filing

3.1 McLean Drain (1972) – H. M. Gibson, P. Eng.

Prior to 1972, the watershed of the McLean Drain was serviced by an award drain constructed in accordance of an award by F. Ure, dated 1904. No copy of the 1904 award by F. Ure was located.

In 1972, the area of the existing McLean Award was improved under a report by H. M. Gibson, P. Eng. The 1972 report provided for the construction of a Main Drain, as well as Branches A & B. Locations of these drains are shown on Drawing 1. It is understood the 1972 drain was constructed beside the 1904 tile, without destroying the original. Commentary in K. A. Smart's, P. Eng., 1996 report suggests that the 1972 tile may have provided for a 3/8" drainage coefficient design.

3.2 McLean Drain 1996 – K. A. Smart, P. Eng.

In 1996, the bottom end of the existing McLean Drain was improved under a report by K. A. Smart, P. Eng. The original appointment was made in accordance with Section 78, primarily for the purpose of removing the existing award drain, located in the west road ditch along the 18th Line. The Township desired the drain to be relocated off of the road allowance. As a result, the project improved the Main Drain of the McLean Drain from the open ditch outlet at the Thames River up to the property line divide from what is now the W. Vink & 1474526 Ontario Ltd. properties (middle of Lot 12, Concession 17). The report also provided for the construction of a new Branch C under Section 4.

One of the main features discussed at the meetings and subsequently proposed in the report was the construction of berms/terracing for surface water detention. Berms/terraces with hickenbottoms/catchbasins were constructed in six (6) locations. The first berm was located at what is now STA. 0+876 on the 1474526 Ontario Ltd property, at the junction of the Main Drain with Branch C. Two berms were located on the property line with W. Vink (one on the Main Drain at STA. 1+039, and one on the proposed Branch C at STA. 078). Two more berms were located within the W. Vink field (one at the top end of Branch C at STA. 232, and the other on the lot line between Lots 12 & 13 at STA. 1+382). The final terracing area was proposed to be a saucer shape (excavation only), located on the property line between W. & C. Vink and M. Czerniawski (STA. 1+734).

After construction was complete, an addendum report was prepared by K. A. Smart, P. Eng., to recognize alterations made to four of the six terracing areas. The report states that during construction the berm, at what is now STA. 1+382 (located on the lot line between Lots 12 & 13), was constructed significantly higher than originally proposed, creating an additional 1,000m³ of storage. The estimated total water storage at this berm in the addendum report was 1,600m³ (calculations show this berm actually stores approximately 1,307m³ – see Drawing No. 4 and *Section 8.3 Berms* below). As a result of this change, the owner requested the next upstream terracing area (the excavation only area centred on the property line at STA. 1+734) be excavated only on the neighbouring upstream property. No excavation on their own side.

The final change was a request from the owner of Roll No. 020-12100 to slide the crests of the two berms located along their northerly property line (STA. 1+039 and STA. 0+078 of Branch C) closer to the property line. The berms were also constructed slightly higher than originally proposed; however, a review suggests this height increase would lead to minimal increase in total storage.

3.3 Agriculture, Food and Rural Affairs Appeal Tribunal (1998-25)

Following the Addendum report, an appeal was made to the Agriculture, Food and Rural Affairs Appeal Tribunal by the owners of the property with Roll No. 020-11000 (Czerniawski) on the grounds that the drain was not constructed according to the Engineer's report.

The following are excerpts taken from the Tribunal Decision (File Number: 1998-25) to outline the background for contentious items that may be applicable to this report:

"Mr. Czerniawski said he and his wife are appealing the construction of terracing on the property line between himself and Mr. Vink. He said instead of the saucer that was to have been built straddling the Vink/Czerniawski property line, he has a half saucer on his property, and Mr. Vink has a berm on his property and no pond.... In his opinion, if the full saucer was built as agreed upon, it would be more effective."

"....Once the terracing work was started [Mr. Smart] was called out to site by Mr. Harmer. Mr. Chesney and Mr. Vink also attended the meeting to address the concern of damaging field tile on the Chesney and Vink property if terraces were built as specified in the report. It was agreed to construct a berm on the mid-location on the Vink property approximately 16 inches higher than what was required in the report. By creating a higher berm at that location more surface waters would be contained by that particular berm. He said he did not feel any changes were being made on the Czerniawski property, so no attempt was made to contact Mr. Czerniawski. Mr. Smart told the Tribunal that, in his opinion, it was an advantage to the drain to make the changes requested."

"....The Czerniawski's informed [Mr. Smart] they were not satisfied due to the fact that no part of the saucer had been constructed on the Vink side.... [Mr. Smart] said the water will overflow out of the constructed basin at about the same elevation as in the original report and by-law, so water will not pond into Mr. Czerniawski's field any further than the original design."

The following are excerpts of the Tribunal's findings in its decision:

"....However before the meeting broke up, the party walked up to the Czerniawski/Vink location and discussed possible changes. The Vink property is tiled at that point and so it was decided that the bottom elevation of the excavated saucer would be raised. To make up for lost capacity, a terrace was to be put in roughly following the perimeter location of the original proposed saucer on the Vink property. The engineer was agreeable to this change so long as water retention capacity was not compromised and no water trapped. The Czerniawski's were not told of this proposed change. In any event, Mr. Vink and the contractor did not carry through with the proposed changes. The half saucer on the Czerniawski property was excavated, but there was no half saucer excavated on the Vink property. Instead, almost all of the topsoil was spread out along the Vink/Czerniawski property line, on the Vink side. This resulted in a berm about one foot high extending for approximately 400 feet. The berm was graded back into the original surface on the Vink side over a strip about 18 feet wide. The contractor and Mr. Vink had no permission from the Drainage Superintendent, the Engineer or the Czerniawskis for this change...."

“...The tribunal accepts that overall the drain functions as well as the original design called for. The Tribunal accepts that at the Czerniawski/Vink boundary the water retention still works satisfactorily. There is no significant change in the volume of water to be stored on the Czerniawski property. Because there is less storage in the half saucer than there would have been in the whole saucer, in a runoff event the pond will overflow sooner and more often onto the downstream lands (Vink) but this will affect on Vink, who brought about the situation and not Czerniawski. Therefore, there is no need to order any changes to the work on the basis of technical considerations.”

“4. Mr. & Mrs. Vink pay the sum of \$500 to the Township to cover costs incurred by Mr. & Mrs. Czerniawski for this hearing.”

3.4 McLean Drain 2021 – K. A. Smart, P. Eng.

In 2001, the improved McLean Drain was subsequently extended upstream under a report by K. A. Smart, P. Eng. A 250mmø (10”) tile was extended through the southerly Vink property to the existing berm on the Lot 12/Lot 13 divide.

In addition to the improved drain extension, the overflow elevation of the berm at STA. 1+039 was slightly lowered because water was spilling over to the east, into the Branch C watershed. Further upstream berming was requested by Mr. Vink. Options were reviewed and presented by the engineer, however upstream owners were opposed to the proposal, and therefore no work upstream of Lot 12/Lot 13 was included.

3.5 Section 40 Report (2019) – Ray Roscovich, P. Eng.

On June 20, 2018, K. Smart Associates Limited was appointed by the Township of East Zorra-Tavistock to review improvements to the McLean Drain under Section 78 of the Drainage Act. The request for improvement was made by Mr. Vink. At the on-site meeting, Mr. Vink explained the berm at his westerly property line (STA. 1+734) was causing crop damage and erosion on his property.

After a review of survey and cross section, Ray Roscovich, P. Eng., determined that the berm had degraded since its original construction, but stated that the repair work could be completed as maintenance by the Drainage Superintendent. A report under Section 40 of the Drainage Act was filed stating that drainage improvements on the McLean Drain were not required at this time.

4 INVESTIGATION

4.1 On-Site Meeting

Attendees:

| | |
|--|---|
| Bill Vink (Roll No. 020-11900 & 020-11910) | Connor Occleston (Twp. of EZT) |
| Dave Vink (Roll No. 020-11900 & 020-11910) | Claire Ohrling (Twp. of EZT) |
| Edward & Marie Czerniawski (Roll No. 020-11000) | Tom Lightfoot (Twp. of EZT) |
| Maurie & Tammy Clayton – Otterside Farm Ltd. (Roll No. 020-11200) | Curtis MacIntyre, P. Eng. (K. Smart Associates) |
| Lynn Chesney – 1474526 Ontario Ltd. (Roll No. 020-12100 & 020-12301) | Joel Miller, P. Eng. (K. Smart Associates) |

On August 4, 2020, the on-site meeting for the Section 4 appointment was held at the pavilion of the Innerkip Community Centre. Those in attendance are listed above. The project engineer briefly explained the background of the petition received, as well as the documented history of the McLean Drain since its original construction in 1904.

All owners in attendance were given an opportunity to describe the drainage on their property and what they would like to see completed. General comments are listed below:

Dave Vink – (Roll No. 020-11900 & 020-11910) (Petitioner)

Dave Vink, speaking on behalf of his father Bill, explained the three main outcomes that they would like to see out of this project. First, he explained that they have washouts of the topsoil in their field downstream of the Lot 12/13 line and have brought in topsoil several times. Mr. Vink cited the hectares from the watershed plan as an example that the majority of water is not coming off of their land. They would like to see a berm constructed along their west property line shared with the Czerniawski farm. Secondly they would like to see a new berm on the property line between the Czerniawski farm and Otterside Farm Ltd., located upstream of their farm. Finally they believe the whole drain should be upsized going downstream to the outlet into the open ditch on the east side of 18th Line.

They also recalled the Littlejohns Drain being improved around the same time as the McLean Drain in the late 1990's and have observed no problems on that drain. They would like the McLean Drain to be sized to perform the same way. *After the meeting, the engineer reviewed the report on the Littlejohns Drain and determined the tile was sized to accommodate between a 25mm (1") to a 37mm (1.5") drainage coefficient, as opposed to the 3/8" drainage coefficient that the 200mm tile on Roll No. 020-11900 is currently sized for.*

Maurie & Tammy Clayton (Otterside Farm Ltd.) (Roll No. 020-11200) (Petitioner)

The Clayton's stated they moved to this property after the last substantial report (2001) had been completed on the McLean Drain, but they have not noticed significant runoff

from their farm onto the Czerniawski property. They have an approximate 10 ft. laneway along their southern property line left grassed and uncropped. They could see from the aerial plan that there were a few random tiles on their farm out-letting to the McLean Drain but did not have any tile plan and had no immediate plans for systematic tiling in the future.

Joel Miller made the comment that if the drain were to be reconstructed up to their property line, then the portion of the 1972 tile that continues into their farm may be abandoned of status.

Edward & Marie Czerniawski (Roll No. 020-11000)

The Czerniawski's believed that a larger tile would help the situation and that they would be okay with the terracing/saucer shaped design being implemented as per the previous report by Kenn Smart. Mr. Czerniawski believed there was no point in re-engineering something that had already been engineered once.

Lynn Chesney – 1474526 Ontario Ltd. (Roll No. 020-12100 & 12301) (Petitioner)

Lynn was in favour of looking into a tile drain with an increased drainage coefficient across her farm. She had no specific concerns about the drainage on her farms. She knew the property was systematically tile drained but did not have the tile plans.

Connor Occleston (Drainage Superintendent)

Connor recalled flushing out a portion of the existing Main Drain tile for 900 feet upstream of the junction box where Branch C meets the Main Drain (STA. 0+876).

4.2 Phone Calls After the Meeting

William Chesney – William A. Chesney & Sons (Roll No. 020-17200) (Petitioner)

A phone call was made to Mr. Chesney on August 7, 2020. He explained that normally the drainage on his farm has been alright but they had a big problem last year with wet ground at the southwest corner of his property. He is in favour of improving/upsizing Branch B that services his farm and the portion of the Main Drain downstream to the open ditch.

Greg Chesney – 1474526 Ontario Ltd. (Roll No. 020-12100 & 12301) (Petitioner)

A phone call was made to Greg Chesney (son of Lynn Chesney) on August 11, 2020 because he had more knowledge of the drainage specific to their farms. Greg recalled the situation discussed at the on-site meeting of the Township digging up the junction box in their field to flush out the plugged drain tile. He wondered if there was a possibility that the flushing pushed the blockages further downstream. He explained that within the past couple of years they had to dig up and fix a couple of their own plugged private tiles. Greg also recalled a time a couple of years ago where one of the tiles at this catchbasin wasn't flowing, but that both seem to be flowing now.

Greg was okay with reviewing an increased tile size.

4.3 Site Examination and Survey

The sections of the existing McLean Drain that were accessible and discussed as requiring potential drainage improvements were examined after the on-site meeting. The findings from this investigation are outlined below. Topographic (GPS) survey was later completed in February, 2021.

Otterside Farm Ltd. (Clayton)

- Located catchbasin on south property line. Tiles into and out of the catchbasin were quite deep.
- Reviewed top end of watershed and determined the break is approximately at the divide in cropping (wheat to corn)

Czerniawski/Vink property line

- Located the catchbasin and a 200mm \varnothing offset hickenbottom.
- Observed a berm constructed along the Vink side of the fencerow that appeared to be about 450mm-600mm in height.

4.4 Watershed Description

The perimeter watershed of the Drain was established using the existing 2001 watershed plan, then adjusted based on topographical survey and open source SWOOP Digital Elevation Model (DEM) data from the province. Historic reports of neighboring municipal drains were also reviewed to ensure accuracy.

The watershed for the McLean Drain is neighbored by the Littlejohns Drain Improvement 2006 to the east, and the Gillespie-Yeo Drainage Works to the west. The Chesney Drain & Pelton Drain watersheds also border the McLean Drain watershed to the north.

The watershed area for the McLean Drain is predominantly agricultural lands, with small forested lands at the bottom of the watershed.

5 AUTHORITY FOR REPORT

Section 4 of the Drainage Act provides for the construction of new drainage works for an area requiring drainage. As a result of discussions at the on-site meeting and site examination, the area requiring drainage has been determined to be three (3) areas.

The first area requiring drainage was determined to be the southwest corner of the property with Roll No. 020-17200, requiring an improved outlet for subsurface drainage, as petitioned and requested by the owner.

The second area requiring drainage was determined to be an area of approximately 5.0 hectares located on the property with Roll No. 020-11900 from the southern limits of Lot 13, Concession 17 to the midpoint of the concession.

The third area requiring drainage was determined to be the approximate SE1/4 of the W1/2 of Lot 14, Concession 17 on property with Roll No. 020-11200, requiring an improved outlet for subsurface drainage, as petitioned and requested by the owner.

For each of the three areas requiring drainage, the signatures on the petition represent greater than 60% of the area requiring drainage; thus, the petition is valid under Section 4(1)(b) of the Drainage Act.

6 RECOMMENDED WORK

A property by property description of the proposed McLean Drain 2023 for construction and future maintenance can be found in the Special Provisions (Drawings 6 & 7). A high level outline of the proposed Drain is as follows.

6.1 Main Drain

K. & E. Leeson (Roll No. 020-17400)

- Power brushing along ditch and approx. 6m wide right-of-way
- Existing ditch deepening

P. & P. Menary (Roll No. 020-17300)

- No work required. Equipment access to Leeson property will be required along maintenance corridor beside existing ditch.

18th Line (Township of East Zorra-Tavistock)

- 15m of 750mmØ solid plastic pipe crossing of 18th Line by open cut
- 900x1500mm ditch inlet catchbasin

J. & K. Blaak (Roll No. 020-12300)

- 57m of 525mmØ concrete tile

1474526 Ontario Ltd. (Roll No. 020-12100)

- 177m of 525mmØ concrete tile to junction box at Branch B
- 900x1500mm junction box at Branch B
- 190m of 350mmØ concrete tile, and 126m of 300mmØ concrete tile to junction box at Branch C
- 900x1200mm junction box at Branch C
- 163m of 300mmØ concrete tile to the north property line
- Restore berm on north property line to existing conditions

W. Vink (Roll No. 020-11910)

- 900x1200mm ditch inlet catchbasin
- 343m of 300mmØ concrete tile
- Restore berm in middle of the field to existing conditions

W. & C. Vink (Roll No. 020-11900)

- 900x1200mm catchbasin
- 352m of 350mmØ concrete tile
- Restore berm on westerly property line to existing conditions. Construct overflow rock spillway with 10m² of riprap.

M. Czerniawski (Roll No. 020-11000)

- 900x1200mm catchbasin
- 177m of 300mmø concrete tile, and 217m of 250mmø concrete tile
- Construct 10m long new berm at north property line

Otterside farm Ltd. (Roll No. 020-11200)

- 600x600mm catchbasin

6.2 Branch B**1474526 Ontario Ltd. (Roll No. 020-12100)**

- 17m of 300mmø concrete tile from junction box to road

18th Line (Township of East Zorra-Tavistock)

- 600x600mm catchbasin
- 15m of 300mmø solid plastic pipe crossing of 18th Line by open cut
- 600x600mm catchbasin

7 MEETING(S)**Attendees:**

| | |
|--|--|
| Maurie Clayton (Otterside Farm Ltd.) (020-11200) | Curtis MacIntyre, P. Eng (K. Smart Associates) |
| Edward & Brenda Czerniawski (020-11000) | Joel Miller, P. Eng. (K. Smart Associates) |
| Bill Vink (020-11900 & 020-11910) | Connor Occleston (Twp. East Zorra Tavistock) |
| William Chesney (020-17200) | Tom Lightfoot (Twp. East Zorra Tavistock) |

On September 13, 2022 an information meeting for the Section 4 appointment was held at the Innerkip Community Centre. At the meeting, the results of the investigation to-date were presented, along with a summary of the proposed work, and preliminary assessments. After presenting the information, the engineer offered the opportunity for all petitioners to provide their comments, followed by all other owners. The following is a summary of the general comments listed by property:

William Chesney (020-17200)

- Overall, William is in favour of the proposed work to upsize the McLean Drain. His main concern is to ensure that the improvement work to the drain stops the water from backing up into his tiles/field.
- William felt that the Township's cleanout of the open ditch earlier in 2022 helped his tiles (and Branch B) function better.
- He was not sure exactly where the Branch B crossed the road into his field. He stated that the previous tiling work was done by R.J. Vance and perhaps they may have information on this.

Bill Vink (020-11900 & 020-11910)

- Overall, Bill is in favour of the proposed work to upsize the McLean Drain.
- Bill asked about private tile connections to the old 1972 tile and if they would be connected to the new tile. The engineer commented that if many connections are found, we may decide to install a header tile beside the new drain and connect all the private tiles to this new header instead. Otherwise, individual tile connections would be tied into the new McLean Drain tile. The engineer further commented that the reason for proposing the new McLean Drain tile be located on the same side as the existing 1972 tile, not the 1996/2001 tile, is so that the contractor will uncover all the existing private connections into the 1972 tile as the new one is being installed (and before the 1972 tile is destroyed). If the new tile were to be on the opposite side of the 1996/2001 tile, there could be a greater chance of missed tile connections. Bill agreed with this approach.
- Bill requested a review of the location of the existing berms and catchbasins in relation to property lines. The engineer stated he would review all of these catchbasin/berm locations on the McLean Drain and if any required adjusting, it would be to make it consistent with others in the watershed.
- Bill commented on the existing large trees along the property line between 1474526 Ontario Ltd. and Blaak properties, near the location of the existing Drain. The engineer agreed this could be a concern, and that the existing 1996 tile could be exposed during construction at this location to inspect for roots plugging tiles.

Maurie Clayton (Otterside Farm Ltd.) (020-11200)

- Maurie confirmed they would like to see the upsized drain improvement work continue to their property.
- He was okay with the idea of a berm included behind the catchbasin on his property line.

Edward & Brenda Czerniawski (020-11000)

- Ed asked if the decision of the Tribunal from the work in 1996 was reviewed and considered in the proposed work for the berm at their property line. The engineer commented that he had read it several times, that it is considered in the evaluation of the berm & current drainage conditions, but that he did not feel an engineer is exactly required to follow a decision made by the tribunal many years ago. The engineer read aloud an excerpt from the third paragraph of the 9th page of said Tribunal decision, regarding the Tribunal's consideration of the technical aspects outlined in the hearing. He then outlined the primary reasoning for incorporating the berm as it currently exists, as later discussed in *Section 8.3 Berms* of this report.

Connor Occleston (Township Drainage Superintendent)

- Connor confirmed that the open ditch of the McLean Drain was cleaned out earlier in 2022. The cleanout ended at the east side of the Menary property and did not include the Leeson property to the Thames River.

- Connor also re-iterated the flushing work that was undertaken on the 1474526 Ontario Ltd. property in 2017 at the buried junction box. They flushed both upstream and downstream of this location. The engineer commented that since it is a long way from this junction box to the next structure, it is possible additional flushing of the 1996 tile could be necessary at the time of construction. All in attendance agreed.

7.1 Additional Site Examination

- Following the meeting, the open ditch was investigated from the 18th Line to its outlet at the Thames River. The ditch was observed to be dry for the full length. Many fallen trees were observed over top of the ditch on the Leeson property. Saplings were also observed to be growing in the centre of the ditch. Brushing/grubbing work should occur as a part of the project.
- Existing 600mmØ CSP Main Drain crossing of 18th Line rusting up to spring line. Reviewed with the Township and decision made to replace this crossing with one new pipe.

8 DESIGN CONSIDERATIONS

8.1 Sufficient Outlet

Section 15 of the Act requires that the 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.” For this project the Thames River represents a sufficient outlet for the McLean Drain 2023 work.

8.2 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 the watershed examination and landowner discussions, the proposed tile drains on this project have been designed for a 38mm (1.5”) drainage coefficient. In the case of the Main Drain from STA. 0+326 to 1+382, it is the combination of the proposed 2023 tile and the existing 1996/2001 tiles totalling the 38mm drainage coefficient design.

The visual below outlines the proposed and existing tile sizes to remain a part of the Drain, and the new capacity provided to each property.

| <u>Property Owner (From Upstream to Downstream)</u> | <u>Drainage Coefficient (design) the current McLean Drain provides</u> | <u>Current Tile Size (diameter) & Year</u> | <u>Graphic of Stages of Improvement</u> | | |
|---|--|---|---|------|--------|
| Otterside Farms Ltd. | 3/8" 1.5" | | 1972 NEW TILE | | |
| Czerniawski | 3/8" 1.5" | 150mm (6") -1972 250mm/300mm (10"-12) - New | | | |
| Vink (020-11900) | 4" 1.5" | 200mm (8") -1972 350mm (14") - New | | | |
| Vink (020-11910) | 4" 1.5" | 250mm (10") -2001 & 200mm (8") -1972 300mm (12") - New | | | 2001 ↓ |
| 1474526 Ontario Ltd. (020-12100) * | 4" 1.5" | 250mm/300mm (10"-12") -1996 & 200mm/250mm (8"-10") -1972 300mm/350mm (12"-14") - New | | | ↓ |
| 1474526 Ontario Ltd. (020-12301) * | 4" 1.5" | 350mm (14") -1996 & 300mm (12") -1972 525mm (21") - New | | 1996 | |
| Blaak | 4" 1.5" | 350mm (14") -1996 & 300mm (12") -1972 525mm (21") - New | | | |

* Properties merged at time of report filing

8.3 Berms

Berms/terracing are an important feature of the McLean Drain as documented in several reports. It has also been a contentious one.

At the on-site meeting, it was requested by Mr. Vink that a berm be constructed along his westerly property line (STA. 1+734). However following the meeting a site inspection completed by the engineer, observed there already is a berm constructed at this location approx. 450mm-600mm in height. Survey of this area shows the property line built up higher than the 1996 addendum report/as-built drawing depicted it to be.

An analysis of the berm at this location in its current state shows a maximum storage volume of 1,468m³ (after a minor proposed adjustment to the rock spillway elevation). This storage volume is comparable to the maximum water contained by the next downstream berm on the Vink property (1,307 m³ at STA. 1+382). Furthermore, the immediate upstream contributing areas to each of these berms are also comparable in size. The approximate contributing Czerniawski land area to the berm at STA. 1+734 is 10.3 hectares, while the Vink land area contributing to the berm at STA. 1+382 is approximately 10.8 hectares.

An excerpt from Herbert Todgham in the 1998 McLean Drain Tribunal reads: "An independent engineer designs the scheme, exercising his best judgment, free of favouritism..... When an Engineer's report is prepared and circulated, the basic

assumption is that the burdens of the drain are spread around as fairly as possible..... The perception of fairness is a factor in the acceptance of the report by the landowners, and the evaluation of the report by the Tribunal.”

With fairness in mind, this report proposes to incorporate the existing berm at STA. 1+734 as a part of the McLean Drain 2023, with the slight alteration of constructing a new rock spillway for overflow near the proposed catchbasin. The new rock spillway is to be only 0.02m below the existing low point of the berm, and is proposed at a better location for surface water to overflow (existing low point along the property line is approx. 60m south of the catchbasin). When requested by one owner to raise the berm, and the other to return it to its original 1996 design, the decision to incorporate the berm under its general existing condition is deemed to be the most fair for the watershed.

It is important to state, though berming is, and has been, important to the function of the McLean Drain watershed, the engineer believes the substantial increase in tile capacity of the proposed McLean Drain 2023 will provide the desired improvements of reducing overland flow that owners have previously relied on increased berm size for.

One new small berm is proposed to be constructed at the top end of the McLean Drain 2023 (STA. 2+128). The primary purpose of this berm is to direct surface flows toward the catchbasin. Storage capacity is considered negligible (25m³). All other berms along the McLean Drain are to be restored to existing conditions.

8.4 Soil Conditions

The 1996 report titled: “Upgrade of Soil Survey Information for Oxford County” indicates that the soils are well drained Guelph Loams for areas surrounding the ditch work on the Leeson property, and tile work north of the 1474526 Ontario Ltd. property. London Loams are shown to exist in between the two areas above, with imperfect drainage. Both soils are made up of a loamy till and contain slight surface stoniness.

Based on available information, as well as there being no documented soil problems during construction of the previous drainage projects, adverse subsurface conditions are not expected on this project. The use of conventional construction equipment is anticipated. Refer to the Standard Specifications for drain construction procedures when adverse subsurface conditions are encountered.

9 ENVIRONMENTAL CONSIDERATIONS

9.1 Agency Consultation

9.1.1 Upper Thames River Conservation Authority

The Upper Thames River Conservation Authority did not request an environmental appraisal under Section 6 of the Act. The Conservation Authority was sent notice for the on-site meeting. No comments regarding the petition or on-site meeting invitation were received.

Prior to construction, the Engineer will complete the necessary “*Notification of Drain Maintenance or Repair Form*” (Commonly referred to as “D.A.R.T.” form), as drain maintenance-type work is to be completed on the existing open ditch of the McLean Drain.

10 CONSTRUCTION CONSIDERATIONS

10.1 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. Other than the D.A.R.T. protocol described above to be completed by the Engineer, no other permits are expected to be required by the contractor for the proposed work.

10.2 Construction Scheduling

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

10.3 Minor Adjustments 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 more than 133% of the tendered amount, and not impact the 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 fully 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. If a substantial alteration is required, a revised report can be prepared and processed through the Act, or an application can be made under the Act to the Drainage Tribunal to recognize the substantial alteration.

10.4 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, landowners may obtain a legal survey at their own cost before construction.

11 DRAWINGS AND SPECIFICATIONS

11.1 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 for the Main Drain and Branch Drains are shown on Drawings 2 and 3. The profiles show the depth and grade for proposed work and future maintenance. Drawings 4 and 5 contain details at specific locations (such as catchbasins and road crossings). Finally, Drawings 6 and 7 contain the Construction Notes (Construction Specifications).

11.2 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.

12 COST ESTIMATE

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

12.1 Allowances

Sections 29 to 33 of the Drainage Act provides for allowances (compensation) to owners affected by proposed drain construction. On this project, there are only allowances for Section 30.

12.1.1 Section 30 - Damages

Section 30 provides for payment of an allowance to landowners along the Drain or designated access route for damages caused by the construction of the Drain or by access of equipment to the Drain. Section 30 allowances have also been considered where the implementation of new berming is expected to cause newly inundated areas and therefore damages to crops. In agricultural areas, crop damages are computed based on published crop values and declining productivity loss in the years following construction.

The allowance for damage to land and crops was calculated using a rate of \$2,000 per hectare applied to the defined working area. A 25m corridor width along the drain in the area of the proposed tile drain construction, as well as a 6m corridor width for proposed access routes was the basis for the Section 30 allowance calculations. There is a minimum Section 30 allowance of \$100.

A separate allowance of \$4,000 has been applied to the property with Roll No. 020-11000 to recognize damages to crops as a result of a berm constructed at STA. 1+734, after the previous report on the McLean Drain, and to be incorporated as a part of this report. This value was determined upon review of the 1996 report by K. A. Smart, P. Eng, in which the engineer identified an allowance for “terraces” (berms) to the property

with Roll No. 020-11000 of \$500. At the same time, the berm on the adjacent downstream property (Roll No. 020-11900) was provided \$2,100 in allowances. Under the 1996 report the inundated areas (areas of potential damages to crops) created by these two terraces/berms were very different. The terrace at STA. 1+734 was significantly smaller and centered across the property line. It is this engineer's opinion that if the berm at STA. 1+734 (shown on Drawing 5) had been constructed in its current state in 1996 under the K. A. Smart, P. Eng. report, the property with Roll No. 020-11000 would have been provided the same \$2,100 in allowances as their neighbour (therefore an additional \$1,600 in allowances).

Using the published OMAFRA crop statistics database, it can be approximately stated that average Ontario crop value over the previous 4-year period of available data (2018-2021) has increased/inflated by a factor of 2.5 compared to the 4-year period leading up to 1996 (1992-1995). Therefore, from an equity standpoint, an additional \$1,600 allowance in 1996 to property with Roll No. 020-11000 would be \$4,000 at this time.

12.1.2 Summary of Allowances

The table below summarizes the amounts of allowances to be provided.

Table 12.1-1 – Summary of Allowances

| Roll Number | MAIN DRAIN | | | BRANCH B Along Drain (\$) | Total (\$) |
|--------------------------|------------------|--------------|-------------|------------------------------|---------------|
| | Along Drain (\$) | Berming (\$) | Access (\$) | | |
| 020-11000 | 2,000 | 4,000 | | | 6,000 |
| 020-11200 | 100 | | 500 | | 600 |
| 020-11900 | 1,800 | | | | 1,800 |
| 020-11910 | 1,700 | | | | 1,700 |
| 020-12100 | 3,250 | | | 100 | 3,350 |
| 020-12300 | 300 | | | | 300 |
| 020-17200 | | | | 100 | 100 |
| TOTAL ALLOWANCES: | 9,150 | 4,000 | 500 | 200 | 13,850 |

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 due to construction.

12.2 Construction Cost Estimate

The estimated cost for labour, equipment and materials to construct the proposed Drain is outlined in detail in Table 12.6-1 – 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 alterations to the project.

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 petitioner(2) to determine if the project should proceed.

12.3 Engineering Cost Estimate

Engineering costs include report preparation and attending the Council meeting to consider the report and the Court of Revision.

Construction Phase Services may include: preparing tender documents and tender call, review of tenders, attending the 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. The final cost will be based on the actual time required for meetings. The estimate shown for construction phase services is based on experience and assumes good construction conditions and a Contractor who efficiently completes the construction. The final cost for the construction phase will vary as per the actual time spent during and following drain construction. Engineering costs are summarized in Table 12.6-1 – Estimated Cost Summary.

12.4 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 the 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 from Section 73(1) and primarily provides for interest charges on financing the project until it is completed. 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 required to carry out the required procedures under the Act can be included in the final drain cost. Section 73 costs are summarized in Table 12.6-1 – Estimated Cost Summary.

12.5 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.

12.6 Estimated Cost Summary**Table 12.6-1 – Estimated Cost Summary**

| DESCRIPTION | | | | TOTAL |
|-----------------------------------|----------------|---|--------|-----------------|
| ALLOWANCES: | | | | \$13,850 |
| CONSTRUCTION COST ESTIMATE | | | | |
| Item | Stations | Description | Cost | |
| M) Main Drain | | | | |
| M1 | 0+000 to 0+203 | 203m of power brushing (See S.S. 400.27) along ditch. Also remove growing/fallen tree obstructions within ditch. Logs to be piled neatly along edge of a clear 6m right-of-way. Also includes temporary straw bale dam/sediment trap at STA. 0+005. | 9,135 | |
| M2 | 0+000 to 0+203 | 203m of ditch bottom cleanout, 1m bottom width, 2:1 side slopes. | 6,090 | |
| M3 | 0+203 to 0+311 | 108m of existing open ditch to be incorporated. | -- | |
| M4 | 0+311 to 0+326 | 15m of 750mm dia. solid plastic pipe crossing, with rodent grate, of 18th Line by open cut method. Road to be fully backfilled above pipe with granular B, 150mm granular A, 50mm HL8 asphalt, and 40mm of HL3 asphalt. Install 5m ² of riprap on downstream side of crossing. | 30,000 | |
| M5 | 0+326 | 900x1500mm concrete DICB, including all connections, birdcage grate and 5m ² of riprap. Also includes remove and disposal of existing 900x1200mm DICB. | 5,000 | |
| M6 | 0+326 to 2+128 | Pre-locate existing McLean Drain 1972 tile. | 3,500 | |
| M7 | 0+326 to 0+383 | 57m of 525mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 300mm dia. concrete tile (1972). | 4,800 | |
| M8 | 0+383 | Approx. 6m of 375mm dia. solid plastic pipe to replace section of existing 350mm dia. concrete tile drain at property line exposed to root blockage. | 500 | |
| M9 | 0+383 to 0+560 | 177m of 525mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 300mm dia. concrete tile (1972). | 15,000 | |
| M10 | 0+560 | 900x1500mm concrete JB, including connections and concrete lid. | 4,000 | |
| M11 | 0+560 to 0+750 | 190m of 350mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 300mm dia. concrete tile (1972). | 11,400 | |
| M12 | 0+750 to 0+876 | 126m of 300mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 250mm dia. concrete tile (1972). | 6,900 | |
| M13 | 0+876 | 900x1200mm concrete JB, including all connections and concrete lid. Also includes removal of existing 900x1200mm JB. | 2,200 | |
| M14 | 0+876 to 1+039 | 163m of 300mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972). | 9,000 | |
| M15 | 1+039 | 900x1200mm concrete DICB, including connections and birdcage grate. Also includes removal of existing 600x600mm DICB. | 3,500 | |
| M16 | 1+039 | Repair berm/terracing to existing conditions. | 1,000 | |
| M17 | 1+039 to 1+382 | 343m of 300mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972). | 18,900 | |
| M18 | 1+382 | 900x1200mm concrete CB, including connections and birdcage grate. Also includes removal of existing 600x600mm DICB. | 3,500 | |
| M19 | 1+382 | Repair berm/terracing to existing conditions. | 1,000 | |
| M20 | 1+382 to 1+734 | 352m of 350mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972). | 21,200 | |
| M21 | 1+734 | 900x1200mm concrete CB, including connections and birdcage grate. Also includes remove and disposal of existing 600x600mm CB. | 3,500 | |
| M22 | 1+734 | Repair berm to existing conditions. Construct overflow rock spillway with 10m ² of riprap. | 2,000 | |
| M23 | 1+734 to 1+911 | 177m of 300mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972). | 9,700 | |

| DESCRIPTION | | | TOTAL |
|---|--|--|------------------|
| M24 | 1+911 to 2+128 | 217m of 250mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972). | 8,700 |
| M25 | 2+128 | 600x600mm concrete CB, including connections and birdcage grate. Also includes remove and disposal of existing 600x600mm CB. | 2,400 |
| M26 | 2+128 | Construct 10m long new berm as per detail. | 1,000 |
| Sub Total Part M): | | | 183,925 |
| B) Branch B | | | |
| B1 | 0+000 to 0+032 | Pre-locate existing McLean Drain Branch B on both sides of 18th Line. | 300 |
| B2 | 0+000 to 0+017 | 17m of 300mm dia. concrete tile with joint wrap. Includes break up and burying (abandoning) the existing 200mm dia. concrete tile (1972) | 900 |
| B3 | 0+017 | 600x600mm concrete CB, including connections, birdcage grate and 2m ² of riprap | 2,500 |
| B4 | 0+017 to 0+032 | 15m of 300mm dia. solid plastic pipe crossing of 18th Line by open cut method. Road to be fully backfilled above pipe with granular B, 150mm granular A, 50mm HL8 asphalt, and 40mm of HL3 asphalt | 16,000 |
| B5 | 0+032 | 600x600mm concrete CB, including connections, birdcage grate and 2m ² of riprap | 2,500 |
| Sub Total Part B): | | | 22,200 |
| C) Contingencies | | | |
| C1 | Increased costs to install 100m of tile by backhoe in areas of muck or wet/unstable soils, including geotextile and 300mm of clear crushed stone. (Contingency is intended to be independent of tile size. If required and authorized, would be paid in addition to regular bid item above). | | 5,000 |
| C2 | Increased costs to install 250m of tile by backhoe in stony conditions, where authorized, and with thin bedding of clear crushed stone. (Contingency is intended to be independent of tile size. If required and authorized, would be in paid in addition to regular bid item above). | | 7,500 |
| C3 | Contingency allowance for lift-outs of wheel machine to allow for stone removal and restarting/continuing the wheel machine (based on 5 @ \$300/lift-out) | | 1,500 |
| C4 | Tile Connections (based on 20 @ \$150/connection). | | 3,000 |
| C5 | Flushing of existing tile when exposed at time of construction (based on 2 - 500 gallon tanks at \$400/tank) | | 800 |
| C6 | Grouting of existing Branch B (200mm dia. CSP) crossing under travelled portion of 18 th Line if left in tact after construction of new Branch B | | 800 |
| C7 | Lump sum contingency allowance | | 2,000 |
| Sub Total Contingencies (Part C): | | | 20,600 |
| Total Construction (Parts M, B, & C): | | | 226,725 |
| Net HST (1.76%) (on Parts M, B, & C): | | | 3,995 |
| TOTAL CONSTRUCTION COST ESTIMATE: | | | \$230,720 |
| ENGINEERING | | | |
| | Report Preparation | | 41,000 |
| | Consideration of Report Meeting | | 2,000 |
| | Court of Revision | | 2,000 |
| | Construction Phase Services | | 27,000 |
| | Net HST (1.76%) | | 1,265 |
| TOTAL ENGINEERING COSTS: | | | 73,265 |
| SECTION 73 COSTS (Interest Estimate & Other Unforeseen Costs/Applications) | | | |
| TOTAL SECTION 73 COSTS: | | | 9,165 |
| TOTAL ESTIMATED COST: | | | \$327,000 |

13 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).

13.1 Calculation of Assessments

The first step in the assessment calculation is to determine the benefit assessments 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 total cost of each branch, the balance of the cost is then assessed as outlet liability on a per hectare basis to all lands and roads in the watershed.

13.2 Benefit Assessments (Section 22)

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 based on the estimated value provided to the property by the works. Benefit assessments are generally balanced and applied on the following three criteria: Direct Outlet (ability of a property to connect directly to the new drain), Subsurface Service Area (size of land area that is or can be directly connected via subsurface tile drains), and Improved Drainage (improved drainage along the length of the drain crossing a property). Table 13.2-1 – Benefit Assessments provides a summary of the benefit assessments separated for each proposed branch.

Table 13.2-1 – Benefit Assessments

| <u>Roll Number</u> | <u>Description</u> | <u>Main Drain</u> | <u>Branch B</u> | <u>Total</u> |
|--------------------|---|---------------------------|-----------------|--------------|
| 020-11000 | -for improved drainage along drain -for improved direct outlet -for improved sub-surface service area | 8,600 3,000 9,300 | | 20,900 |
| 020-11200 | -for improved direct outlet -for improved sub-surface service area | 3,000 6,800 | | 9,800 |
| 020-11900 | -for improved drainage along drain -for improved direct outlet -for improved sub-surface service area | 12,300 4,500 9,500 | | 26,300 |
| 020-11910 | -for improved drainage along drain -for improved direct outlet -for improved sub-surface service area | 17,200 3,000 9,600 | | 29,800 |
| 020-12100 | -for improved drainage along drain -for improved direct outlet -for improved sub-surface service area | 36,300 6,000 11,600 | 900 | 54,800 |
| 020-12300 | -for improved drainage along drain -for improved direct outlet -for improved sub-surface service area | 3,900 1,500 800 | | 6,200 |
| 020-17200 | -for improved direct outlet -for improved sub-surface service area | 1,000 2,200 | 2,000 4,400 | 9,600 |

| <u>Roll Number</u> | <u>Description</u> | <u>Main Drain</u> | <u>Branch B</u> | <u>Total</u> |
|---------------------------|---|--------------------------|------------------------|---------------------|
| 020-17300 | -for improved drainage (ditch) | 300 | | 300 |
| 020-17400 | -for improved drainage (ditch) | 1,000 | | 1,000 |
| 18 th Line | -for improved outlet (ditch) | 5,000 | | 5,000 |
| Oxford Road 29 | -for improved drainage along road (ditch) | 1,000 | | 1,000 |
| TOTAL BENEFIT | | 157,400 | 7,300 | 164,700 |

13.3 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. Therefore 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 in Table 13.3-1 – Runoff Factors.

Table 13.3-1 – Runoff Factors

| Land Use | Runoff factor |
|-----------------|----------------------|
| Agricultural | 1 |
| Paved Roads | 3 |
| Bush lands | 0.5 |

13.4 Increased Cost (Special) Assessment (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. This assessment is known as a Special Assessment.

The estimated Special Assessments are presented in Table 13.4-1 - Estimated Special Assessments. The equivalent drain cost is based on the length of the 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 13.4-1 - Estimated Special Assessments

| | <u>Main Drain</u> | <u>Branch B</u> |
|------------------------------------|--------------------------|------------------------|
| Road/Railroad/Utility | 18 th Line | 18 th Line |
| Authority/Owner | Twp. of EZT | Twp. of EZT |
| Construction Cost | 30,000 ¹ | 16,000 ² |
| + Engineering Cost | 7,510 | 3,880 |
| - Equivalent Drain Cost | 1,275 | 825 |
| + Net HST | 640 | 335 |
| = Estimated Special Assess. | 36,875 | 19,390 |

¹Item M4 from the construction cost estimate.

²Item B4 from the construction cost estimate.

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 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 at the time of construction 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.

13.5 Assessment Schedules

For all 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 assessment roll information provided by the Township. 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.

13.5.1 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.

13.5.2 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, pro rata with the amounts in Schedule B. The \$ amounts in Schedule B are listed solely for calculating percentages (share of future maintenance costs) and will not be levied with the final cost of the drainage works.

Schedule B is divided into columns to reflect the different branches where maintenance work may be undertaken. The percentages shown in Schedule B determine the share of future maintenance to be levied to property or road. For example, a \$1,000 tile repair will result in a \$50 assessment to a property with a 5% maintenance assessment.

For portions of the McLean Drain not proposed to be improved by this report, the existing future maintenance assessment columns from the "Schedule B – Schedule for Future Maintenance" of the K. A. Smart, P. Eng. 1996 report, have been carried forward and included in Schedule B of this report (with slight modifications), so that review of the old schedule is no longer required. For more detail see Notes on Schedule B.

13.5.3 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 determined 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 the 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.

14 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. The current OMAFRA *Agricultural Drainage Infrastructure Program* (ADIP) 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 the grant, as per OMAFRA's ADIP policy, those ineligible costs have been separately identified in this report.

15 PRIVACY OF LANDS

A right of way for the Municipality will exist along the Drain once constructed on each property. However, the property on which the right of way is located remains private property. Other landowners or the public may not enter or use the drain right of way. Persons authorized to enter the drain right of way to carry out duties authorized under the Act include: Engineers, Contractors and the appointed Drainage Superintendent and/or their assistants.

16 MAINTENANCE

16.1 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 pro rata 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 the Municipality. Any landowner making a new connection to the Drain shall 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.

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 of removing obstructions is the responsibility of the owner.

The costs of cleaning through road crossings shall be assessed as drain maintenance to upstream lands/roads in accordance with Schedule B. The cost for future structural repair/replacement of road crossings shall be assessed fully to the road authority.

16.2 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.

16.3 Drains To Be Abandoned

In accordance with Section 19 of the Act, the following drains are hereby abandoned of status under the Drainage Act and shall be broken up and buried during construction:

| <u>Name of Drain</u> | <u>Branch Name</u> | <u>Stations (1972)</u> |
|-----------------------------|--------------------|------------------------|
| McLean Municipal Drain 1972 | Main Drain | 6+00 to 68+00 |
| McLean Municipal Drain 1972 | "B" Branch | 0+00 to 4+00 |

17 BYLAW

This report including the drawings, specifications, and assessment schedules, 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.



Curtis MacIntyre, P. Eng.



**SCHEDULE A - SCHEDULE OF ASSESSMENTS FOR CONSTRUCTION
McLEAN DRAIN 2023
TOWNSHIP OF EAST ZORRA - TAVISTOCK**

| Con | Lot | Roll No. (Owner) | Main Drain | | | | | Branch B | | | | | Gross Total Assessment (\$) |
|---|--------------|---------------------------------------|-------------------|-------------------|-------------------|------------------|----------------|-------------------|-------------------|-------------------|------------------|---------------|-----------------------------|
| | | | Total ha affected | Benefit (Sec. 22) | Special (Sec. 26) | Outlet (Sec. 23) | Total | Total ha affected | Benefit (Sec. 22) | Special (Sec. 26) | Outlet (Sec. 23) | Total | |
| Township of East Zorra - Tavistock (Roll No. 32-38-010-) | | | | | | | | | | | | | |
| F 17 | W Pt. Lot 13 | 020-11000 (M. Czerniawski) | 10.3 | 20,900 | 0 | 24,701 | 45,601 | 0.0 | 0 | 0 | 0 | 0 | 45,601 |
| F 17 | W Pt. Lot 14 | 020-11200 (Otterside Farm Ltd.) | 7.5 | 9,800 | 0 | 17,987 | 27,787 | 0.0 | 0 | 0 | 0 | 0 | 27,787 |
| F 17 | E Pt. Lot 13 | 020-11900 (W. & C. Vink) | 15.3 | 26,300 | 0 | 20,281 | 46,581 | 0.0 | 0 | 0 | 0 | 0 | 46,581 |
| F 17 | N Pt. Lot 12 | 020-11910 (W. Vink) | 19.6 | 29,800 | 0 | 15,686 | 45,486 | 0.0 | 0 | 0 | 0 | 0 | 45,486 |
| 17 | N Pt. Lot 12 | 020-12000 (O. & C. Horn) | 1.0 | 0 | 0 | 566 | 566 | 0.0 | 0 | 0 | 0 | 0 | 566 |
| F 17 | S Pt. Lot 12 | 020-12100 (1474526 Ontario Ltd.) | 25.0 | 53,900 | 0 | 10,725 | 64,625 | 0.0 | 900 | 0 | 0 | 900 | 65,525 |
| F 17 | N Pt. Lot 11 | 020-12300 (J. & K. Blaak) | 5.4 | 6,200 | 0 | 1,289 | 7,489 | 0.0 | 0 | 0 | 0 | 0 | 7,489 |
| F 18 | Lot 12 | 020-17200 (William A. Chesney & Sons) | 7.4 | 3,200 | 0 | 4,191 | 7,391 | 7.4 | 6,400 | 0 | 4,894 | 11,294 | 18,685 |
| 17/18 | Pt. Lot 12 | 020-17300 (P. & P. Menary) | 2.4 | 300 | 0 | 214 | 514 | 0.0 | 0 | 0 | 0 | 0 | 514 |
| 18 | Pt. Lot 11 | 020-17400 (K. & E. Leeson) | 3.9 | 1,000 | 0 | 356 | 1,356 | 0.0 | 0 | 0 | 0 | 0 | 1,356 |
| Subtotal (Lands): | | | 97.8 | 151,400 | 0 | 95,996 | 247,396 | 7.4 | 7,300 | 0 | 4,894 | 12,194 | 259,590 |
| 18th Line (Township of East Zorra-Tavistock) | | | 1.8 | 5,000 | 36,875 | 2,497 | 44,372 | 1.2 | 0 | 19,390 | 2,381 | 21,771 | 66,143 |
| Oxford Road 29 (County of Oxford) | | | 0.5 | 1,000 | 0 | 267 | 1,267 | 0.0 | 0 | 0 | 0 | 0 | 1,267 |
| Subtotal (Roads & Utilities): | | | 2.3 | 6,000 | 36,875 | 2,764 | 45,639 | 1.2 | 0 | 19,390 | 2,381 | 21,771 | 67,410 |
| TOTAL ASSESSMENT McLEAN DRAIN 2023: | | | 100.1 | 157,400 | 36,875 | 98,760 | 293,035 | 8.6 | 7,300 | 19,390 | 7,275 | 33,965 | 327,000 |

Notes:

- Lands noted with an "F" are classified as agricultural and according to current OMAFRA policy qualify for the 1/3 grant
Eligibility for the 1/3 grant will be confirmed at the time the final cost is levied.
- Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each parcel of land and road affected.
The affected parcels of land have been identified using the roll number from the last revised assessment roll for the County/Township.
For convenience the owner's names as shown by the last revised assessment roll have also been included.

SCHEDULE B - Schedule of Assessment for Future Maintenance
McLEAN DRAIN 2023
TOWNSHIP OF EAST ZORRA - TAVISTOCK

| For Ditch and Tile Work | | | | | | | | | | | | Terracing Work | | | | | | | | | | |
|---|--------------|---------------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|----------------|---------------|---------------|---------------|---|--------------|---------------|--------------|---------------|
| | | MAIN DRAIN | | | | | | | | | | BRANCH A | | BRANCH B | | BRANCH C | | MAIN DRAIN | | BRANCH C | | |
| | | Interval 1 | | Interval 2 | | Interval 3 | | Interval 4 | | Interval 5 | | 000 to 427 | | 0+000 to 0+032 | | 000 to 232 | | (on 1474526 Ontario Ltd., Vink & Czerniawski) | | 000 to 232 | | |
| Con | Lot | Roll No. (Owner) | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | | |
| Township of East Zorra - Tavistock (Roll No. 32-38-010-) | | | | | | | | | | | | | | | | | | | | | | |
| 17 | W Pt. Lot 13 | 020-11000 (M. Czerniawski) | 750 | 8.23 | 2,400 | 5.96 | 1,596 | 8.48 | 5,250 | 12.60 | 19,069 | 35.84 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 930 | 9.39 | 505 | 5.10 |
| 17 | W Pt. Lot 14 | 020-11200 (Otterside Farm Ltd.) | 588 | 6.45 | 1,748 | 4.34 | 1,162 | 6.17 | 3,823 | 9.17 | 17,317 | 32.55 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 730 | 7.37 | 395 | 3.99 |
| 17 | E Pt. Lot 13 | 020-11900 (W. & C. Vink) | 1,345 | 14.77 | 3,566 | 8.86 | 2,371 | 12.59 | 10,453 | 25.08 | 16,814 | 31.61 | 12,400 | 100.00 | 0 | 0.00 | 2,633 | 17.79 | 1,668 | 16.85 | 1,310 | 13.22 |
| 17 | N Pt. Lot 12 | 020-11910 (W. Vink) | 1,236 | 13.56 | 4,568 | 11.35 | 5,137 | 27.28 | 14,387 | 34.52 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 7,687 | 51.94 | 1,532 | 15.47 | 2,955 | 29.83 |
| 17 | N Pt. Lot 12 | 020-12000 (O. & C. Horn) | 16 | 0.18 | 233 | 0.58 | 155 | 0.82 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 80 | 0.54 | 20 | 0.20 | 11 | 0.11 |
| 17 | S Pt. Lot 12 | 020-12100 (1474526 Ontario Ltd.) | 1,870 | 20.53 | 12,751 | 31.68 | 6,706 | 35.61 | 7,762 | 18.63 | 0 | 0.00 | 0 | 0.00 | 3,450 | 31.58 | 4,400 | 29.73 | 3,610 | 36.46 | 3,958 | 39.95 |
| 17 | N Pt. Lot 11 | 020-12300 (J. & K. Blaak) | 242 | 2.66 | 9,426 | 23.42 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 300 | 3.03 | 165 | 1.67 |
| 18 | Lot 12 | 020-17200 (William A. Chesney & Sons) | 427 | 4.69 | 3,325 | 8.26 | 1,147 | 6.09 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 5,094 | 46.63 | 0 | 0.00 | 530 | 5.35 | 286 | 2.89 |
| 17/18 | Pt. Lot 12 | 020-17300 (P. & P. Menary) | 750 | 8.23 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 60 | 0.61 | 36 | 0.36 |
| 18 | Pt. Lot 11 | 020-17400 (K. & E. Leeson) | 1,000 | 10.98 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 100 | 1.01 | 55 | 0.56 |
| Total Assessments on Lands: | | | 8,224 | 90.28 | 38,017 | 94.45 | 18,274 | 97.04 | 41,675 | 100.00 | 53,200 | 100.00 | 12,400 | 100.00 | 8,544 | 78.21 | 14,800 | 100.00 | 9,480 | 95.74 | 9,676 | 97.68 |
| 18th Line (Township of East Zorra-Tavistock) | | | 572 | 6.27 | 2,228 | 5.55 | 556 | 2.96 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2,381 | 21.79 | 0 | 0.00 | 400 | 4.06 | 220 | 2.21 |
| Oxford Road 29 (County of Oxford) | | | 314 | 3.45 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 20 | 0.20 | 11 | 0.11 |
| Total Assessments on Roads: | | | 886 | 9.72 | 2,228 | 5.55 | 556 | 2.96 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2,381 | 21.79 | 0 | 0.00 | 420 | 4.26 | 231 | 2.32 |
| TOTAL ASSESSMENTS | | | 9,110 | 100.00 | 40,245 | 100.00 | 18,830 | 100.00 | 41,675 | 100.00 | 53,200 | 100.00 | 12,400 | 100.00 | 10,925 | 100.00 | 14,800 | 100.00 | 9,900 | 100.00 | 9,907 | 100.00 |
| | | | 2.1 | | | | | | | | | | 2.2 | | | | | | 2.3 | | 2.4 | 2.5 |

Note:

- Agricultural designation not included as grant eligibility has to be confirmed at the time of maintenance cost levy.
- Replicated column from "Schedule B - Schedule for Future Maintenance" of K. A. Smart, P. Eng.'s 1996 report on the McLean Drain 1996
 - Merged assessments for Roll No.'s -121 & -123-01. Re-apportioned assessment for -119 due to the 020-11900 & 020-11910 severance. (Original 1996 Assessment for Future Maintenance to -119 was 2,581)
 - No reapportionments required. Increased 1996 assessments by multitude of 4 to relate better to other 2023 values.
 - Merged assessments for Roll No.'s -121 & -123-01. Re-apportioned assessment for -119 due to the 020-11900 & 020-11910 severance. (Original 1996 Assessment for Future Maintenance to -119 was 2,580) Increased 1996 assessments by multitude of 4 to relate better to other 2023 values.
 - Merged assessments for Roll No.'s -121 & -123-01. Re-apportioned assessment for -119 due to the 020-11900 & 020-11910 severance. (Original 1996 Assessment for Future Maintenance to -119 was 3,200)
 - Merged assessments for Roll No.'s -121 & -123-01. Re-apportioned assessment for -119 due to the 020-11900 & 020-11910 severance. (Original 1996 Assessment for Future Maintenance to -119 was 4,265)

April 28, 2023

**SCHEDULE C - SCHEDULE FOR ACTUAL COST BY-LAW
McLEAN DRAIN 2023
TOWNSHIP OF EAST ZORRA - TAVISTOCK**

Page 28
File No. 20-068

| Con | Lot | Roll No. (Owner) | Ha. Affected | Gross Assessment | 1/3 Grant | Allowances | NET |
|--|-------|---|-----------------|---------------------|---------------|---------------|----------------|
| <i>Township of East Zorra - Tavistock (Roll No. 32-38-010-)</i> | | | | | | | |
| F | 17 | W Pt. Lot 13 020-11000 (M. Czerniawski) | 10.3 | 45,601 | 15,200 | 6,000 | 24,401 |
| F | 17 | W Pt. Lot 14 020-11200 (Otterside Farm Ltd.) | 7.5 | 27,787 | 9,262 | 600 | 17,925 |
| F | 17 | E Pt. Lot 13 020-11900 (W. & C. Vink) | 15.3 | 46,581 | 15,527 | 1,800 | 29,254 |
| F | 17 | N Pt. Lot 12 020-11910 (W. Vink) | 19.6 | 45,486 | 15,162 | 1,700 | 28,624 |
| | 17 | N Pt. Lot 12 020-12000 (O. & C. Horn) | 1.0 | 566 | 0 | | 566 |
| F | 17 | S Pt. Lot 12 020-12100 (1474526 Ontario Ltd.) | 25.0 | 65,525 | 21,842 | 3,350 | 40,333 |
| F | 17 | N Pt. Lot 11 020-12300 (J. & K. Blaak) | 5.4 | 7,489 | 2,496 | 300 | 4,693 |
| F | 18 | Lot 12 020-17200 (William A. Chesney & Sons) | 7.4 | 18,685 | 6,228 | 100 | 12,357 |
| | 17/18 | Pt. Lot 12 020-17300 (P. & P. Menary) | 2.4 | 514 | 0 | | 514 |
| | 18 | Pt. Lot 11 020-17400 (K. & E. Leeson) | 3.9 | 1,356 | 0 | | 1,356 |
| Subtotal (Lands): | | | 97.8 | 259,590 | 85,717 | 13,850 | 160,023 |
| 18th Line (Township of East Zorra-Tavistock) | | | 1.8 | 66,143 | 0 | | 66,143 |
| Oxford Road 29 (County of Oxford) | | | 0.5 | 1,267 | 0 | | 1,267 |
| Subtotal (Roads & Utilities): | | | 2.3 | 67,410 | 0 | 0 | 67,410 |
| TOTAL ASSESSMENT McLEAN DRAIN 2023: | | | 100.1 | 327,000 | 85,717 | 13,850 | 227,433 |

Notes:

- Lands noted with an "F" are classified as agricultural and according to current OMAFRA policy qualify for the 1/3 grant. Eligibility for the 1/3 grant will be confirmed at the time the final cost is levied.
- Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each parcel of land and road affected. The affected parcels of land have been identified using the roll number from the last revised assessment roll for the County/Township. For convenience the owner's names as shown by the last revised assessment roll have also been included.
- Actual assessment is levied to the owner of the parcel at the time the final cost is levied.

APPENDIX A - Calculation of Assessments
McLEAN DRAIN 2023
TOWNSHIP OF EAST ZORRA - TAVISTOCK

| | Main Drain | | | | | | | | | | | | | | | | Main Drain | | | | BRANCH B | | | | Grand | | | | | | | |
|---|-------------------|----------------|-------------------|-------------------|-------------------|--------------|------------------|-------------------|-------------------|-------------|------------------|-------------------|-------------------|-------------|------------------|-------------------|-------------------|-------------|------------------|-------------------|-------------------|-------------|------------------|-------------------------|-------------------------|---------------|------------------------|----------------|---------------|---------------|--------------|-------|
| | Interval 1 | | | | Interval 2 | | | | Interval 3 | | | | Interval 4 | | | | Interval 5 | | | | Main Drain | | | | BRANCH B | | | | Grand | | | |
| ESTIMATED COST | Station | 0+000 | to | 0+311 | Station | 0+311 | to | 0+560 | Station | 0+560 | to | 0+876 | Station | 0+876 | to | 1+433 | Station | 1+433 | to | 2+128 | Total | Total | Total | Total | Station | 0+000 | to | 0+032 | Total | Total | Total | Total |
| Allowances | | | | 0 | | | | 1,150 | | | | 1,600 | | | | 2,800 | | | | 8,100 | | | | 13,650 | | | | | | | | |
| Construction | | | | 16,725 | | | | 69,100 | | | | 22,600 | | | | 44,000 | | | | 49,900 | | | | 202,325 | | | | | | | | |
| Engineering | | | | 3,300 | | | | 14,000 | | | | 4,500 | | | | 8,800 | | | | 9,500 | | | | 40,100 | | | | | | | | |
| Construction Supervision | | | | 1,800 | | | | 8,300 | | | | 2,700 | | | | 5,300 | | | | 6,000 | | | | 24,100 | | | | | | | | |
| Administration | | | | 700 | | | | 2,865 | | | | 900 | | | | 1,700 | | | | 2,000 | | | | 8,165 | | | | | | | | |
| Net HST | | | | 385 | | | | 1,605 | | | | 530 | | | | 1,025 | | | | 1,150 | | | | 4,695 | | | | | | | | |
| TOTAL | | | | 22,910 | | | | 97,020 | | | | 32,830 | | | | 63,625 | | | | 76,650 | | | | 293,035 | | | | | | | | |
| Roll No. (Owner) | Total Ha Affected | Run-off Factor | Total ha Adjusted | Benefit (Sec. 22) | Special (Sec. 26) | Adj Ha | Outlet (Sec. 23) | Benefit (Sec. 22) | Special (Sec. 26) | Adj Ha | Outlet (Sec. 23) | Benefit (Sec. 22) | Special (Sec. 26) | Adj Ha | Outlet (Sec. 23) | Benefit (Sec. 22) | Special (Sec. 26) | Adj Ha | Outlet (Sec. 23) | Benefit (Sec. 22) | Special (Sec. 26) | Adj Ha | Outlet (Sec. 23) | Total Benefit (Sec. 22) | Total Special (Sec. 26) | Total Adj Ha | Total Outlet (Sec. 23) | Total Benefits | Total Special | Total Outlets | TOTAL | |
| Township of East Zorra - Tavistock (Roll No. 32-38-010-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 020-11000 (M. Czerniawski) | 10.3 | 1.0 | 10.3 | | | | 10.3 | | | | 1,836 | | | | 10.3 | | | | 2,400 | | | | | | | | | | | | | |
| 020-11200 (Olterside Farm Ltd.) | 7.5 | 1.0 | 7.5 | | | | 7.5 | | | | 1,337 | | | | 7.5 | | | | 1,748 | | | | | | | | | | | | | |
| 020-11900 (W. & C. Vink) | 15.3 | 1.0 | 15.3 | | | | 15.3 | | | | 2,727 | | | | 15.3 | | | | 3,566 | | | | | | | | | | | | | |
| 020-11910 (W. Vink) | 19.6 | 1.0 | 19.6 | | | | 19.6 | | | | 3,494 | | | | 19.6 | | | | 4,568 | | | | | | | | | | | | | |
| 020-12000 (O. & C. Horn) | 1.0 | 1.0 | 1.0 | | | | 1.0 | | | | 178 | | | | 1.0 | | | | 233 | | | | | | | | | | | | | |
| 020-12100 (1474526 Ontario Ltd.) | 25.0 | 1.0 | 25.0 | | | | 25.0 | | | | 4,456 | 27,900 | | | 20.6 | | | | 4,801 | 17,800 | | | | | | | | | | | | |
| 020-12300 (J. & K. Blaak) | 5.4 | 1.0 | 5.4 | | | | 5.4 | | | | 963 | 6,200 | | | 1.4 | | | | 326 | | | | | | | | | | | | | |
| 020-17200 (William A. Chesney & Sons) | 7.4 | 1.0 | 7.4 | | | | 7.4 | | | | 1,319 | 3,200 | | | 7.4 | | | | 1,725 | | | | | | | | | | | | | |
| 020-17300 (P. & P. Menary) | 2.4 | 0.5 | 1.2 | | | | 300 | | | | 214 | | | | 0.0 | | | | 0 | | | | | | | | | | | | | |
| 020-17400 (K. & E. Leeson) | 3.9 | 0.5 | 2.0 | | | | 1,000 | | | | 356 | | | | 0.0 | | | | 0 | | | | | | | | | | | | | |
| Subtotal (Lands): | 97.8 | | 94.7 | 1,300 | 0 | 94.7 | 16,880 | 37,300 | 0 | 83.1 | 19,367 | 22,000 | 0 | 66.3 | 10,274 | 43,900 | 0 | 38.7 | 19,725 | 46,900 | 0 | 22.5 | 29,750 | 151,400 | 0 | 95,996 | 247,396 | 7,300 | 0 | 7.4 | 4,894 | |
| 18th Line (Township of East Zorra-Tavistock) | 1.8 | 3.0 | 5.4 | | | | 2,500 | | | | 963 | | | | 2,500 | | | | 36,875 | | | | | | | | | | | | | |
| Oxford Road 29 (County of Oxford) | 0.5 | 3.0 | 1.5 | | | | 1,000 | | | | 267 | | | | 0.0 | | | | 0 | | | | | | | | | | | | | |
| Subtotal (Roads & Utilities): | 2.3 | | 6.9 | 3,500 | 0 | 6.9 | 1,230 | 2,500 | 36,875 | 4.2 | 978 | 0 | 0 | 3.6 | 556 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 6,000 | 36,875 | 2,764 | 45,639 | 0 | 19,390 | 3.6 | 2,381 | | |
| TOTAL ASSESSMENT McLEAN DRAIN 2023: | 100.1 | | 101.6 | 4,800 | 0 | 101.6 | 18,110 | 39,800 | 36,875 | 87.3 | 20,345 | 22,000 | 0 | 69.9 | 10,830 | 43,900 | 0 | 38.7 | 19,725 | 46,900 | 0 | 22.5 | 29,750 | 157,400 | 36,875 | 98,760 | 293,035 | 7,300 | 19,390 | 11.0 | 7,275 | |

400 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF DRAINS

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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.

410

STANDARD SPECIFICATIONS

FOR

OPEN DRAINS

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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.

420

STANDARD SPECIFICATIONS

FOR

TILE DRAINS

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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.

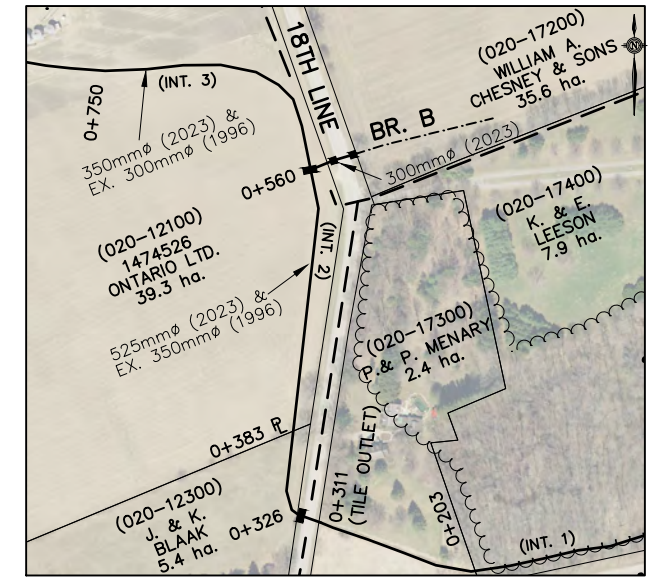
All catchbasin sumps to be fully cleaned by the Contractor after completion of drain installation and backfilling.

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.



| BENCHMARKS | |
|--|--|
| BM#1 "WATER SURVEY OF CANADA" TABLET AT NW CORNER OF CTY RD. 29 BRIDGE ELEV. 297.922 | BM#5 CUT CROSS NE CORNER 600x600mm CB ON "CZERNIAWSKI" & "VINK" R ELEV. 309.603 |
| BM#3 SPIKE IN S/SIDE H.P.#C76MXJ WEST SIDE 17th LINE ELEV. 313.788 | BM#6 NAIL IN W. SIDE HP #CD8X8D 24m EAST OF STA. 0+540 ELEV. 298.047 |
| BM#4 CUT CROSS NW CORNER 600x600mm CB ON "OTTERSIDE" & "CZERNIAWSKI" R ELEV. 314.226 | BM#7 TOP SW CORNER OF CONC. PAD FOR HYDRO VAULT ELEV. 301.505 |

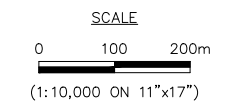


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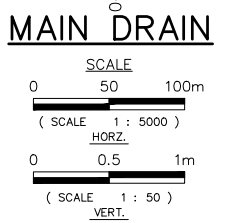
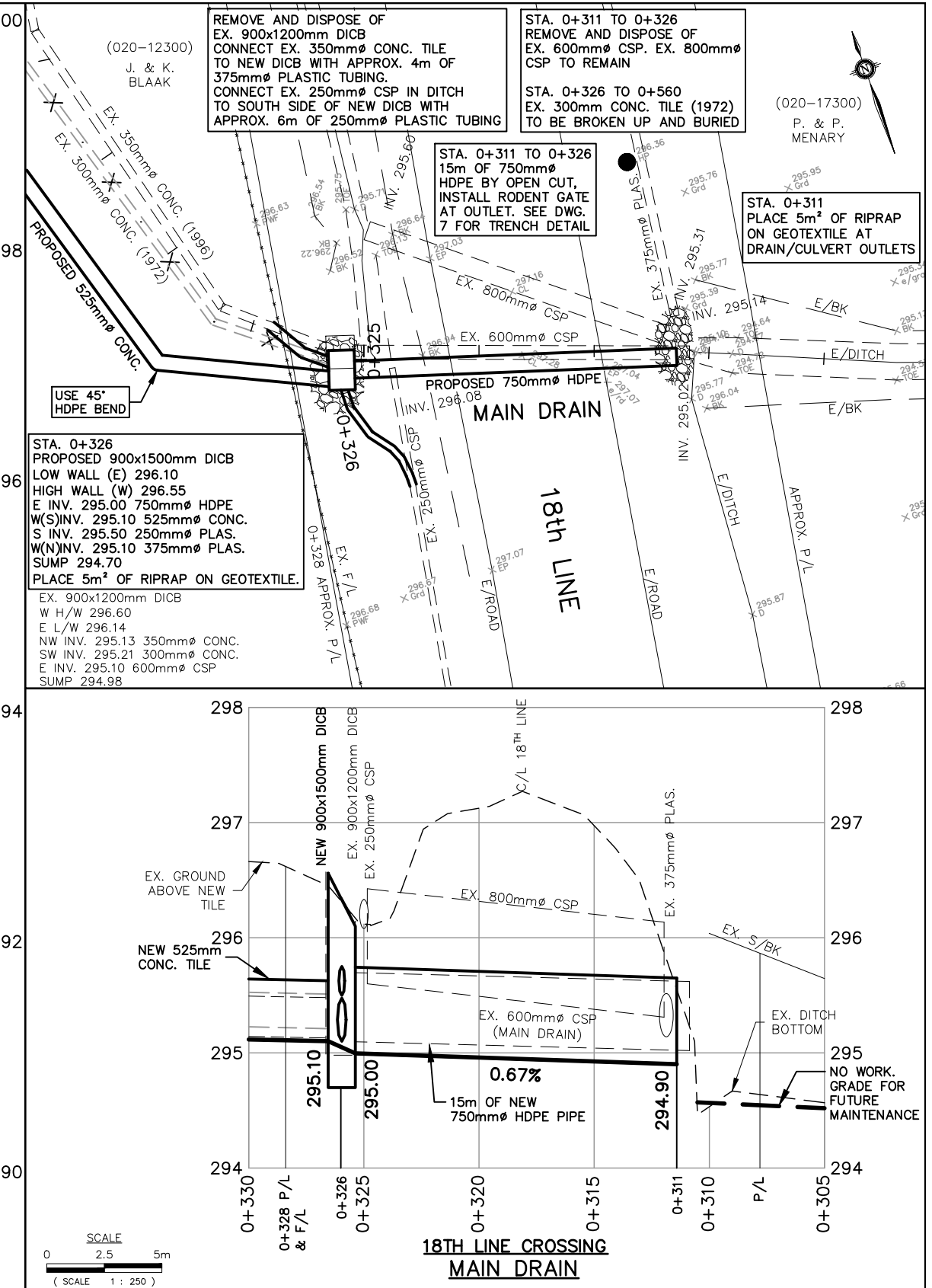
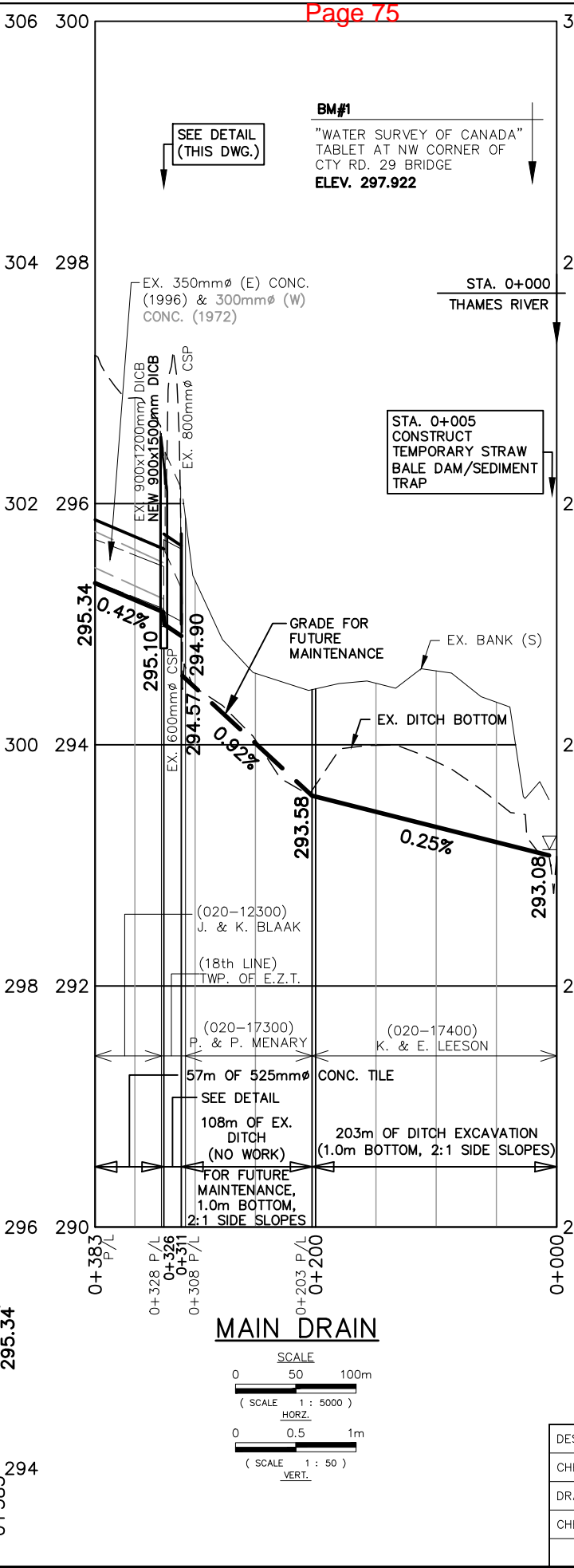
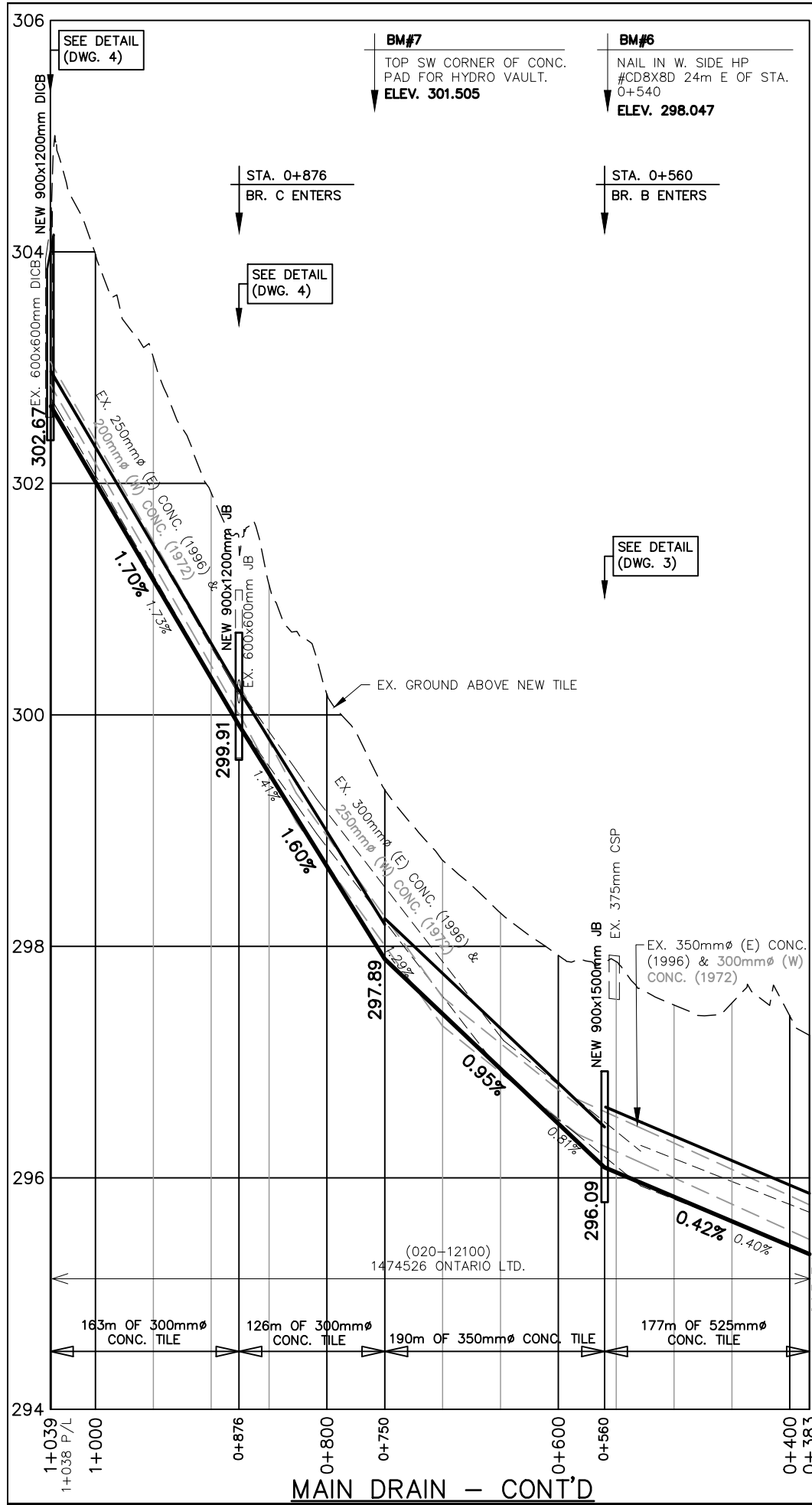
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| | ACCESS |
| | APPROXIMATE HECTARES IN WATERSHED |
| | HECTARES OWNED |
| | ASSESSMENT ROLL NUMBER |
| | BUSH AREA |

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, 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.

DESIGNED BY: C.J.M.
CHECKED BY: J.E.M.
DRAWN BY: C.J.M.
CHECKED BY: A.M.P.



| | |
|---|---------------------------|
| McLEAN DRAIN 2023 | |
| COUNTY OF OXFORD TOWNSHIP OF EAST ZORRA-TAVISTOCK | |
| WATERSHED PLAN | APR. 28, 2023 |
| K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY | REVISED: |
| | JOB NUMBER: 20-068 |
| | DRAWING |
| | 1 OF 7 |

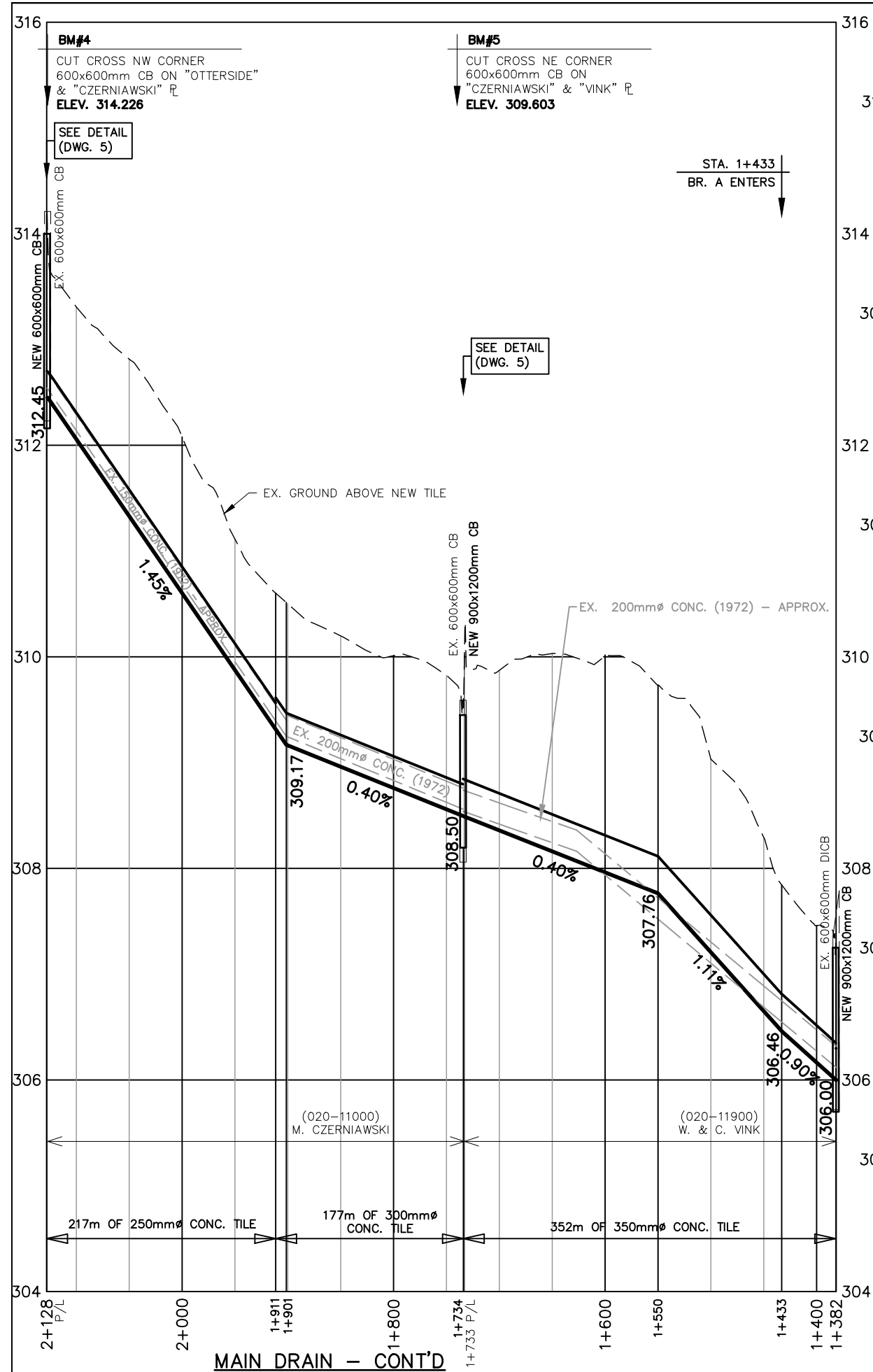


DESIGNED BY: C.J.M.
 CHECKED BY: J.E.M.
 DRAWN BY: C.J.M.
 CHECKED BY: A.M.P.

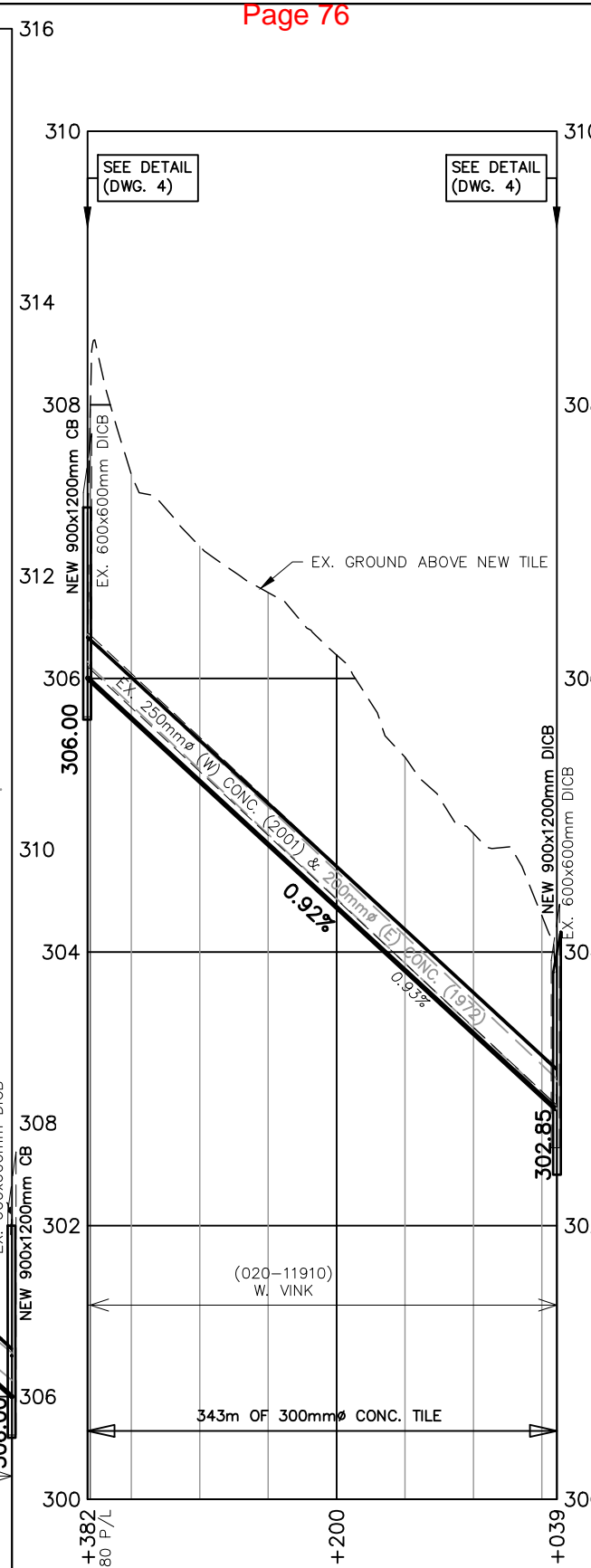


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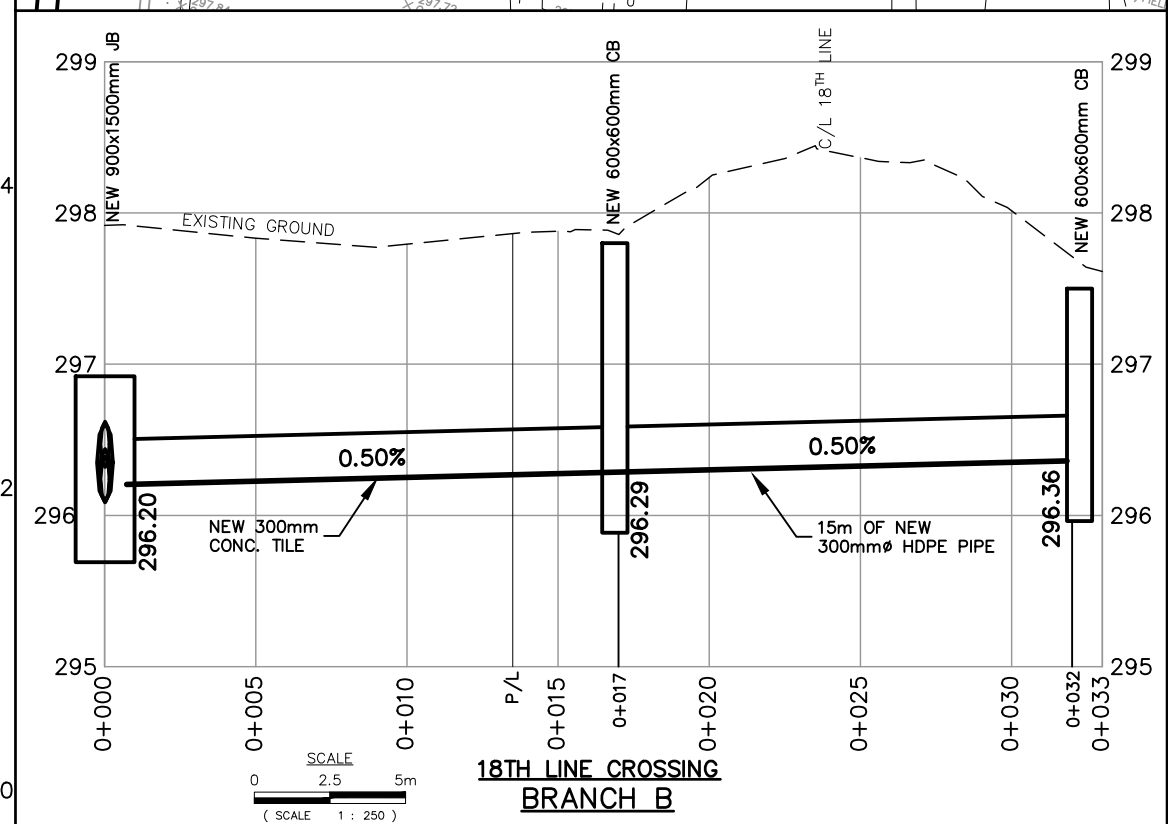
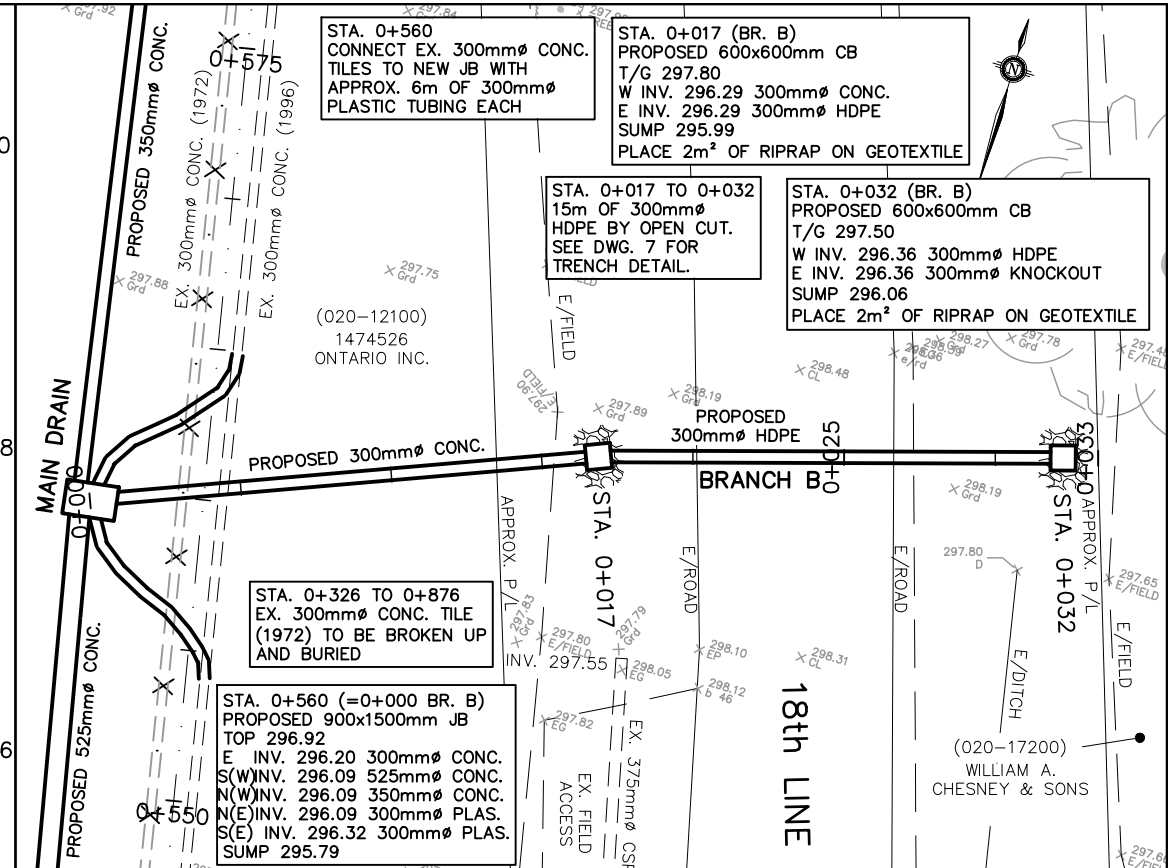
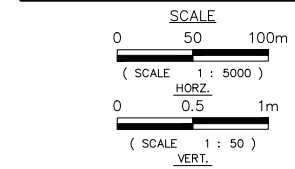
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| COUNTY OF OXFORD TOWNSHIP OF EAST ZORRA-TAVISTOCK | |
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| K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY | REVISED: |
| | JOB NUMBER: 20-068 |
| DRAWING | |
| 2 OF 7 | |



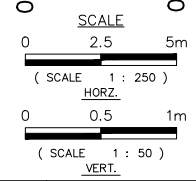
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MAIN DRAIN - CONT'D




18TH LINE CROSSING
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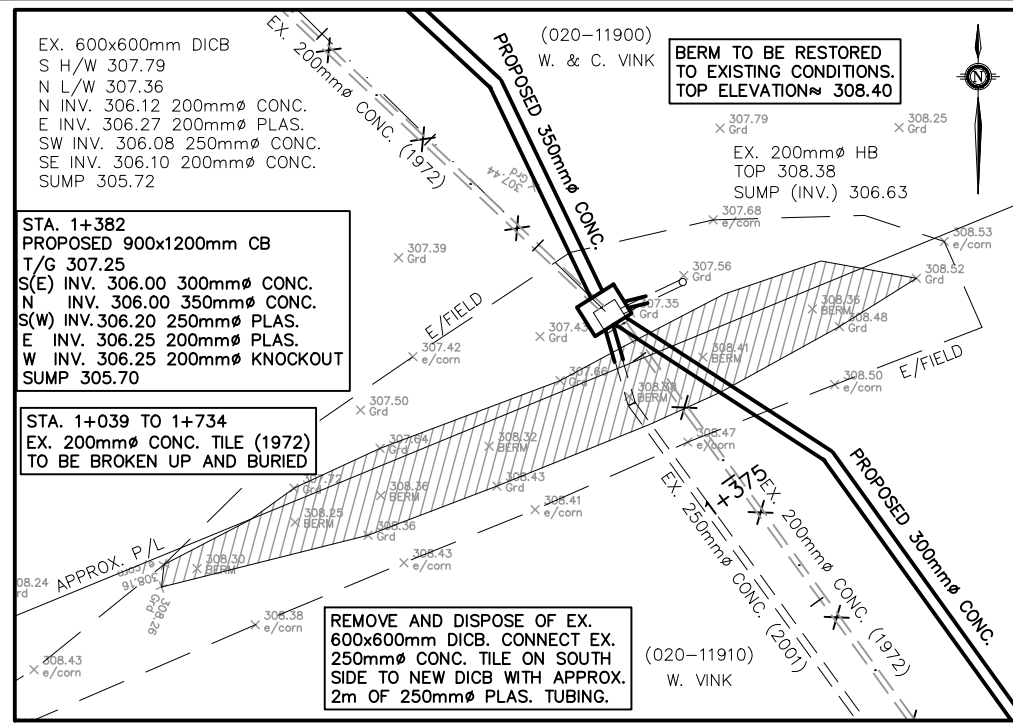


DESIGNED BY: C.J.M.
CHECKED BY: J.E.M.
DRAWN BY: C.J.M.
CHECKED BY: A.M.P.

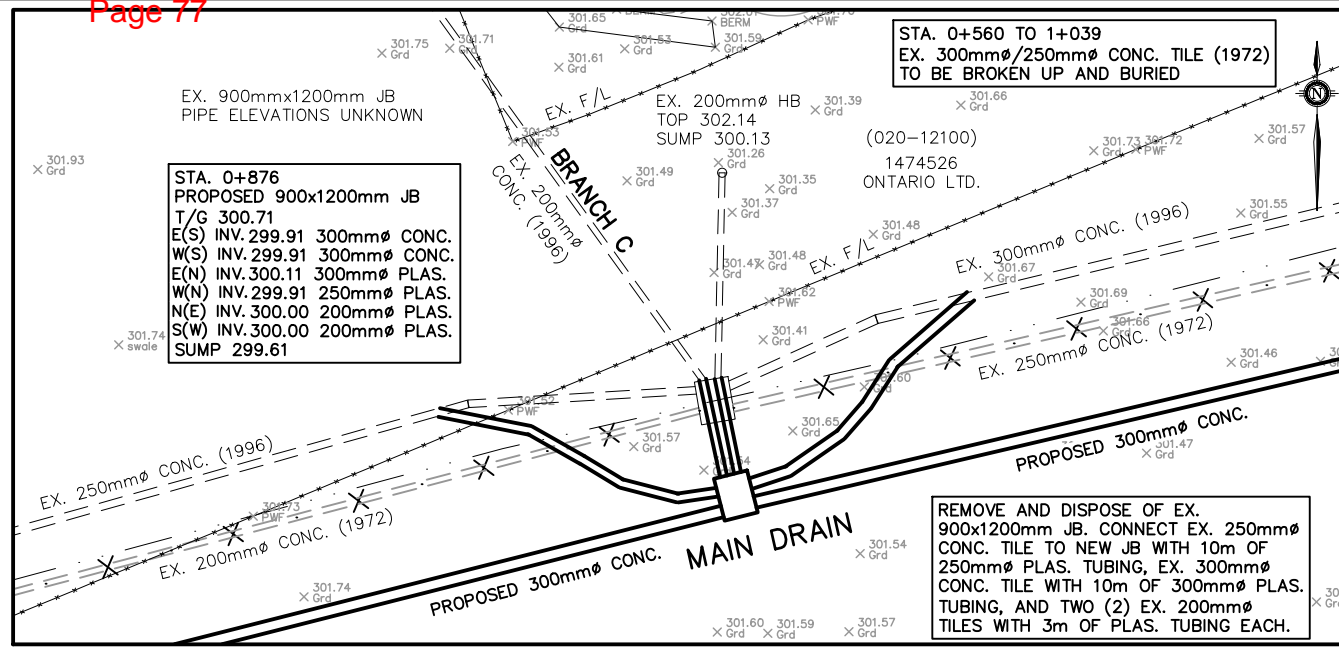


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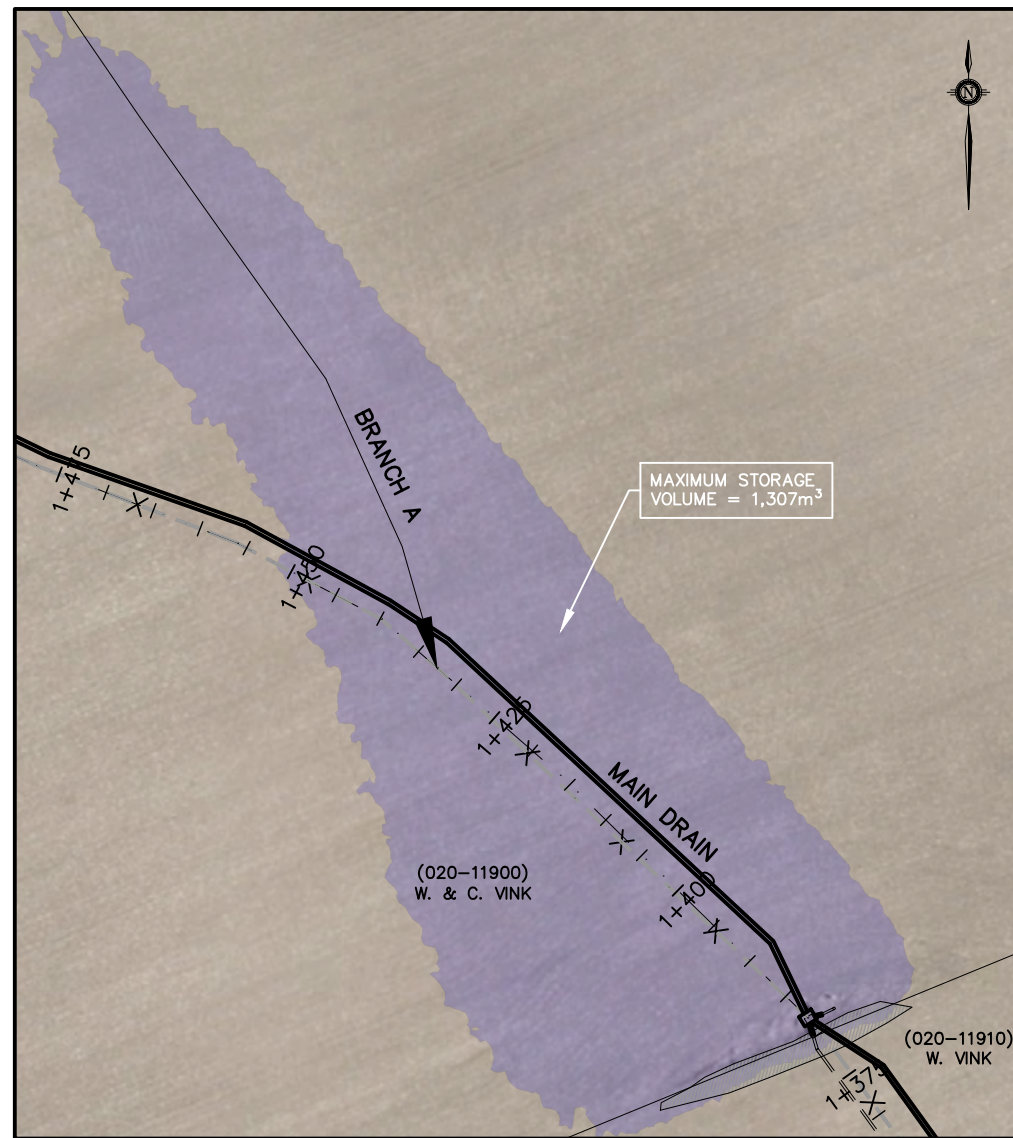
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| McLEAN DRAIN 2023 | |
| COUNTY OF OXFORD TOWNSHIP OF EAST ZORRA-TAVISTOCK | |
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|  K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY | REVISED: |
| | JOB NUMBER: 20-068 |
| DRAWING 3 OF 7 | |



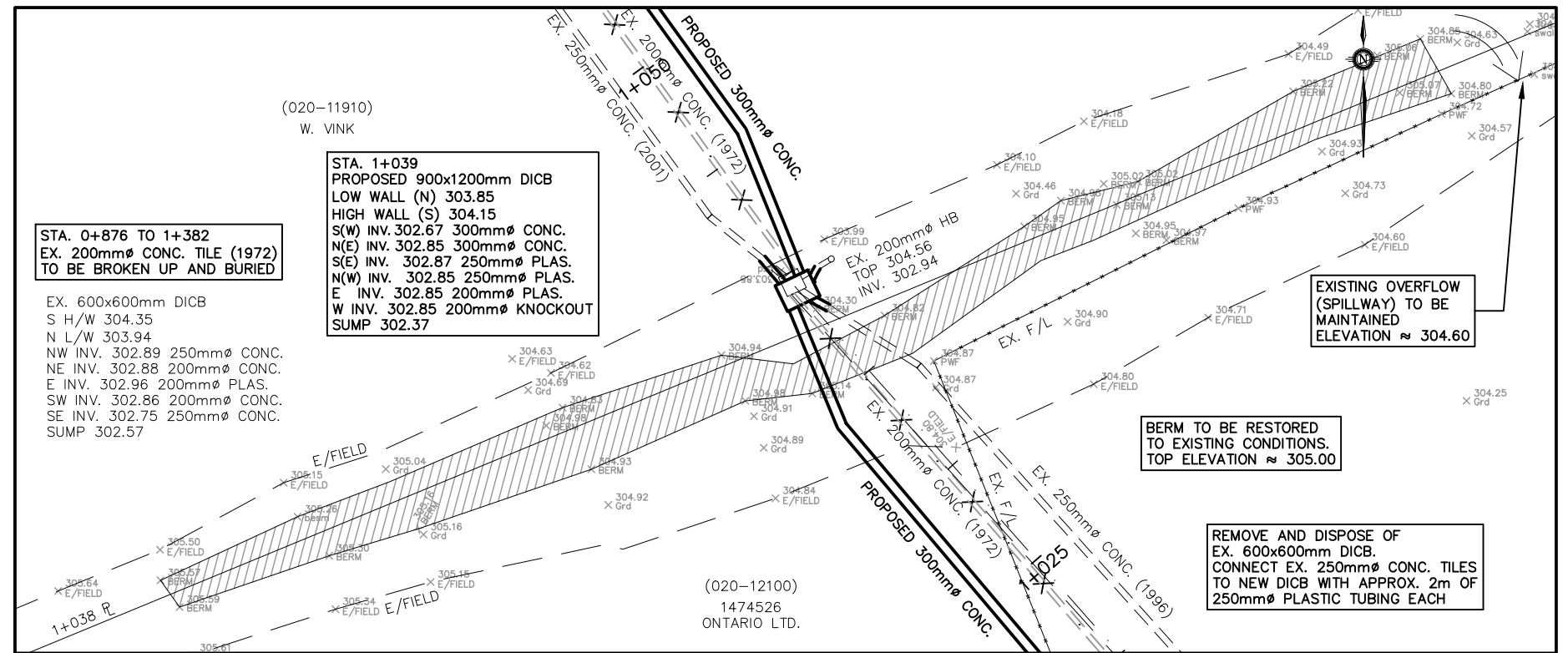
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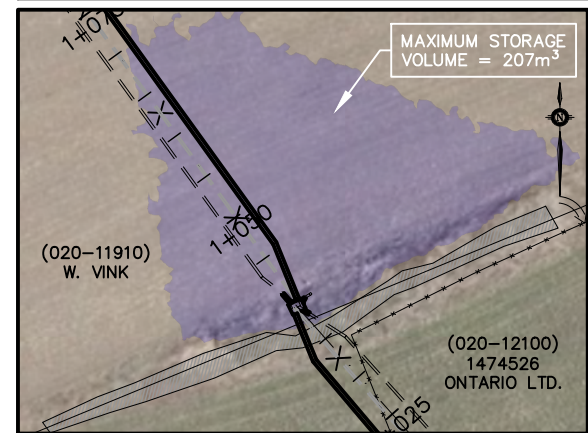
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STA. 1+382: INUNDATION IMPACT AREA



STA. 1+039: DETAIL



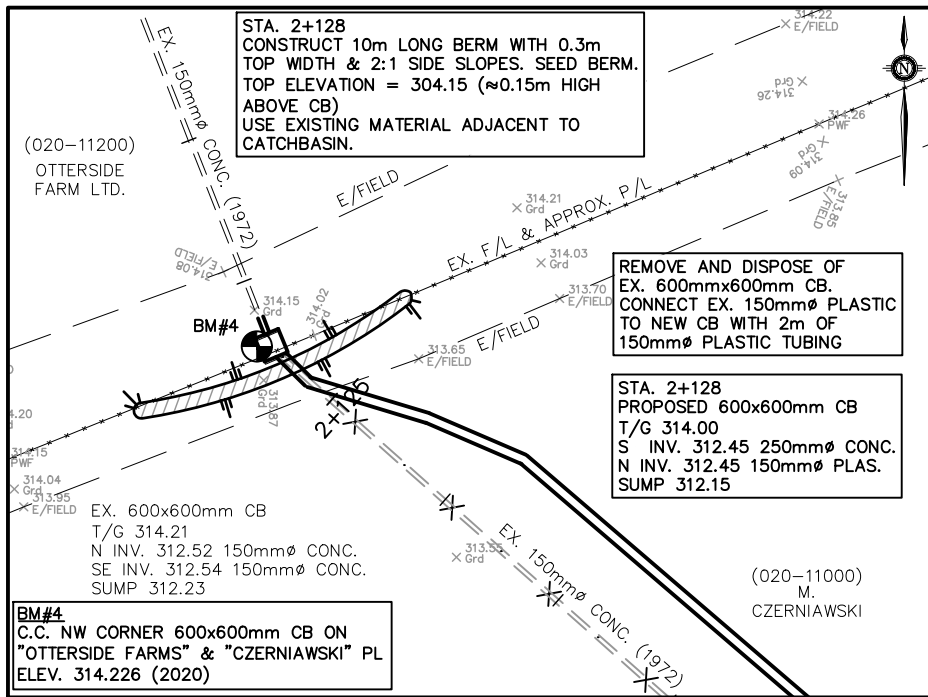
STA. 1+039: INUNDATION IMPACT AREA

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CHECKED BY: J.E.M.
DRAWN BY: C.J.M.
CHECKED BY: A.M.P.



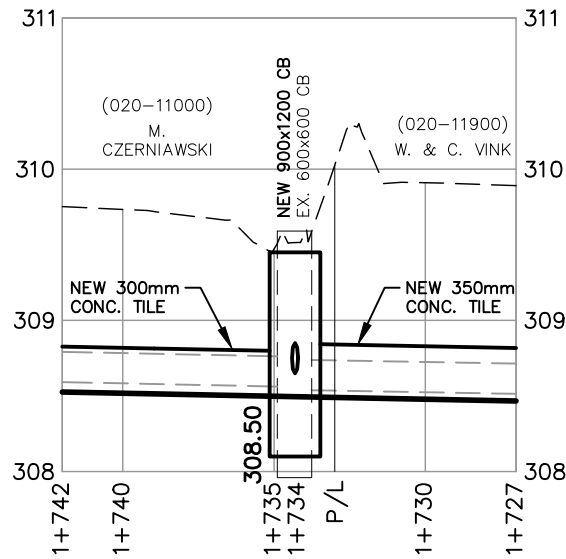
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DETAILS
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(SCALE 1 : 750)
INUNDATION IMPACT AREAS

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| McLEAN DRAIN 2023 | |
| COUNTY OF OXFORD | TOWNSHIP OF EAST ZORRA-TAVISTOCK |
| DETAILS (1) | APR. 28, 2023 |
| | K. SMART ASSOCIATES LIMITED CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY |
| | REVISED: JOB NUMBER: 20-068 DRAWING 4 OF 7 |



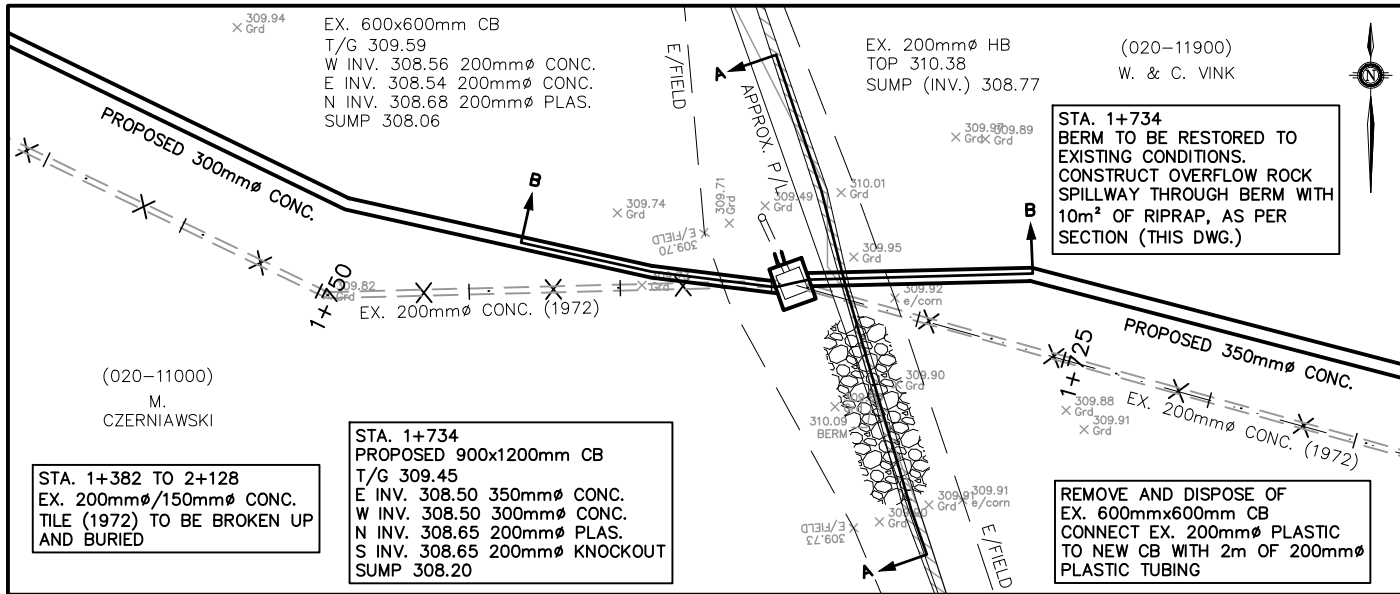
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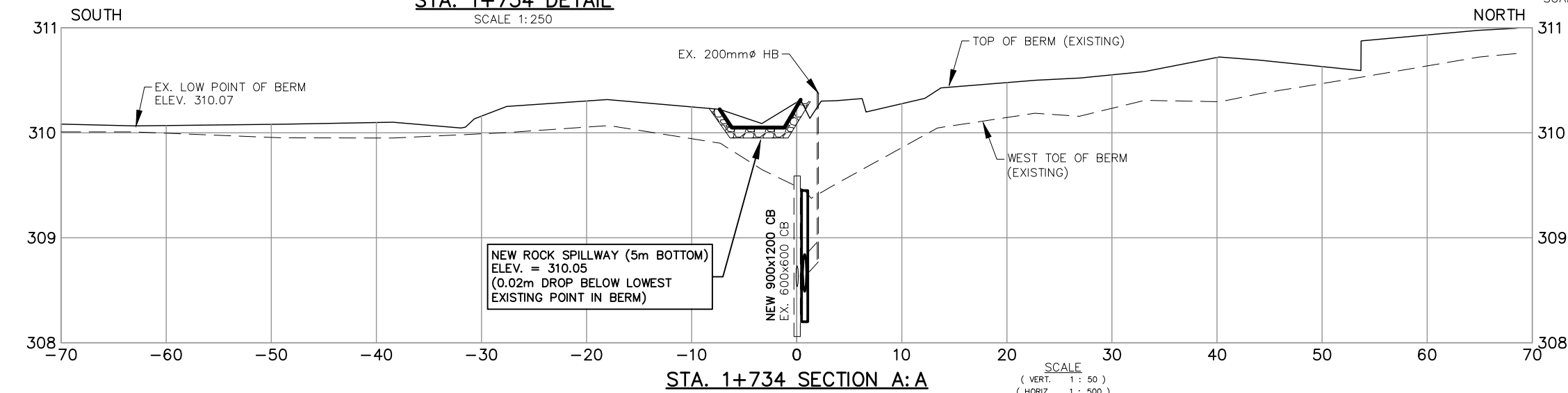
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 (HORIZ. 1 : 250)



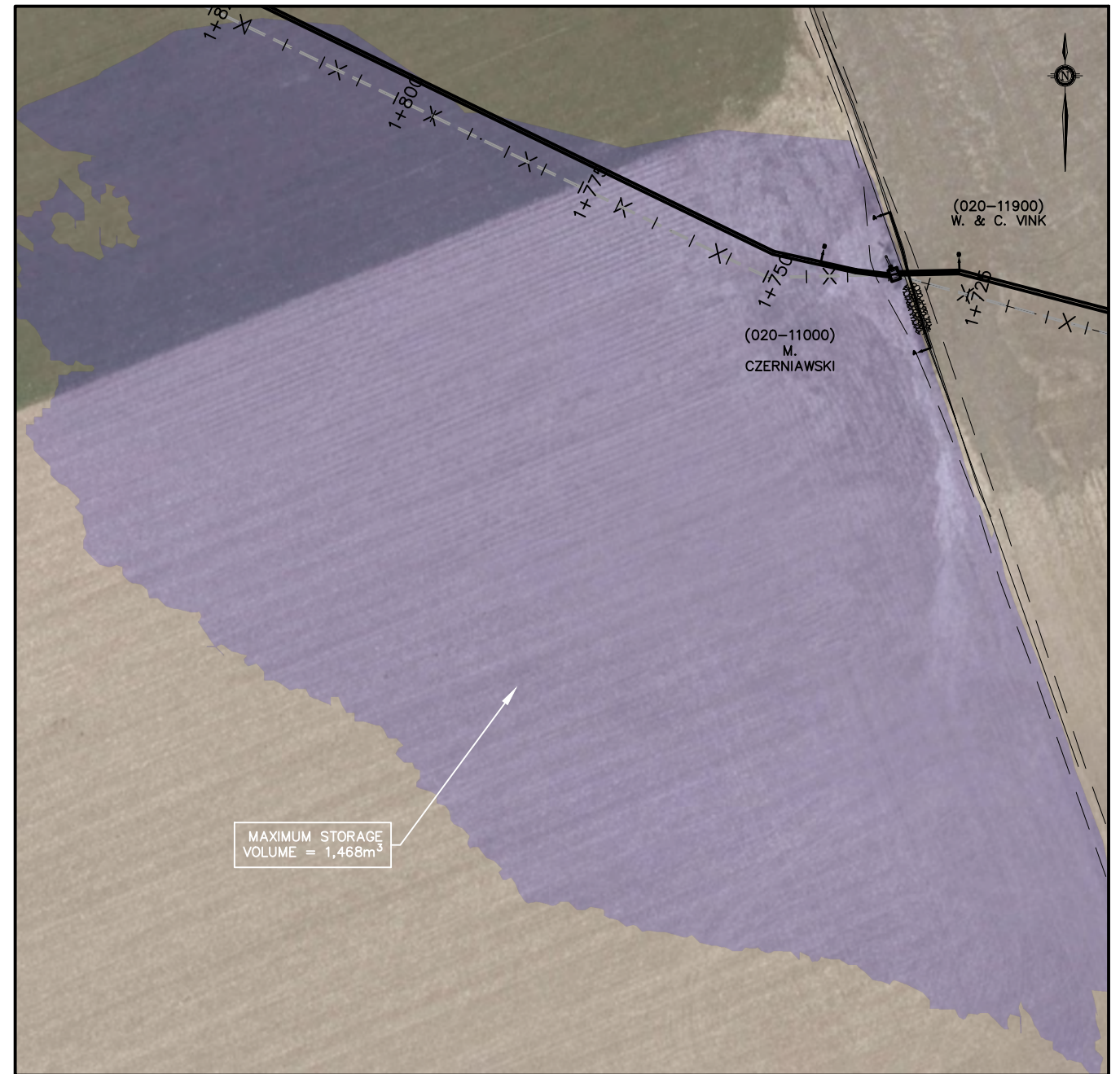
STA. 1+734 DETAIL

SCALE 1:250



STA. 1+734 SECTION A:A

SCALE
 (VERT. 1 : 50)
 (HORIZ. 1 : 500)



STA. 1+734: INUNDATION IMPACT AREA

SCALE 1:750

| | | |
|---------------------|--|-----------------------------------|
| DESIGNED BY: C.J.M. | | SCALE AS SHOWN (ON 11"x17") |
| CHECKED BY: J.E.M. | | |
| DRAWN BY: C.J.M. | | |
| CHECKED BY: A.M.P. | | |

McLEAN DRAIN 2023
 COUNTY OF OXFORD TOWNSHIP OF EAST ZORRA-TAVISTOCK

DETAILS (2) APR. 28, 2023

| | |
|---------|--------------------|
| | REVISED: |
| | JOB NUMBER: 20-068 |
| DRAWING | 5 OF 7 |

300) CONSTRUCTION NOTES (SPECIAL PROVISIONS)**300.1) CONSTRUCTION SPECIFICATIONS - SPECIFIC NOTES****j) MAIN DRAIN****K. & E. Leeson (Roll No. 020-17400)**

- 0+000 - Construct straw bale dam/sediment trap prior to any brushing or construction work upstream.
- Straw bale dam/sediment trap to be cleaned out at the end of construction and removed.
- 0+000 to 0+203 - 203m of power brushing of 6m wide path along existing ditch (See S.S. 400.27). Logs to be piled neatly along outside edge of cleared right-of-way. Brushing to be on north side of existing ditch to limit debris directed toward Oxford Road 29.
- 203m of ditch excavation (1.0m bottom, 2:1 side slopes). Spoil to be spread on north bank.

P. & P. Menary (Roll No. 020-17300)

- 0+203 to 0+311 - No work. Existing open ditch to be incorporated as a part of McLean Drain 2023 (1.0m bottom, 2:1 side slopes).

Township of East Zorra-Tavistock (18th Line Main Drain Crossing)

- 0+311 - Place 5m² of riprap on geotextile at drain/culvert outlets.
- 0+311 to 0+326 - Remove and disposal of existing 600mm (24") dia. CSP under 18th Line.
- Install 15m of 750mm (30") dia. solid plastic pipe (HDPE) with rodent grate at outlet across 18th Line by open cut including full granular backfill and road restoration (see Drawing 2 & detail on Drawing 7).
- Bedding & Backfill for this crossing:
- Bedding to be 150mm granular A, shaped for pipe.
 - Pipe and excavation to be fully backfilled with granular B, compacted under haunches.
- Reconstruction of road for this crossing:
- 150mm of granular A at road surface.
 - 50mm thickness of HL8 base coarse, 40mm thickness of HL3 surface course.
- Existing 800mm (32") dia. CSP under 18th Line to be protected during construction and remain in place.
- 0+326 - Construct 900 x 1500mm concrete DICB, including connections and birdcage grate. Also includes Remove and disposal of existing 900 x 1200mm DICB (see detail on Drawing 2).
- Place 5m² of riprap on geotextile around proposed DICB.

J. & K. Blaak (Roll No. 020-12300)

- 0+326 to 0+383 - Install 57m of 525mm (21") dia. concrete tile with joint wrap. Includes breaking up and burying existing 300mm dia. concrete tile (1972).
- Use 45° 525mm dia. HDPE bend to turn concrete tile after DICB at Sta. 0+326 (see detail on Drawing 2).

1474526 Ontario Ltd. (Roll No. 020-12100)

- 0+383 to 0+560 - Install 177m of 525mm (21") dia. concrete tile with joint wrap. Includes breaking up and burying existing 300mm dia. concrete tile (1972).

- 0+560 - Construct 900 x 1500mm concrete JB, including connections and concrete top (see detail on Drawing 3).
- 0+560 to 0+750 - Install 190m of 350mm (14") dia. concrete tile with joint wrap. Includes breaking up and burying existing 300mm / 250mm dia. concrete tile (1972).
- 0+750 to 0+876 - Install 126m of 300mm (12") dia. concrete tile with joint wrap. Includes breaking up and burying existing 250mm dia. concrete tile (1972).
- 0+876 - Construct 900 x 1200mm concrete JB, including connections and concrete top. Also includes removal and disposal of existing 900 x 1200mm JB (see detail on Drawing 4).
- 0+876 to 1+039 - Install 163m of 300mm (12") dia. concrete tile with joint wrap. Includes breaking up and burying existing 250mm dia. concrete tile (1972).
- 1+039 - Construct 900 x 1200mm concrete DICB, including connections and birdcage grate. Also includes removal and disposal of existing 600 x 600mm DICB (see detail on Drawing 4).
- Berm to be restored to existing conditions. Seed berm.

W. Vink (Roll No. 020-11910)

- 1+039 to 1+382 - Install 343m of 300mm (12") dia. concrete tile with joint wrap. Includes breaking up and burying existing 200mm dia. concrete tile (1972).
- 1+382 - Construct 900 x 1200mm concrete CB, including connections and birdcage grate. Also includes removal and disposal of existing 600 x 600mm DICB (see detail on Drawing 4).
- Berm to be restored to existing conditions. Seed berm.

W. & C. Vink (Roll No. 020-11900)

- 1+382 to 1+734 - Install 352m of 350mm (14") dia. concrete tile with joint wrap. Includes breaking up and burying existing 200mm dia. concrete tile (1972).
- 1+433 - Connect existing 150mm dia. concrete tile (Branch A) to proposed 350mm (14") dia. concrete tile by field cut or coring. Connection to be wrapped with geotextile and paid as per "tile connections" in tender.

M. Czerniawski (Roll No. 020-11000)

- 1+734 - Construct 900 x 1200mm concrete CB, including connections and birdcage grate. Also includes removal and disposal of existing 600 x 600mm CB (see detail on Drawing 5).
- Berm to be restored to existing conditions. Overflow rock spillway to be notched into existing berm with 10m² of riprap as per sections on Drawing 5. Seed berm.
- 1+734 to 1+911 - Install 177m of 300mm (14") dia. concrete tile with joint wrap. Includes breaking up and burying existing 200mm dia. concrete tile (1972).

- 1+911 to 2+128 - Install 217m of 250mm (10") dia. concrete tile with joint wrap. Includes breaking up and burying existing 150mm dia. concrete tile (1972).

Otterside Farm Ltd. (Roll No. 020-11200)

- 2+128 - Construct 600 x 600mm CB including birdcage grate and connections. Also includes removal and disposal of existing 600 x 600mm CB (see detail on Drawing 5).
- Construct 10m of new berm as per detail (0.3m top width, 2:1 side slopes) (see Drawing 5). Seed berm.

iv) BRANCH B**1474526 Ontario Ltd. (Roll No. 020-12100)**

- 0+000 to 0+017 - Install 17m of 300mm (12") dia. concrete tile with joint wrap. Includes breaking up and burying existing 150mm dia. concrete tile (if found in this proposed Branch B location).

Township of East Zorra-Tavistock (18th Line Branch C Crossing)

- 0+017 - Construct 600 x 600mm concrete CB, including connections and birdcage grate (see Drawing 9).
- 0+017 to 0+032 - Remove and disposal of existing 200mm (8") dia. CSP under 18th Line (if found in this proposed Branch B crossing location). The Township may alternatively require the existing pipe to be grouted if found to cross at a different location.
- Install 15m of 300mm (12") dia. solid plastic pipe (HDPE) across 18th Line by open cut including full granular backfill and road restoration (see Drawing 3 & detail on Drawing 7).
- Bedding & Backfill for this crossing:
- Bedding to be 150mm granular A, shaped for pipe.
 - Pipe and excavation to be fully backfilled with granular B, compacted under haunches.
- Reconstruction of road for this crossing:
- 150mm of granular A at road surface.
 - 50mm thickness of HL8 base coarse, 40mm thickness of HL3 surface course.
- 0+032 - Construct 600 x 600mm concrete CB, including connections and birdcage grate (see detail on Drawing 3).

300.2) CONSTRUCTION SPECIFICATIONS – GENERAL NOTES**1. Working Area for Construction**

For a closed drain the working area shall be a 12.5m width on either side of the trench or any combination not exceeding 25m.
For an open drain the working area shall be a 9m width.

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.

3. 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.

4. Pre-locates

Cross trenches to be dug along entire length of Main Drain route at 100 to 200m intervals (minimum) prior to commencing construction so that true alignment of new

McLEAN DRAIN 2023

County of Oxford
File No. 20-068

Township of East Zorra-Tavistock
April 28, 2023
Drawing 6 of 7

drain may be established alongside existing drain without cutting off private lateral tiles. The frequency of pre-locating will depend on the alignment of the existing drains. More pre-locates will be necessary in a meandering route than in a route that is consistently straight.

5. Tile Drain Work

Refer to Specific Notes and 420 – Standard Specifications for Tile Drains.

TYPICAL NOTES FOR EACH NEW TILE LENGTH

1. Maintain all existing headers. Locate as part of "4. Pre-locates"
2. Ensure any connections to the old drain are connected/outletted to the new drain. All intercepted lateral tile are to be flagged so the Engineer can GPS.
3. On straight runs, ensure tile joints are parallel (maximum 12mm (1/2") gap), and tile wrap is flat, covers joint evenly and has overlap.
4. On curved runs, ensure tile joints are touching on one side with maximum gap of 12mm (1/2") on opposite side. Bevel cut tile or use elbow sections where curves are greater. Tile wrap to be flat, cover joints evenly and have overlap.

6. Concrete Tile Installation

New tile to be installed by tiling (wheel) machine with joints tightly wrapped and topsoils to be separately stripped and replaced to width of machine plus width of spoil pile. For further materials information, refer to Standard Specification for Construction of Drains, Section 400.15.1. For information regarding installation procedure of concrete tile, refer to Standard Specification for Tile Drains, Section 420.3.5.1.

If backhoe methods are approved by engineer, the following shall be attended to: additional topsoils may need to be stripped and replaced, a shaped bottom to be provided and careful tamping around the tile is necessary. Final excavation to grade to be by hand and a shaped bottom to be provided. The Engineer may require a thin lift of stone bedding also as part of usage of backhoe if the native ground/shaped bottom is not satisfactory for long term integrity of the tile.

7. Solid Plastic Pipe or High Density Polyethylene Pipe (HDPE)

Solid plastic pipe to be high density polyethylene (HDPE) double wall (corrugated on the outside and smooth wall on the inside), such as BOSS 2000 Series 320 kPa or equal. Pipe material shall conform to CSA B182.8. Refer to Standard Specification for Tile Drains, Section 420.3.5.3 for installation on plastic pipe.

8. Tile Connections

The Contractor is to verify with each owner prior to starting, any systematic drainage scheme existing on each property and is to make provisions for connecting all headers and laterals.

All subsurface drainage tile encountered along the route of the proposed closed drain are to be connected up to the new drain if the intercepted tile are clean and do not contain polluted water.

All tile connections are to be flagged by the Contractor so the Engineer can GPS the location for future reference. The payment for connections is to be as set out in the tender form.

Refer to Standard Specification of Tile Drains, Section 420.3.7 for further information on tile connections.

9. Catchbasins and Junction Boxes

Catchbasins shall have secured grates and marker stakes. Grates are to be birdcage grates as manufactured by Coldstream Concrete or approved equal, unless otherwise specified in the Specific Notes. All grates are to be secured with non-corrosive fasteners. Marker stakes as supplied by Coldstream Concrete or equal are to be placed beside each catchbasin. Backfill around all new catchbasins and junction boxes is recommended to be compacted 19mm clear crushed stone to avoid future settlements

and Contractor obligations to repair such and to ensure connected tile has granular backfill. All catchbasin sumps to be fully cleaned by the Contractor after completion of drain installation and backfilling.

Refer to Standard Specification for Tile Drains, Section 420.3.13 and 420.3.14 for more details.

10. Utilities

The Contractor shall arrange with all local utility companies (telephone, gas, hydro) to verify the location of all utilities within road allowances and on private lands. All utilities shall be exposed to the satisfaction of the utility company to verify that their elevations will not conflict with the construction of the drain at the specified elevations. Provisions for protection and relocation of utilities that conflict with the drain as designed will be determined at the time of construction.

11. Seeding of Non-Lawn Areas

For seeding use mechanical (cyclone) spreader (or approved equal) and the following shall apply:

Seed mixture to be applied at 60kg/ha and to be as follows:

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

To provide temporary cover for late fall planting add as additional 10 kg/ha of rye or winter wheat. Areas that remain grassed after excavation may not need to be seeded as directed by the Engineer.

Contractor responsible for additional seeding to provide uniform catch during one year maintenance period.

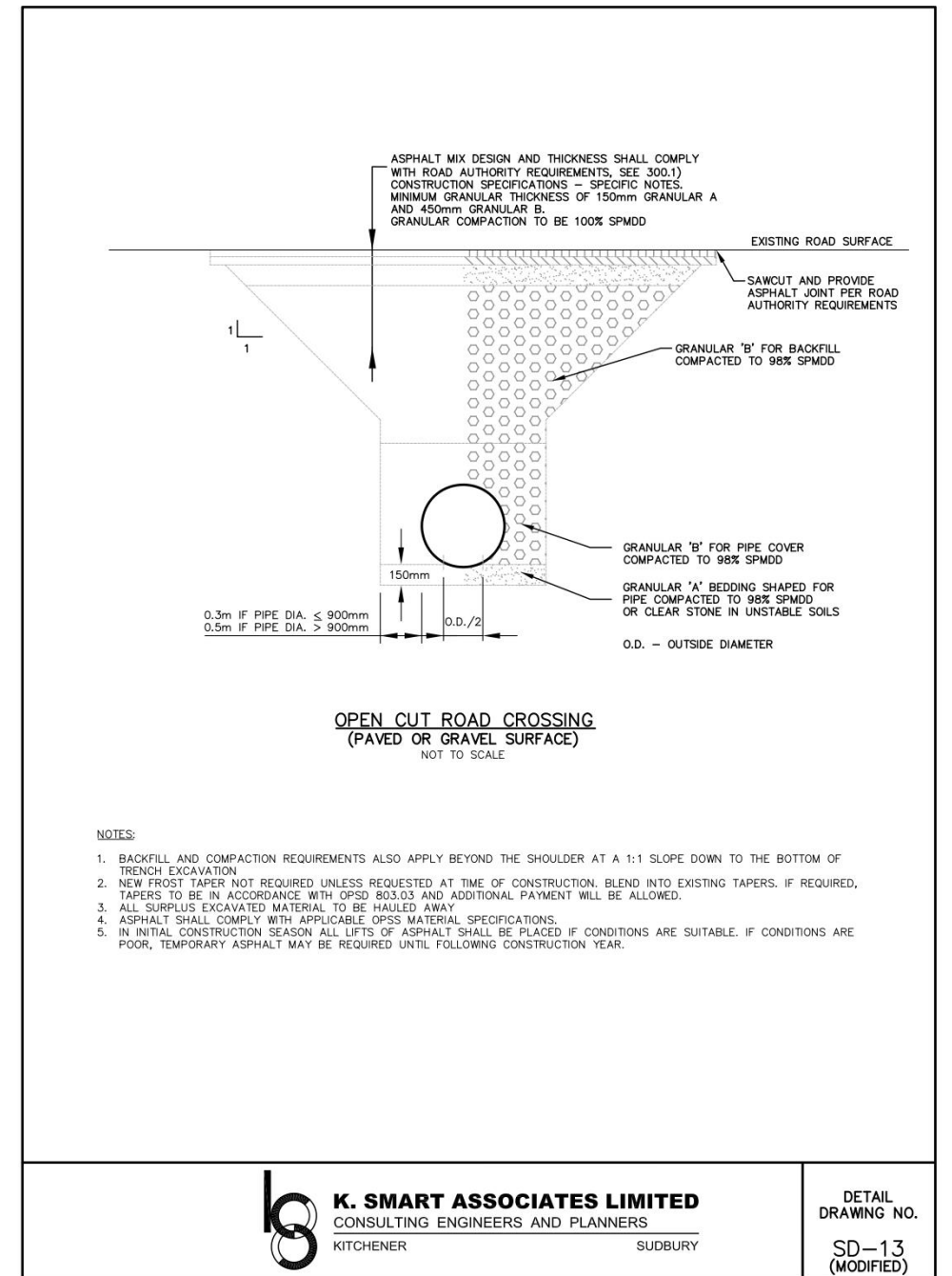
12. Open Cut Road Crossings (Township Roads)

The Road Authority is to be given 72 hours' notice of construction within their right-of-way. Proper detour signing in accordance with MTO signing manual to be used where roads are closed or restricted. Contractor is responsible to repair any settlement which occurs within warranty period. The location of the road crossing shall be confirmed with the Engineer and Road Authority prior to excavation. The Trench Detail on this drawing and the special construction notes shall also apply. If the Road Authority requires granular rather than native material backfill where native is allowed on the Trench Detail, additional payment will be allowed. Where granular is shown to be required, such is to be included as part of the tender. All surplus materials are to be hauled away. In the boulevards, topsoils shall be separately stripped and replaced. Seeding is required. All backfill to be compacted to 98% SPMDD. Pipe materials are to be as noted in the specific construction notes. All old crossings are to be located, removed and disposed of. If so noted, some may remain but are to be fully sealed with pumped concrete as part of the tender.

13. 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 weight tickets and the suppliers invoice.



Community Planning

P. O. Box 1614, 21 Reeve Street
Woodstock Ontario N4S 7Y3
Phone: 519-539-9800 • Fax: 519-421-4712
Web site: www.oxfordcounty.ca

Our File: **A05-23**

APPLICATION FOR MINOR VARIANCE

TO: Township of East Zorra-Tavistock Committee of Adjustment
MEETING: July 5, 2023
REPORT NUMBER: CP 2023-201

OWNER/APPLICANT: Rolf Maurer
65 Young Street, P.O. Box 100, Innerkip, ON N0J 1M0

VARIANCE REQUESTED:

1. Relief from **Section 5.1, Table 5.1.1.3 – Regulations for Accessory Uses**, to allow a building accessory to a residential use to be built in the required Front Yard with a minimum front yard depth of 5 m (16.4 ft).

LOCATION:

The subject lands are described as Part Lot 94, Plan 111, Part 1, 41R7592, Part Lot 10, Concession 17 (East Zorra) in the Township of East Zorra-Tavistock. The lands are located on the south side of Young Street, east of Queen Street, and are municipally known as 65 Young Street, in the Village of Innerkip.

BACKGROUND INFORMATION:

COUNTY OF OXFORD OFFICIAL PLAN:

| | | |
|----------------|---|-------------------------|
| Schedule 'E-1' | Township of East Zorra-Tavistock Land Use Plan | Settlement |
| Schedule 'E-3' | Village of Innerkip Land Use Plan | Low Density Residential |

TOWNSHIP OF EAST ZORRA-TAVISTOCK ZONING BY-LAW:

Special Limited Agricultural Zone (A1-10)

COMMENTS:

(a) Purpose of the Application:

The subject lands comprise approximately 1.7 ha (4.3 ac) and are currently occupied by an existing single detached dwelling and a temporary garage structure that is to be removed. While located within the settlement boundaries of the Village of Innerkip, the subject lands are currently zoned 'Special Limited Agricultural Zone (A1-10).' The purpose of the special provision is to recognize the reduced lot area and lot frontage of the parcel.

The applicant is proposing relief from the above noted provision of the Township's Zoning By-law to facilitate the construction of a residential accessory building to the northeast of the existing single detached dwelling on the subject lands. The proposed accessory building would be approximately 133.7 m² (1,440 ft²) in size and the purpose of the accessory building is for personal storage.

Surrounding uses are generally residential in nature.

Plate 1, Existing Zoning & Location Map, shows the location of the subject lands and the current zoning in the immediate vicinity.

Plate 2, Aerial Photography (2020), shows the location of the subject lands and surrounding properties.

Plate 3, Applicant's Sketch, illustrates the location of the existing single detached dwelling and the location of the proposed detached garage.

(b) Agency Comments

The Township Public Works Manager has advised that they are satisfied with a 5 m setback from the property line but would prefer 6 m. It was also advised that the property line must be surveyed and staked in the field along the proposed work area for the Township to review.

The Oxford County Public Works Department has advised no concerns provided that a setback of 3-5 m be maintained between the proposed garage and the tank of the Young Street Pumping Station located just north of the subject lands in the road right-of-way. Land around the pumping station will need to remain slightly elevated to provide adequate cover over the tank and there shall be no driveway impediment.

The Township Fire Chief, the Township Chief Building Official, and the Upper Thames River Conservation Authority (UTRCA) have indicated no concerns regarding the proposal.

(c) Public Consultation

Public Notice was provided to surrounding property owners in accordance with the requirements of the Planning Act. At the time of writing this report, no comments or concerns had been received from the public.

(d) Intent and Purpose of the Official Plan:

The subject lands are located within the 'Settlement' designation according to the Township of East Zorra-Tavistock Land Use Plan, Schedule 'E-1' in the County of Oxford Official Plan. In the Settlement (Serviced Village) designation, a full range of land use is permitted in accordance with the land use patterns shown on Schedule E-3 - Village of Innerkip Land Use Plan. The lands are designated 'Low Density Residential' on Schedule E-3 and are intended to be used for a variety of low-rise, low density housing forms consisting of single detached, semi-detached, duplexes, converted dwellings and street townhouses. The use of the lands for a single detached dwelling and accessory uses thereto conforms to the Low Density Residential policies of the Official Plan.

(e) Intent and Purpose of the Zoning By-law:

The subject lands are zoned 'Special Limited Agricultural Zone (A1-10)' in the Township of East Zorra-Tavistock Zoning By-Law. The 'A1-10' zone permits a range of agricultural uses, including livestock and regulated farm operations, as well as buildings and structures accessory thereto. A special provision is included to recognize the existing lot size and lot frontage.

The intent of the A1 zoning is to require new single detached dwellings to be accessory to a farming operation, however, existing single detached dwellings on A1 zoned lots are not required to be accessory to a farm. In this instance, the existing detached dwelling is not accessory to a farm operation. Accessory buildings and structures accessory to the residential use of the property are permitted.

Buildings accessory to residential uses on A1 zoned properties are required to be located outside of any required front yard depth, which is 15 m (49.2 ft) in the A1 zone. The requirement to locate accessory buildings outside of the required front yard depth are intended to ensure that an adequate area is maintained between the buildings and the municipal road allowance to allow for proper maintenance of the street, for potential future road widening as well as ensuring proper sightlines. The requirements also ensure structures are located a suitable distance from property lines to provide adequate area for maintenance, grading and drainage.

While a 15 m (49.2 ft) front yard depth would be in keeping with the character of rural residences, given that the lot is located on a residential street within a Serviced Village, staff are of the opinion that this requirement is excessive when taking the neighbourhood context of the lot into consideration. Surrounding lots are zoned 'Residential Type 1 Zone (R1),' which permits front yard depths of 7 m (23 ft). Permitting a front yard depth of 5 m (16.4 ft) would bring the streetscape of the subject lands closer inline with that of the traditional residential neighbourhood.

Given the constraints that exist on the subject lands, the applicant is limited in where the proposed garage can be located. There is a grade change on the east side of the property towards the on-site pond. The proposed location would be just outside of where the grade change begins and the Upper Thames River Conservation (UTRCA) has reviewed the proposal and advised that the proposed location is acceptable but it cannot be moved back any further due to the slope. While there is available space on the west side of the property placing the garage on the west side would block the view of the dwelling from the road right-of-way, and therefore negatively impacting the existing residential development on the lands.

Both the Oxford County Public Works Department, which is the authority governing the Young Street Pumping Station, and the Township Public Works Department, which has jurisdiction over Young Street, have indicated no concerns with the proposal provided their requirements are met. Requirements from the two departments can be found in the Agency Comments section of this Staff Report.

Given the narrow area that the applicant has to work with before there are topographical issues, a condition is recommended that would require the applicant to produce a survey in order to confirm lot line locations before a building permit can be issued. Should the said survey result in the need for the size of the garage to be altered to respect the 5 m (16.4 ft) setback and the grade change, the applicant has advised willingness to do so.

(f) Desirable Development/Use:

It is the opinion of this office that the applicant's proposal to obtain relief to permit the building within a required front yard, 5 m (16.4 ft) from the front lot line, can be considered desirable for the development of the subject property. The proposed relief will provide additional storage space for the applicant and as the proposed relief is not anticipated to impede the adjacent road right-of-ways or the existing Young Street Pumping Station, the requested relief can be considered minor.

In light of the foregoing, it is the opinion of this Office that the proposed relief is in keeping with the general intent and purpose of the Official Plan and Township Zoning By-law and can be given favourable consideration.

RECOMMENDATION:

That the Township of East Zorra-Tavistock Committee of Adjustment **approve** Application A05-23, submitted by Rolf Maurer for lands described as Part Lot 94, Plan 111, Part 1, 41R7592, Part Lot 10, Concession 17 (East Zorra), as it relates to:

1. Relief from **Section 5.1, Table 5.1.1.3 – Regulations for Accessory Uses**, to allow a building accessory to a residential use to be built in the required Front Yard, subject to the following conditions:
 - i. That the proposed garage be set back a minimum of 5 m (16.4 ft) from the front lot line.
 - ii. That the proposed relief shall only apply to a detached garage of the approximate size and location as depicted on Plate 3 of Report CP 2023-201.
 - iii. That a land survey be provided to Township staff, to the Township's satisfaction, prior to the issuance of Building Permits.

As the variance requested is considered to be:

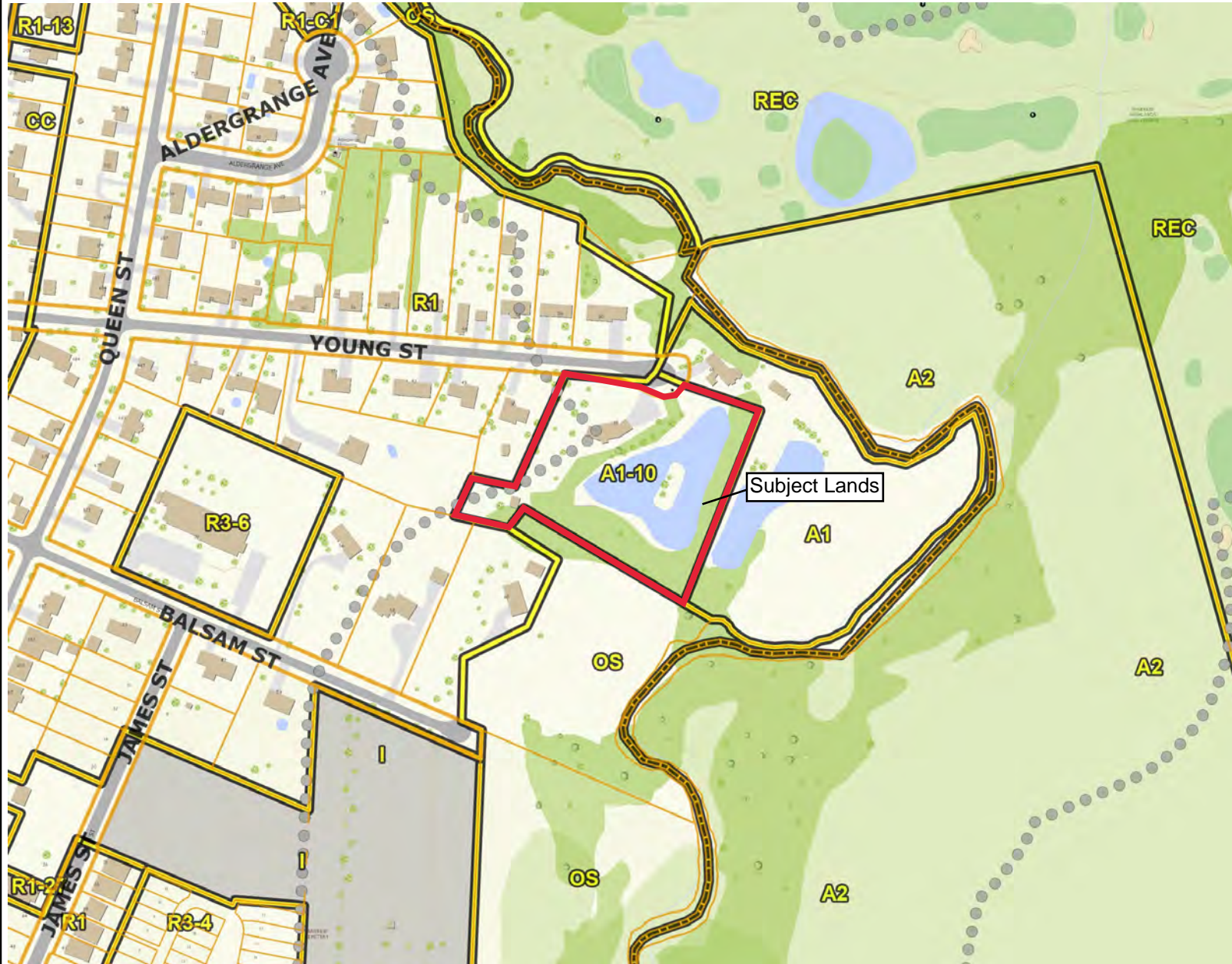
- i) in keeping with the general intent and purpose of the Official Plan;
- ii) a minor variance from the provisions of the Township of East Zorra-Tavistock Zoning By-Law No. 2003-18;
- iii) desirable for the appropriate development or use of the land, building or structure; and,
- iv) in keeping with the general intent and purpose of the Township of East Zorra-Tavistock Zoning By-Law No. 2003-18

Authored by: *Original Signed by*

Dustin Robson, MCIP, RPP
Development Planner

Approved for submission by: *Original Signed by*

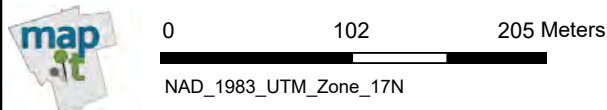
Gordon K. Hough, RPP
Director



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - ▲ 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)

Notes



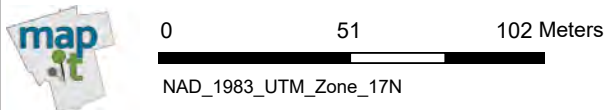
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. This is not a plan of survey



Legend

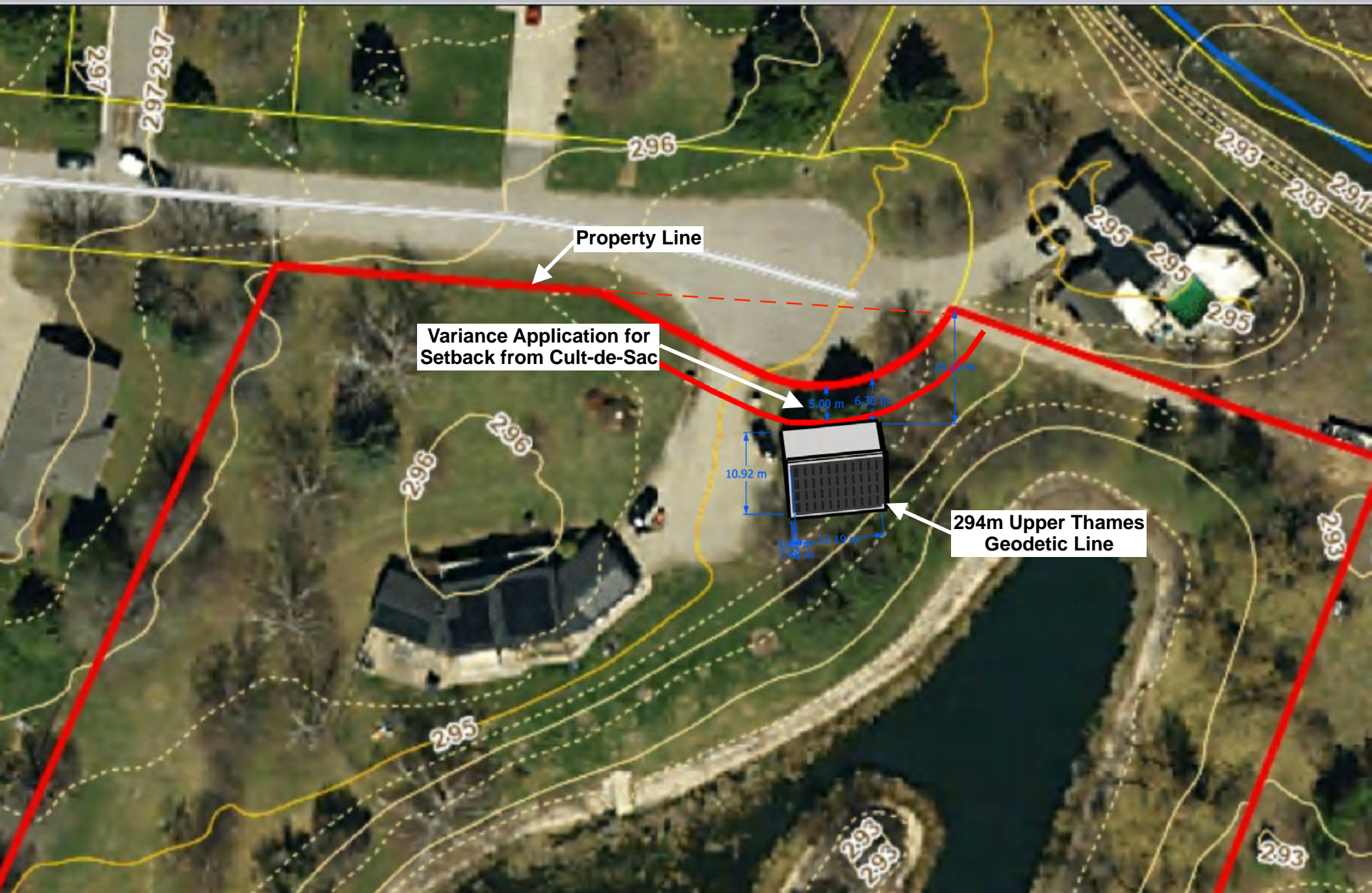
- Parcel Lines**
 - Property Boundary
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- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - ▲ 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)

Notes



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June 23, 2023



#6.a

Placeholder page for Agenda Item 6.a –
Conferences & Seminars

#6.b

Placeholder page for Agenda Item 6.b - County Council – Update & Questions

#6.c

Placeholder page for Agenda Item 6.c –
Staff Reports and Questions for Staff

STAFF REPORT

Report #CI O2023-04

To: His Worship the Mayor and Members of Council

From: Meaghan Vader, Corporate Initiatives Officer

Re: EZT-RFP-23-03 Tavistock Spray Pad Bid Award

Date: June 28, 2022

Background:

As part of the 2020 Capital budget, Council approved the Tavistock Spray Pad project. Issuance of the bid was contingent on the community reaching their \$100,000 fundraising goal. Following the fundraising goal achievement, a Request for Proposal, EZT-RFP-23-03 for the Design and Construction of the Tavistock Spray Pad, was issued on Bids and Tenders on Friday May 5, 2023, with a closing date of Tuesday June 13, 2023, at 2:00 pm.

There were eleven registered plan takers. Five bid submissions were received and verified for compliance by staff. Evaluation of the proposals was then completed by the evaluation team including the CAO/Treasurer, Public Works Manager, and Parks and Recreation Operations Supervisor, with the evaluation based on the scoring matrix incorporated into the RFP bid document.

Discussion:

The RFP requested the submission of proposals from proponents who were able to design, construct, and install the spray pad and all associated equipment. The highest ranking proponent was Openspace Solutions Inc. The cost associated with Openspace Solutions Inc.'s **proposal is** \$248,900.00.

Financial Implications:

The budget for this project was \$250,00.00. The project is being funded through **an Ontario Trillium Foundation grant**, and community fundraising.

Attachments:

- **Appendix 'A'** – Concept Drawings

Recommendation:

1. That Council accept the bid from Openspace Solutions Inc. in the amount of \$248,900.00;
2. And further that Council authorizes the CAO/Treasurer to sign the contractual agreement with Openspace Solutions Inc., as provided in the bid document package EZT-RFP-23-03.

Reviewed by C.A.O:



Karen DePrest
Chief Administrative Officer

Report prepared and submitted by:



Meaghan Vader
Corporate Initiatives Officer



QUEENS PARK, TAVISTOCK, ON

Appendix 'A'



QUEENS PARK, TAVISTOCK, ON



QUEENS PARK, TAVISTOCK, ON



QUEENS PARK, TAVISTOCK, ON




WATERPLAY[®]
BY  **AKR**

QUEENS PARK, TAVISTOCK, ON

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WATERPLAY
BY  **AKR**

QUEENS PARK, TAVISTOCK, ON

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STAFF REPORT

Report #CBO2023-07

To: His Worship the Mayor and Members of Council
 From: John Scherer, Chief Building Official
 Re: Building, Development & Drainage – July 2023 Council Report
 Date: June 28, 2023

Departmental Highlights:

- Tavistock Master Drainage Plan Update – initial modeling completed, combining legacy data with new development data.
- Innerkip Master Drainage Plan – Draft tender completed and being reviewed by staff.

Legislative Updates:

- None.

Monthly Permit Activity:

Permit Summary

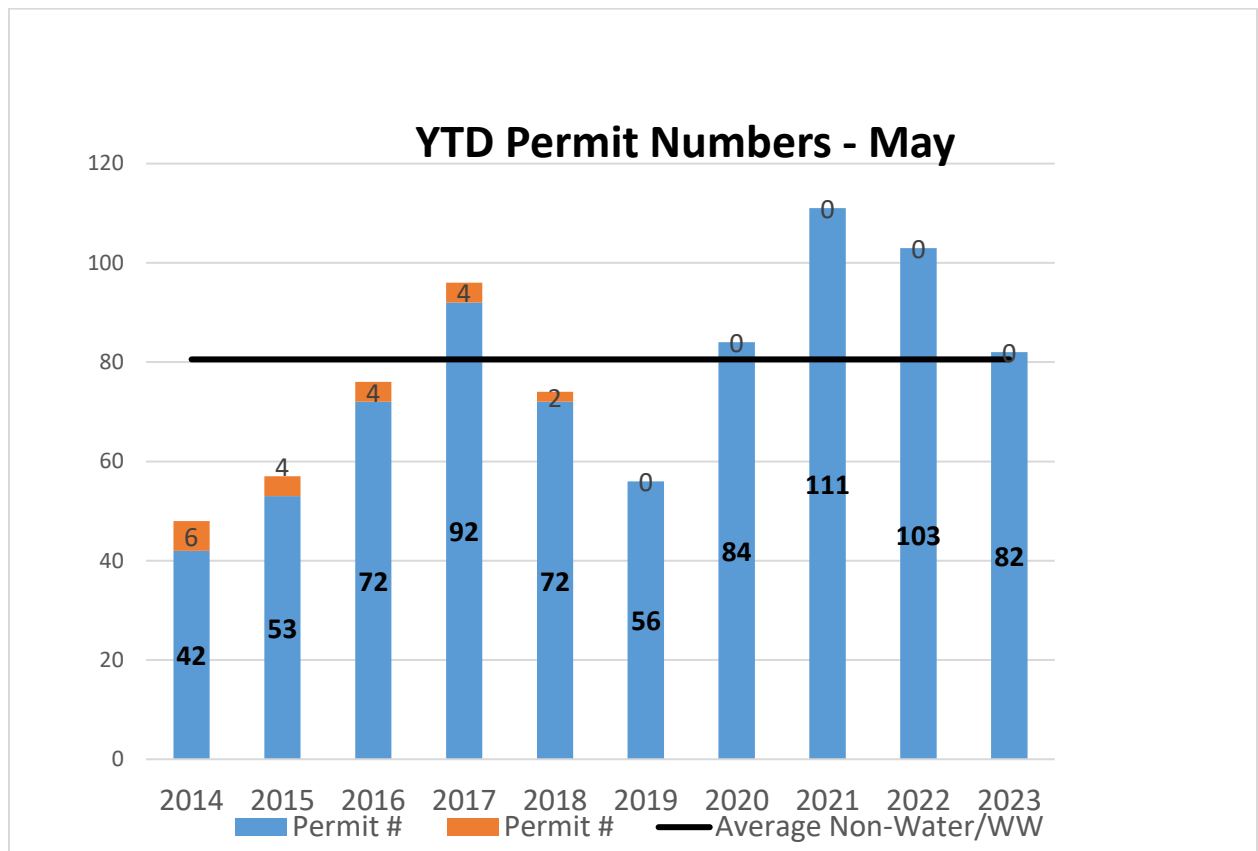
| | No. of Permits | Permit Value | Permit Fees |
|-----------------------------|----------------|--------------|--------------|
| May 2023 | 24 | \$2,419,035 | \$19,765.62 |
| Year to Date – May 31, 2023 | 82 | \$33,838,781 | \$148,167.30 |

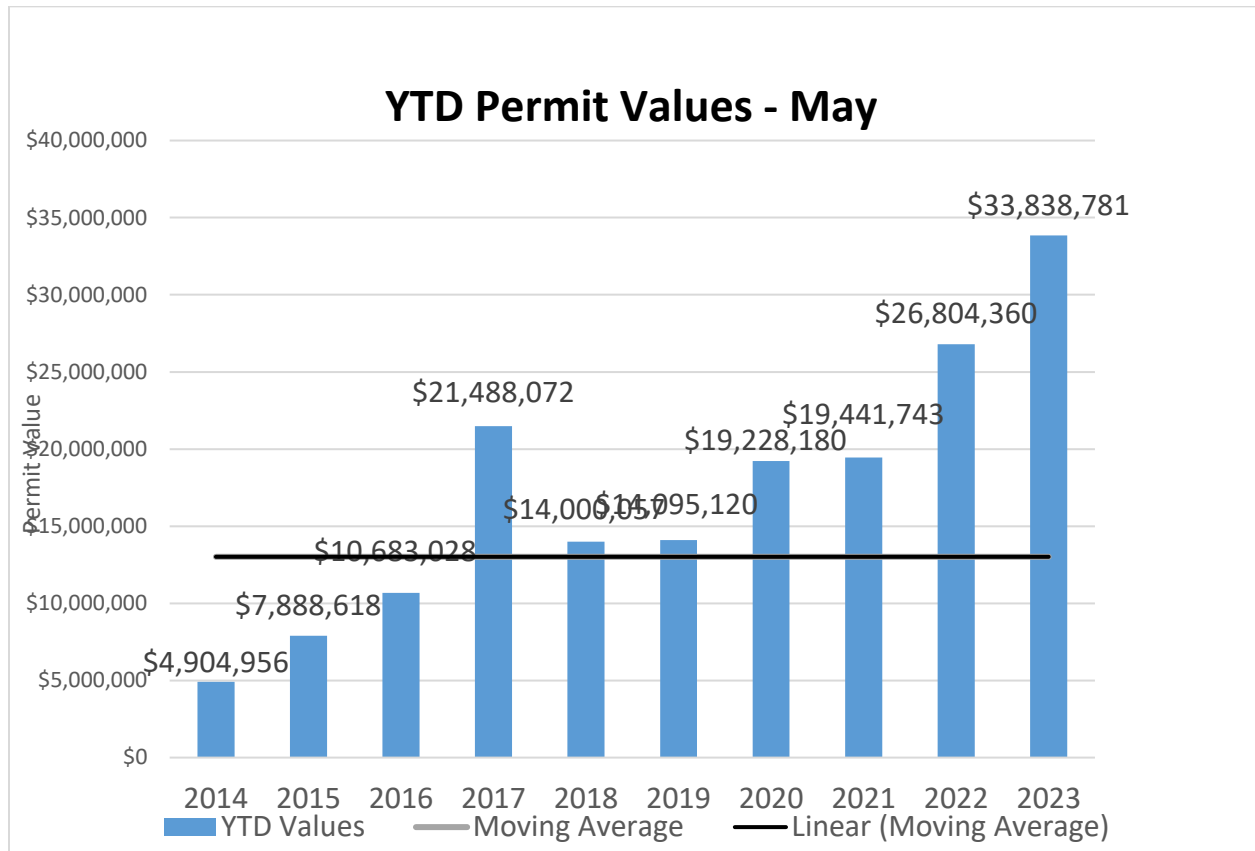
Permit Values and Fees

| Project | Cost of construction | Building Fees |
|-----------------------------|----------------------|---------------|
| Basement walk in door | 10,000 | 174.00 |
| Solar panel | 22,000 | 588.52 |
| SFD addition & covered deck | 300,000 | 3,290.93 |
| Septic system | 57,000 | 635.00 |
| New SFD | 625,000 | 4,088.18 |
| Ag shop | 328,000 | 1,170.82 |
| Septic system | 20,000 | 635.00 |
| Septic system | 19,000 | 635.00 |
| Deck | 10,000 | 200.00 |
| Above ground pool | 12,800 | 133.00 |
| New SFD | 862,235 | 4,308.79 |
| Above ground pool | 20,000 | 133.00 |
| Deck | 6,000 | 200.00 |

Staff Report – Building, Development and
Drainage Monthly Report

| | | |
|-------------------------------|------------------|------------------|
| Above ground pool | 17,000 | 133.00 |
| Deck | 28,000 | 200.00 |
| Demolition of house | 5,000 | 200.00 |
| Demolition of barn | 5,000 | 133.00 |
| Deck | 15,000 | 200.00 |
| Deck | 2,000 | 200.00 |
| Deck | 15,000 | 200.00 |
| Shed | 10,000 | 398.00 |
| Deck | 7,000 | 200.00 |
| Renovation brewery/restaurant | 10,000 | 1,576.38 |
| Above ground pool | 13,000 | 133.00 |
| Total | 2,419,035 | 19,765.62 |





Status of Development Matters:

Ward 1 - TAVISTOCK

| | | |
|-------------------------------|--|--|
| *The Ponds (Phase 3) | 33 SFD | Plan 41M-335 Plan 44M-68 Minor Items remain outstanding. |
| The Orchards (Phase 1) | 16 SFD 6 Semi Units 39 Condo Towns | Plan 41M-321 Warranty item identified for developer. |
| The Orchards (Phase 2) | 48 SFD 2 Semi Units | Plan 41M-353 Warranty items identified. |
| The Orchards (Phase 3) | 52 SFD 6 Semi Units | Plan 41M-371 Permits Issued. |
| Gateman Homes (Jacob St E) | 13 SFD 10 Semi Units | Plan 41M-363 Permits Issued. |
| Mill-Gate Homes (Phase 1) | 61 SFD 1 Infill Lot | Plan 41M-390 Permits Issued |

Ward 3 - INNERKIP

| | | |
|---|---|---|
| Innerkip Meadows (P3 – Curtis St) | 24 SFD Semi Units now proposed. | Plan 41M-313 |
| Innerkip Meadows (P4– Lock St) | 24 SFD | Plan 41M-325 |
| Innerkip Meadows (P5 -Queen/Curtis) | 25 SFD | Plan 41M-339 |
| Innerkip Meadows (P6 - Lock) | 19 SFD | Plan 41M-355 |
| Innerkip Meadows (P7 - Matheson) | 32 Semi Units 1 SDD Unit | Plan 41M-313 Permits issued. |
| *Majestic Homes Development (James/Main St) | Condo Block on Main St (25 units) | Plan 41M-322 Unit construction underway. |
| Oxford Road Developments 5 Inc. | 29 SFD + 1 Block for Future Dev. | Plan 41M - 352 Revised Grading Plan. |

Drain & Streetlight Locate Summary:

Updated Quarterly – Next update August/September

Status of Drainage Matters:

| Drain Name | Status |
|---------------------------------|--|
| McLean Drain | Section 78 received, and Section 40 received. Petition restarted – Section 4 proposed (new drain). Report to Council. 2024 project. |
| Tavistock 1974 & 1979 Drains | Relocation of drains proposed for new residential developments. Walkthrough complete, minor deficiencies noted and will be corrected Summer 2023. |
| Parker Drain | Tender process complete. Construction to be completed by late summer 2023. In process of installation. |
| Witzel Drain | Report complete. In process of installation. Completed by late summer 2023. |
| Tavistock Drain 1 | In process of abandonment. |

Attachments:

- None

Recommendation:

1. None. For Council information only.

Reviewed by C.A.O.:



Karen DePrest
Chief Administrative Officer

Report prepared and
submitted by:



John Scherer
Building, Drainage and Development
Manager
(Chief Building Official)

STAFF REPORT

Report #PW2023-07

To: His Worship the Mayor and Members of Council

From: Tom Lightfoot, Public Works Manager

Re: Public Works – July 2023 Council Report

Date: June 28, 2023

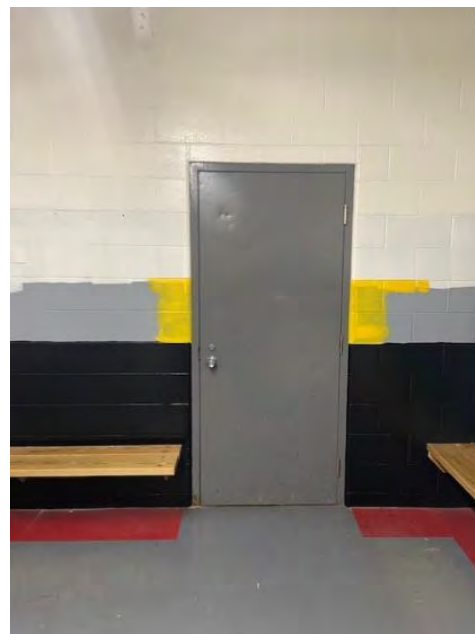
Departmental Highlights:

- Public Works staff has been out touching up some washboard sections of the roads at intersections, over the last week. It is normal for washboards to show at intersections after fresh gravel application. The heavy rains we received over the last week has started to create small potholes on the gravel roads, so staff will continue to monitor them and touch them up, as required.
- Roadside grass cutting will continue through the fall. Currently staff are on the second pass of the rural roads.
- Public Works has completed some driveway installations and widenings over the last month. Staff will be doing some additional driveways in July.
- Township staff met with the UTRCA at the Leslie Dickson Arboretum on June 28th. Public Works staff will be working with the UTRCA to complete some parking lot upgrades later this summer.
- **The Township's** annual regulatory sign inspection has been completed. Staff has reviewed the report and there are approximately 30 signs that need to be replaced. Once our shipment of signs arrives, staff will change out the signs. The **"Welcome to East Zorra-Tavistock"** and the **"Historically Known As"** signs have also been ordered and will be installed this summer.
- The speed radar trailer has been ordered. The delivery time frame is 4 to 5 weeks. Once the trailer is received, staff will be moving it around the Township to areas of concern. This unit will display the speed of the vehicle as well as collect speed data, which can be reviewed and shared.

- The 16th Line Fibermat installation is scheduled for the week of July 17th. Public works staff has completed some asphalt padding on the 16th Line to prepare the road for the surface treatment. Line painting is scheduled for the week of August 1st, which allows time for any loose stone to migrate off the road from the Fibermat project.
- Oxford County staff has completed rural centreline painting for the Township, for the year. The County will be completing crosswalk, stop block and railway crossing painting for the Township later this summer.
- Township staff will be completing some further hot mix asphalt padding in July, in the rural areas. Oxford County staff will also be completing some larger padding areas for the Township this summer.
- Staff would like to take the opportunity to welcome Dylan Borton to the EZT Team as a Public Works Equipment Operator. Staff would also like to welcome Mark Wilker to the role of Parks and Recreation Equipment Operator. Mark was previously a Facility Operator at the Arena.

Parks and Recreation

- Arena capital projects for 2023 are underway. Painting of the change rooms has started. Chiller replacement has started, the new chiller is in place and lines are being welded this week. TSSA inspection is scheduled for the week of July 3rd.



- As part of the 2023 capital budget, staff has procured a new zero steer mower through the Canoe Purchasing group. The mower was purchased from D&S Downham Equipment Ltd. It is expected to arrive the week of July 3rd.
- The Tavistock spray pad tender has closed. **A separate report for Council's** consideration will be presented at the July 5th Council meeting.
- The ice at the arena is scheduled to start going back in on July 26th. It takes approximately 2 weeks start to complete the process.

Status of Significant Capital Projects:

| Capital Project | Current Status |
|--------------------------------|----------------|
| Tavistock Arena Chiller | Ordered |
| Zero Steer Mower | Ordered |
| Speed radar trailer | Ordered |
| Tavistock Arena Wi-Fi | Installed |
| Utility Truck | In service |
| 16 th Line FiberMat | Tender Awarded |

Attachments:

1. **Appendix 'A'** - Armadillo Reports:
 - a. Coleman Street
 - b. Holley Avenue
 - c. 16th Line (at Cassel)
 - d. Braemar Sideroad

Recommendation:

1. None. For Council information only.

Reviewed by C.A.O.:



Karen DePrest
Chief Administrative Officer

Report prepared and submitted by:



Tom Lightfoot
Public Works Manager

TRAFFIC ANALYSIS REPORT

For Project: Coleman Street (173 Coleman)
Direction: Both Directions
Speed limit: 50 km/h

Traffic Report From 2023-06-02 8:00:00 AM through 2023-06-12 8:59:59 AM

Speed:

Average Speed: 37.6 km/h

85th Percentile Speed: 47 km/h

Max Speed = 80 km/h on 2023-06-04 - 3:29:20 PM (incoming – northbound)
= 92 km/h on 2023-06-08 - 4:02:59 PM (outgoing – southbound)

Total Vehicle Counts:

Total Vehicles = 2,580 (1,112 incoming; 1,468 outgoing)

AADT = 256.9 (110.7 incoming; 146.2 outgoing)

Average Daily Vehicle Counts (both directions):

| | <u>Time</u> | <u>5 Day</u> | <u>7 Day</u> |
|---------------|----------------|--------------|--------------|
| Average Daily | | 255 | 245 |
| AM peak | 8:00 – 9:00 AM | 36 | 28 |
| PM peak | 3:00 – 4:00 PM | 31 | 27 |

Vehicle Class Counts (both directions):

| | <u>Number</u> | <u>%</u> |
|--------|---------------|----------|
| Small | 23 | 0.9 |
| Medium | 2,482 | 96.2 |
| Large | 75 | 2.9 |

[Small = motorcycle; Medium = sedan; Large = truck]

TRAFFIC ANALYSIS REPORT

For Project: Holley Ave. (42 Holley Ave.)

Direction: Both Directions

Speed limit: 50 km/h

Traffic Report From 2023-06-02 8:00:00 AM through 2023-06-12 8:59:59 AM

Speed:

Average Speed: 36.2 km/h

85th Percentile Speed: 44 km/h

Max Speed = 65 km/h on 2023-06-05 - 7:33:57 AM (incoming – northbound)

= 67 km/h on 2023-06-02 - 12:42:06 PM (outgoing – southbound)

Total Vehicle Counts:

Total Vehicles = 4,223 (2,223 incoming; 2,000 outgoing)

AADT = 420.5 (221.4 incoming; 200 outgoing)

Average Daily Vehicle Counts (both directions):

| | <u>Time</u> | <u>5 Day</u> | <u>7 Day</u> |
|---------------|----------------|--------------|--------------|
| Average Daily | | 392 | 395 |
| AM peak | 7:00 - 8:00 AM | 40 | 32 |
| PM peak | 5:00 - 6:00 PM | 42 | 35 |

Vehicle Class Counts (both directions):

| | <u>Number</u> | <u>%</u> |
|--------|---------------|----------|
| Small | 111 | 2.6 |
| Medium | 4,047 | 95.8 |
| Large | 65 | 1.5 |

[Small = motorcycle; Medium = sedan; Large = truck]

TRAFFIC ANALYSIS REPORT

For Project: 16th Line (south of Cassel)
 Direction: Both Directions
 Speed limit: 60 km/h

Traffic Report From 2023-06-19 12:00:00 PM through 2023-06-26 11:59:59 AM

Speed:

Average Speed: 72.9 km/h

85th Percentile Speed: 84 km/h

Max Speed = 127 km/h on 2023-06-21 - 4:44:42 AM (incoming – southbound)
 = 130 km/h on 2023-06-26 - 8:55:04 AM (outgoing – northbound)

Total Vehicle Counts:

Total Vehicles = 13,819 (6,860 incoming; 6,959 outgoing)

AADT = 1,974.1 (980 incoming; 994.1 outgoing)

Average Daily Vehicle Counts (both directions):

| | <u>Time</u> | <u>5 Day</u> | <u>7 Day</u> |
|---------------|----------------|--------------|--------------|
| Average Daily | | 1,995 | 1,836 |
| AM peak | 7:00 – 8:00 AM | 158 | 122 |
| PM peak | 4:00 – 5:00 PM | 227 | 190 |

Vehicle Class Counts (both directions):

| | <u>Number</u> | <u>%</u> |
|--------|---------------|----------|
| Small | 32 | 0.2 |
| Medium | 12,652 | 91.6 |
| Large | 1,135 | 8.2 |

[Small = motorcycle; Medium = sedan; Large = truck]

TRAFFIC ANALYSIS REPORT

For Project: Braemar Side Road (between 10th & 11th)

Direction: Both Directions

Speed limit: 80 km/h

Traffic Report From 2023-06-19 10:00:00 AM through 2023-06-26 10:59:59 AM

Speed:

Average Speed: 88.8 km/h

85th Percentile Speed: 100 km/h

Max Speed = 154 km/h on 2023-06-20 - 3:35:20 PM (incoming – westbound)
= 149 km/h on 2023-06-22 - 10:29:55 PM (outgoing – eastbound)

Total Vehicle Counts:

Total Vehicles = 5,617 (2,668 incoming; 2,949 outgoing)

AADT = 797.7 (378.9 incoming; 418.8 outgoing)

Average Daily Vehicle Counts (both directions):

| | <u>Time</u> | <u>5 Day</u> | <u>7 Day</u> |
|---------------|----------------|--------------|--------------|
| Average Daily | | 775 | 743 |
| AM peak | 8:00 – 9:00 AM | 54 | 51 |
| PM peak | 4:00 – 5:00 PM | 82 | 75 |

Vehicle Class Counts (both directions):

| | <u>Number</u> | <u>%</u> |
|--------|---------------|----------|
| Small | 5 | 0.1 |
| Medium | 5,355 | 95.3 |
| Large | 257 | 4.6 |

[Small = motorcycle; Medium = sedan; Large = truck]

**THE CORPORATION OF THE
TOWNSHIP OF EAST ZORRA-TAVISTOCK
COUNTY OF OXFORD
BY-LAW # 2023 - 21**

**Being a By-law to provide for the abandonment of drainage works in the
Township of East Zorra-Tavistock – Tavistock Drain 1 Municipal Drain**

WHEREAS the Tavistock Drain 1 Municipal Drain By-law, being By-law #21 of 1910, of the former Village of Tavistock, was passed pursuant to the Drainage Act (now R.S.O. 1990, c.D.17);

AND WHEREAS the Council of the Township of East Zorra-Tavistock is of the opinion that abandonment of the entire Tavistock Drain 1 Municipal Drain is desirable, pursuant to Section 84(2) of the Drainage Act;

AND WHEREAS all owners have been notified of the Township's intention to abandon the entire Tavistock Drain 1 Municipal Drain, pursuant to subsection 84(2) of the Drainage Act;

AND WHEREAS no request for an engineer's report with respect to the abandonment has been received pursuant to subsection 84(3) of the Drainage Act;

NOW THEREFORE the Council of the Township of East Zorra-Tavistock enacts as follows:

1. The Tavistock Drain 1 Municipal Drain is hereby abandoned.
2. The Township of East Zorra-Tavistock, pursuant to subsection 84(5) of the *Drainage Act*, has no further obligation with respect to the drainage works of the Tavistock Drain 1 Municipal Drain.
3. This By-law shall come into force on the passing thereof.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 5th DAY OF JULY, 2023.

Phil Schaefer, Mayor

seal

Will Jaques, Clerk

**THE CORPORATION OF THE
TOWNSHIP OF EAST ZORRA-TAVISTOCK
COUNTY OF OXFORD
BY-LAW NUMBER #2023-24**

A By-Law to amend Zoning By-Law Number 2003-18, as amended.

WHEREAS the Municipal Council of the Corporation of the Township of East Zorra-Tavistock deems it advisable to amend By-Law Number 2003-18, as amended.

THEREFORE, the Municipal Council of the Corporation of the Township of East Zorra-Tavistock, enacts as follows:

- That Section 4.0 to By-Law Number 2003-18, as amended, is hereby further amended by adding the following index at the beginning thereof:

INDEX OF DEFINITIONS

| | | |
|--|---|---|
| <u>A</u> | Golf Course | Place of Worship |
| Abattoir | Grade, Finished | Private Communal Sewage System |
| Accessory | Gross Floor Area | Private Communal Water System |
| Additional Residential Unit | Ground Floor Area | Private Garage, see 'Garage, Private' |
| Agricultural-Related Uses | Group Home | Processing Plant for Agricultural Products and/or By-Products |
| Airstrip, Private | Guest Room | Public Garage, see 'Garage, Public' |
| Alter | <u>H</u> | Public Library |
| Amenity Area | Height | Pump Island |
| Animal Kennel | Home Occupation | |
| Assembly hall | Hospital, Private | <u>R</u> |
| Asphalt or Concrete Batching Plant | Hospital, Public | Recreational or Athletic Facility or Club |
| Attic | Hotel or Motel | Recreational Trail |
| Automobile Service Station | | Recreational Vehicle |
| | | Rendering Plant |
| <u>B</u> | <u>I</u> | Retail Store |
| Basement | Improved Street, see 'Street, Improved' | Required Yard, see 'Yard, Required' |
| Bed and Breakfast Establishment | Individual On-site Sewage System | Risk Management Official |
| Boarding or Lodging House, see 'Dwelling' | Individual On-site Water System | |
| Boundary Adjustment | Infrastructure | <u>S</u> |
| Building | <u>L</u> | Salvage Yard |
| Building Inspector/Chief Building Official | Landfill Site | Sand or Gravel Pit |
| Business or Professional Office | Landscaped Open Space | Sanitary Sewer |
| By-law Enforcement Officer, Zoning Officer, or Chief Building Official | Lane | School |
| | Livestock Assembly and Sales Yard | Public School |
| <u>C</u> | Long Term Care Facility | Private School |
| Carport | Lot | Commercial School |
| Cellar | Corner Lot | |
| Communications Structure | Lot Area | |
| | Lot Coverage | |

Communications Establishment
Conservation Project
Consultant in Agriculture
Contractor's Shop or Yard
Converted Dwelling, see 'Dwelling'
Corporation
Council
County
County Road

D

Daycare Centre
Dead Stock Removal Operation
Deck
Driveway
Dwelling
 Apartment Dwelling
 Boarding or Lodging House
 Converted Dwelling
 Duplex Dwelling
 Multiple Unit Dwelling
 Principal Dwelling
 Semi-Detached Dwelling
 Single Detached Dwelling
 Street Fronting Townhouse
 Dwelling

Dwelling Unit
Dwelling Unit Area

E

Eating Establishment
Elevation, Average
Erect
Established Building Line
Existing

F

Farm
 Farm, Regulated
Farm Auction Barn
Farm Implement Dealer
Farm Unit
Finished Grade, see 'Grade,
 Finished'
Fraternal Lodge or Institutional Hall
Frontage, see 'Lot Frontage'
Front Yard, see 'Yard, Front'
Fuel Storage Tank

G

Garage, Private
Garage, Public
Garden Suite

Lot Depth
Lot Frontage
Interior Lot
Through Lot
Lot Line
 Front Lot Line
 Exterior Side Lot Line
 Rear Lot Line
 Side Lot Line

M

Medical Centre
Minimum Distance Separation
 Formulae (MDS I and MDS II)
Mobile Home
Motel
Motor Home
Motor Vehicle
 Motor Vehicle, Commercial
Municipal Drain
Municipal Sewage System
Municipal Water System
Municipal Yard

N

Natural Hazards
Non-Conforming
Non-Complying Use
Nursery, Retail or Wholesale
Nutrient Management Plan

O

On-Farm Composting Facility
On-Farm Diversified Use
One Hundred Year Erosion Limits
Open Storage
Outdoor Commercial Recreational
 Facility

P

Park
 Park, Passive Use
 Park, Private
 Park, Public
Parking Aisle
Parking Area
Parking Lot
Parking Space
 Parking Space, Tandem
Permitted
Person
Personal Service Establishment
Place of Entertainment

Seasonal Trailer Park or
 Campground
Septic System and/or Holding Tank
Semi-Detached Dwelling, see
 'Dwelling'
Service Shop
Setback
Soil Processing Operation
Storey
Street
 Street, Improved
Street Line
Structure
Studio

T

Third Party Review
Township Road
Trailer
Truck Transportation Terminal

U

Use

V

Veterinary Clinic

W

Warehouse
Watercourse
Water Supply
Wayside Sand or Gravel Pit or
 Stone Quarry

Y

Yard
 Front Yard
 Front Yard Depth
 Rear Yard
 Rear Yard Depth
 Side Yard
 Side Yard Width
 Exterior Side Yard
 Interior Side Yard
Yard, Required

Z

Zoning Officer/By-law Enforcement
 Officer

2. That Section 4.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Sections 4.14, 4.24, 4.28, 4.37, 4.38, 4.49, 4.51, 4.52, 4.99, 4.101, 4.107, 4.109, and 4.124.
3. That Section 4.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting all section numbers for definitions.
4. That Section 4.0 to By-Law Number 2003-18, as amended, is hereby further amended by adding the following definitions in alphabetical order:

“ADDITIONAL RESIDENTIAL UNIT”, means a *dwelling unit* located within the *principal dwelling* on the *lot* or in a permanent detached *accessory building* on the *lot*, and which is secondary and subordinate to the *principal dwelling* on the *lot*. *Additional residential unit(s)* shall not include a *trailer*, a *mobile home*, a *motor home* or *recreational vehicle* as defined herein.

“DWELLING”, means a *building* occupied or capable of being occupied as the home or residence of one or more *persons*, but shall not include a *trailer*, a *mobile home*, a *motor home* or *recreational vehicle* as defined herein. A *dwelling* may include a *mobile home* for the purposes of an *accessory dwelling* to a *farm* in the A1 or A2 Zones.

“APARTMENT DWELLING”, means a *dwelling* of two or more *storeys* containing three or more *dwelling units* sharing a common hall or halls and a common entrance at street level or above the first floor.

“BOARDING OR LODGING HOUSE”, means a *dwelling*, containing not more than four *guest rooms* used or maintained for accommodation of the public, in which the owner or head lessee supplies, for hire or gain, lodgings with or without meals for three or more *persons* but does not include any other establishment otherwise defined or classified herein.

“CONVERTED DWELLING”, means a *single detached dwelling* which has been altered or converted to contain no more than four *dwelling units*, unless otherwise specified in this By-law.

“DUPLEX DWELLING”, means the whole of a *dwelling* that is divided horizontally into two separate *dwelling units* each of which has an independent entrance either directly from the outside or through a common vestibule.

“MULTIPLE UNIT DWELLING”, means a *dwelling* consisting of three or more *dwelling units*, which are horizontally and/or vertically attached, which may be entered from an independent entrance directly from the outside or from an internal common space or an access balcony and in which 50% or more of *dwelling units* have direct access to grade or a roof terrace. A *multiple unit dwelling* includes a triplex, a fourplex, a sixplex and a townhouse, but shall not

include an *additional residential unit*, a *converted dwelling*, a *street fronting townhouse* or an *apartment dwelling*.

“PRINCIPAL DWELLING”, means the *single detached dwelling*, *semi-detached dwelling*, or *street fronting townhouse dwelling* that has been *altered* to contain *additional residential unit(s)* and/or is located on the same *lot* as an *additional residential unit* in an *accessory building*.

“SEMI-DETACHED DWELLING”, means one of a pair of two attached *dwelling units*, divided in whole or in part by a common interior vertical wall with a minimum area above grade of 10 m² (107.6 ft²), each of which has an independent entrance either directly from the outside or through a common vestibule.

“SINGLE DETACHED DWELLING”, means a *building* that was designed and built to contain only one *dwelling unit*, but shall not include a mobile home.

“STREET FRONTING TOWNHOUSE DWELLING”, means a *dwelling* consisting of three or more *dwelling units* that are aligned horizontally and divided vertically in whole or in part by common walls, with a minimum area above grade of 10 m² (107.6 ft²), and each of which has an independent entrance directly from the outside and fronts onto a public *street*.

“DWELLING UNIT”, means a suite of two or more rooms, designed or intended to be used for human habitation and to accommodate a single household, in which sanitary conveniences and cooking facilities are provided and which has a private entrance either from the outside of the *building* or through a common hallway or vestibule.

“GARAGE, PUBLIC”, means a *building* or place where *motor vehicles* are hired or kept or used for hire, or where such vehicles and gasoline or oils are stored or kept for sale, or a *building* or place used for the purpose of servicing, maintaining, repairing (including body and fender work and painting), washing or cleaning *motor vehicles*, but does not include any *use* otherwise defined or classified herein.

“INDIVIDUAL ON-SITE SEWAGE SYSTEM”, means sewage systems, as defined in O. Reg. 332/12 under the Building Code Act, 1992, that are owned, operated and managed by the owner of the *lot* upon which the system is located.

“INDIVIDUAL ON-SITE WATER SYSTEM”, means individual water supply systems that are owned, operated and managed by the owner of the *lot* upon which the system is located.

“MUNICIPAL SEWAGE SYSTEM”, means a sewage works with the meaning of Section 1 the Ontario Water Resources Act that is owned or operated by the *County*, including centralized and decentralized systems.

“MUNICIPAL WATER SYSTEM”, means a drinking-water system within the meaning of Section 2 of the Safe Drinking Water Act, 2002, that is owned or operated by the *County*, including centralized and decentralized systems.

“NATURAL HAZARDS”, means property or lands that could be unsafe for development due to naturally occurring processes and includes riverine flooding hazards, riverine erosion hazards, and wetlands regulated under the Conservation Authorities Act and associated regulations.

"PARKING AREA", means an area provided for the parking of *motor vehicles* and may include *parking aisles*, *parking spaces* and ingress and egress lanes, but shall not include any part of a public *street*. *Parking area* may include a *private garage*, unless otherwise specified in this Zoning By-law.

“PARKING SPACE”, means an area having an adequate means of ingress and egress to and from a public *street*, *lane* or *parking aisle* for the temporary parking or storage of *motor vehicles*, and may include a *private garage*, unless otherwise specified in this Zoning By-law.

“PARKING SPACE, TANDEM”, means two *parking spaces*, one behind the other, which are accessed by the same *parking aisle*.

“PRIVATE COMMUNAL SEWAGE SYSTEM”, means a sewage works within the meaning of section 1 of the Ontario Water Resources Act that serves six or more *lots* or private residences and is not owned by a municipality.

“PRIVATE COMMUNAL WATER SYSTEM”, means a non-municipal drinking-water system within the meaning of section 2 of the Safe Drinking Water Act, 2002 that serves six or more *lots* or private residences.

5. That Section 5.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Subsection 5.5 and replacing it with the following new subsection 5.5:

5.5 CONVERTED DWELLINGS AND ADDITIONAL RESIDENTIAL UNITS

5.5.1 CONVERTED DWELLINGS

5.5.1.1 WHERE PERMITTED

Where listed as a permitted use in the Zone, a *converted dwelling* containing up to four *dwelling units* is permitted subject to compliance with the provisions of this Section and all other provisions of the Zone in which the *lot* is located.

5.5.1.2 WHERE NOT PERMITTED

Converted dwellings shall not be permitted:

- i) on any *lot* containing an *additional residential unit* or a *garden suite*;
- ii) on any *lot* located in within a settlement defined in Section 2.7.2.1, unless adequate *municipal water system* and/or *municipal sewage system* capacity to service the *converted dwelling* has been determined and/or confirmed by the *County*; or,
- iii) on any *lot* containing *natural hazards*, unless clearance or approval from the Conservation Authority having jurisdiction has been obtained, or on any *lot* that does not meet Provincial access standards during a regulatory flood event.

5.5.1.3 ALTERATIONS TO DWELLING

Alterations to an *existing single detached dwelling* shall meet the following requirements:

- i) entrances on the front of the building shall be limited to one, which may be shared by *dwelling units* via an internal vestibule or corridor;
- ii) additional exterior entrance(s) shall only be located in the *rear yard* or *interior side yard*;
- iii) there shall be no exterior stairways or balconies except one open fire escape which shall be located only in the *rear yard* or *interior side yard*; and,
- iv) the lot has a minimum of **100 m²** (1076 ft²) of *landscaped open space* located in the *rear yard* that is accessible to all *dwelling units* and/or exclusive access is apportioned to each *dwelling unit*.

5.5.2 ADDITIONAL RESIDENTIAL UNITS

5.5.2.1 WHERE PERMITTED

Where listed as a permitted use in the Zone, *additional residential units* are permitted subject to the provisions of this Section and compliance with all other provisions of the Zone in which the *lot* is located.

Additional residential units located outside of a settlement defined in Section 2.7.2 shall be required to satisfy the minimum distance separation requirements, as determined through the application of the *Minimum Distance Separation Formula I* (MDS I) or not further reduce an existing insufficient MDS I setback.

5.5.2.2 WHERE NOT PERMITTED

Additional residential units shall not be permitted:

- i) on any *lot* within the following settlements as defined in Section 2.7.2:
 - a) Tavistock (Serviced Village) within the contributory area for the William Street Sewage Pumping Station.
- ii) on any *lot* containing a *boarding or lodging house, a group home, a garden suite, a converted dwelling, a duplex dwelling, a mobile home, or a bed and breakfast establishment*;
- iii) on any *lot* located in within a settlement defined in Section 2.7.2, unless adequate *municipal water system* and/or *municipal sewage system* capacity to service the *additional residential unit(s)* has been confirmed by the *County*;
- iv) on any *lot* containing *natural hazards*, unless clearance or approval from the Conservation Authority having jurisdiction has been obtained, or on any *lot* that does not meet Provincial access standards during a regulatory flood event;
- v) on any *lot* serviced by a *private communal water system* and/or *private communal sewage system*; and,
- vi) notwithstanding the provisions of Section 5.9 and 5.17, on any *lot* serviced by an *individual on-site sewage system* where the *lot area* doesn't meet the minimum *lot area* provisions of this Section or the Zone in which the *lot* is located whichever is the greater.

5.5.2.3 PROVISIONS FOR ALL ADDITIONAL RESIDENTIAL UNITS

All *additional residential units* shall comply with the provisions of Table 5.5.2.3.

| TABLE 5.5.2.3 – PROVISIONS FOR ALL ADDITIONAL RESIDENTIAL UNITS | | | | |
|---|---|---|---|--|
| Provision | R1, R2, R3, CC and V Zones, where served by both a <i>municipal water system</i> and <i>municipal sewage system</i> | R1, R2 and V Zones, where not served by a <i>municipal sewage system</i> | RE and RR Zones in a settlement area (as defined in Section 2.7.2) | A1, A2, RR, and RE Zones outside of a settlement area (as defined in Section 2.7.2) |
| Number of Additional Residential Units per lot , Maximum | 2, in the Village of Tavistock, except as per 5.5.2.2 i) 1, in the Village of Innerkip | 1 | 1 | 2 |
| Cumulative Gross Floor Area for all | 50% of the <i>gross floor area</i> | 50% of the <i>gross floor area</i> of the <i>principal dwelling</i> , or 100 m² | 50% of the <i>gross floor</i> | |

| TABLE 5.5.2.3 – PROVISIONS FOR ALL ADDITIONAL RESIDENTIAL UNITS | | | | |
|--|---|--|---|---|
| Provision | R1, R2, R3, CC and V Zones, where served by both a <i>municipal water system</i> and <i>municipal sewage system</i> | R1, R2 and V Zones, where not served by a <i>municipal sewage system</i> | RE and RR Zones in a <i>settlement area</i> (as defined in Section 2.7.2) | A1, A2, RR, and RE Zones outside of a <i>settlement area</i> (as defined in Section 2.7.2) |
| Additional Residential Units, Maximum | of the <i>principal dwelling</i> , or 50 m² (538 ft ²) of <i>gross floor area</i> , whichever is the lesser | (1076 ft ²) of <i>gross floor area</i> , whichever is the lesser | | <i>area</i> of the <i>principal dwelling</i> , or 140 m² (1507 ft ²) of <i>gross floor area</i> , whichever is the lesser |
| Gross Floor Area for an Additional Residential Unit in a Basement or Cellar | Notwithstanding the maximum gross floor area provision, the entire <i>basement</i> or <i>cellar</i> of the <i>principal dwelling</i> may be used for the purposes of an <i>additional residential unit</i> , provided there are no other <i>additional residential units</i> or <i>garden suites</i> on the <i>lot</i> | | | |
| Location of Entrances | All <i>dwelling units</i> shall be accessed through a common entrance from an internal corridor or vestibule, except that separate entrance(s) may be located in the <i>rear yard</i> or <i>interior side yard</i> . | | | |
| Location of Exterior Stairways | There shall be no exterior stairways except a required emergency exit which shall be located only in the <i>rear yard</i> or <i>interior side yard</i> . | | | |
| Unobstructed Pathway to Entrance of Unit(s), Minimum | 1.2 m (3.9 ft) wide unobstructed pathway from the <i>front lot line</i> to the entrance. Unobstructed means no obstruction or encroachments to a height of up to 2.3 m (7.5 ft). | | | |
| Parking Spaces, Minimum | 1 space per <i>additional residential unit</i> is required. Such spaces may be <i>tandem parking spaces</i> , provided no tandem parking space for an <i>additional residential unit</i> is located within a <i>private garage</i> . | | | |
| Landscaped Open Space in Rear Yard, Minimum | 75 m² (807 ft ²) for 1 <i>additional residential unit</i> and 100 m² (1076 ft ²) for 2 <i>additional residential units</i> and such <i>landscaped open space</i> shall be accessible to all <i>dwelling units</i> or exclusive access is apportioned to each <i>dwelling unit</i> . | | | |

5.5.2.4 PROVISIONS FOR DETACHED ADDITIONAL RESIDENTIAL UNITS

An *additional residential unit* in a detached *accessory building* shall comply with the provisions of Table 5.5.2.3 and Table 5.5.2.4, where a conflict exists, the provisions of Table 5.5.2.4 will prevail.

| TABLE 5.5.2.4 – PROVISIONS FOR DETACHED ADDITIONAL RESIDENTIAL UNITS | | | | | |
|--|---|--|--|--|-------------------------|
| Provision | R1, R2, R3, CC and V Zones, where served by both a <i>municipal water system</i> and <i>municipal sewage system</i> | R1, R2 and V Zones, where not served by a <i>municipal sewage system</i> | RE and RR Zones, in a <i>settlement area</i> (as defined in Section 2.7.2) | RR and RE Zones, outside of a <i>settlement area</i> (as defined in Section 2.7.2) | A1 and A2 Zones |
| Lot Area, Minimum | 600 m² (6,458.5 ft ²) | 0.6 ha (1.48 ac) | 0.6 ha (1.48 ac) | 0.6 ha (1.48 ac) | 0.6 ha (1.48 ac) |

| TABLE 5.5.2.4 – PROVISIONS FOR DETACHED ADDITIONAL RESIDENTIAL UNITS | | | | | |
|---|--|---|---|---|---|
| Provision | R1, R2, R3, CC and V Zones, where served by both a <i>municipal water system</i> and <i>municipal sewage system</i> | R1, R2 and V Zones, where not served by a <i>municipal sewage system</i> | RE and RR Zones, in a <i>settlement area</i> (as defined in Section 2.7.2) | RR and RE Zones, outside of a <i>settlement area</i> (as defined in Section 2.7.2) | A1 and A2 Zones |
| Permitted Location | <i>Rear yard or interior side yard of principal dwelling</i> | | | | Any yard, except a <i>required yard</i> |
| Required Yards and Setbacks and Lot Coverage | In accordance with Table 5.1.1.3 Regulations for Accessory Uses and Table 5.5.2.3 Provisions for All Additional Residential Units – Maximum Gross Floor Area for all <i>Additional Residential Units</i> , whichever is the lesser | | | | In accordance with Zone Provisions for “All Other Buildings and Structures” |
| Building Height, Maximum | In accordance with Table 5.1.1.3 Regulations for Accessory Uses and shall not exceed the <i>height</i> of the <i>principal dwelling</i> | | | | 5.5 m (18 ft) |
| Distance from the Principal Dwelling, Minimum | In accordance with Table 5.1.1.3 Regulations for Accessory Uses | | | | 1.2 m (3.9 ft) |
| Distance from the Principal Dwelling, Maximum | No provision | No provision | No provision | No provision | 30 m (98.4 ft) |
| Distance from Public Street, Maximum | 40 m (147.6 ft) | 40 m (147.6 ft) | 40 m (147.6 ft) | No provision | No provision |
| Privacy Fence, Minimum | A solid privacy fence with a minimum height of 1.8 m around the perimeter of the <i>rear yard</i> | A solid privacy fence with a minimum height of 1.8 m along a <i>lot line</i> where the detached dwelling unit is located within 7.5 m (24.6 ft) of that <i>lot line</i> | | No provision | No provision |
| Window Openings above Ground Floor | Not permitted in a wall facing an <i>interior side yard</i> or <i>rear yard</i> | | | No provision | No Provision |
| Decks, Balconies and Rooftop Patios | Not permitted | | | No provision | No Provision |

6. That Section 5.0 to By-Law Number 2003-18, as amended, is hereby further amended by deleting subsection 5.7 and replacing it with the following new subsection 5.7:

5.7 **DWELLING UNITS BELOW GRADE**

No *dwelling unit* shall be created in a *cellar* or *basement*, where the *building or structure* is located within a *natural hazard* or the *lot* does not meet Provincial access standards during a regulatory flood event.

7. That Section 5.0 to By-Law Number 2003-18, as amended, is hereby further amended by deleting subsections 5.10.1 and 5.10.2 and replacing it with the following new subsections 5.10.1 and 5.10.2:

5.10.1 ZONING AMENDMENT REQUIRED

Prior to placing a *garden suite* on a *lot*, an amendment to this Zoning By-Law under Section 39 of the Planning Act, as amended, will be required. The by-law will prescribe the period of time, up to twenty years, authorizing the temporary use of the *garden suite*.

5.10.2 GARDEN SUITE OCCUPANCY

The *garden suite* shall be occupied by:

- the retired parents or grandparents of a *lot* owner or the *lot* owner's spouse, or
- the retiring *lot* owner provided that the main *dwelling* is occupied by the child or grandchild of the retiring *lot* owner.

8. That Section 5.0 to By-Law Number 2003-18, as amended, is hereby further amended by deleting subsection 5.13.1 and replacing it with the following new subsection 5.13.1:

5.13.1 WHERE PERMITTED

A *home occupation* is permitted within a residential *dwelling unit* and/or an *accessory building* on the same *lot*, subject to compliance with the provisions of this Section and all other provisions of the Zone in which the *lot* is located. A *home occupation* is not permitted within an *additional residential unit*, *converted dwelling*, or *garden suite*.

9. That Section 5.0 to By-Law Number 2003-18, as amended, is hereby further amended by deleting subsections 5.13.7, 5.13.8 and 5.13.9 and replacing them with the following new subsections 5.13.7 and 5.13.8:

5.13.7 BED AND BREAKFAST ESTABLISHMENT

A *bed and breakfast establishment* shall be considered a *home occupation* located in a *single detached dwelling*. Notwithstanding the *gross floor area* limit for a *home occupation* in subsection 5.13.2, a *bed and breakfast establishment* shall be limited to three guest rooms. In a settlement, a *bed and breakfast establishment* is not permitted on a *lot* containing *additional residential unit(s)*, a *converted dwelling*, or a *garden suite*.

5.13.8 HOME DAYCARE

A home daycare, located in a *single detached dwelling*, a *semi-detached dwelling*, or a *duplex dwelling* with accommodation for up to and including 5 children, shall be considered a *home occupation*. The *gross floor area* limit for a *home occupation* in subsection 5.13.2, shall not apply to a home daycare. In a settlement, a home daycare is not permitted on a *lot* containing *additional residential unit(s)*, a *converted dwelling*, or a *garden suite*.

10. That Section 5.0 to By-Law Number 2003-18, as amended, is hereby further amended by deleting the existing Section 5.16.1 and replacing it with a new subsection 5.16.1 as follows:

5.16.1 No land shall be used or built upon and no *building or structure* shall be altered, erected, used or expanded for any purpose unless the land is serviced by municipal services, including, as applicable, *municipal water system*, *municipal sewage system*, drainage systems and *improved streets*, which meet all applicable *County* and/or *Township* standards. Adequacy of *municipal water system* and *municipal sewage system* capacity shall be confirmed by the *County* prior to issuance of a Building Permit.

11. That Section 5.0 to By-Law Number 35-99, as amended, is hereby further amended by deleting the provisions in Table 5.19.2.1 for “Residential Uses” and replacing them with the following new provisions for “Residential Uses”:

| TABLE 5.19.2.1 - PARKING STANDARDS | | |
|------------------------------------|---|---|
| Land Use Category | Use | Number of Vehicle Parking Spaces Required |
| Residential Uses | - <i>single detached dwelling</i> - <i>duplex dwelling</i> - <i>semi-detached dwelling</i> - <i>mobile dwelling</i> - <i>street fronting townhouse dwelling</i> | - 2 per <i>dwelling unit</i> |
| | - <i>bed and breakfast</i> - <i>boarding or lodging house</i> | - 1 per <i>guest room</i> |
| | - <i>home occupation</i> | - 1 space |
| | - <i>garden suite</i> | - 1 per <i>garden suite</i> |

| TABLE 5.19.2.1 - PARKING STANDARDS | | |
|------------------------------------|---|--|
| Land Use Category | Use | Number of Vehicle Parking Spaces Required |
| | - <i>additional residential unit</i> | - 1 per <i>additional residential unit</i> |
| | - residential units in a portion of a non-residential <i>building</i> | - 1.5 per <i>dwelling unit</i> |
| | - <i>multiple unit dwelling</i> | |
| | - <i>apartment dwelling</i> | |
| | - <i>converted dwelling</i> | |
| | - <i>long term care facility</i> | - 1 per 3 beds or fraction thereof |

12. That Section 5.0 to By-Law Number 35-99, as amended, is hereby further amended by deleting subsection 5.19.2.3 and replacing it with the following new subsections 5.19.2.3 and 5.19.2.4:

5.19.2.3 TANDEM PARKING SPACES

Where parking is provided at the *dwelling unit* in an individual *driveway*, the required parking for that *dwelling* may be provided by *tandem parking spaces*.

5.19.2.4 PARKING SPACES WITHIN A PRIVATE GARAGE

Where parking is provided at the *dwelling unit* in an individual *driveway*, *parking spaces* may be within a *private garage*, with the exception that *parking spaces* within a *private garage* shall not be used as *required parking spaces* for *additional residential units*, *converted dwellings* and *garden suites*.

13. That Section 6.0 to By-law Number 35-99, as amended, is hereby further amended by deleting Section 6.1: Uses Permitted and replacing it with the following:

6.1 **USES PERMITTED**

No *person* shall within any A1 Zone use any *lot* or *erect*, *alter* or use any *building* or *structure* for any purpose except one or more of the A1 *uses* in Table 6.1:

| TABLE 6.1: USES PERMITTED |
|---|
| <ul style="list-style-type: none"> • an <i>additional residential unit</i> within the <i>principal dwelling</i>, in accordance with the provisions of Section 5.5; |
| <ul style="list-style-type: none"> • an <i>animal kennel</i>, in accordance with the provisions of Section 5.3 and Section 6.2.3; |
| <ul style="list-style-type: none"> • a <i>communications structure</i>; |
| <ul style="list-style-type: none"> • a <i>conservation project</i>; |
| <ul style="list-style-type: none"> • an <i>existing converted dwelling</i>, containing up to two <i>dwelling units</i>; |

| TABLE 6.1: USES PERMITTED |
|--|
| • a <i>farm</i> , but does not include a <i>regulated farm</i> as defined in this Zoning By-Law; |
| • a <i>garden suite</i> , in accordance with the provisions of Section 5.10; |
| • a <i>group home</i> , in accordance with the provisions of Section 5.12; |
| • a <i>home occupation</i> , in accordance with the provisions of Section 5.13; |
| • an <i>on-farm composting facility</i> ; |
| • an oil or gas well; |
| • a <i>public use</i> , in accordance with the provisions of Section 5.22; |
| • a seasonal fruit, vegetable, flower or farm produce sales outlet, provided the produce is the product of the <i>farm</i> on which the outlet is located; |
| • a <i>single detached dwelling</i> if <i>accessory to a farm</i> ; |
| • a <i>single detached dwelling</i> on an <i>existing lot</i> zoned A1 on the date of passage of this Zoning By-law; |
| • a <i>wayside sand or gravel pit</i> in accordance with the provisions of Section 5.33. |

14. That Section 6.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsections 6.2.4 and 6.2.5.
15. That Section 6.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 6.2.6 and replacing it with the following new subsection 6.2.6:

6.2.6 LOCATION OF NEW OR ENLARGED ACCESSORY DWELLINGS, ADDITIONAL RESIDENTIAL UNITS AND GARDEN SUITES

New or enlarged accessory *dwelling*s, *additional residential units*, *garden suite*s, and temporary *dwelling*s, shall be required to satisfy the minimum distance separation requirements as determined through the application of the *Minimum Distance Separation Formula I (MDS I)*, or not further reduce an *existing* insufficient *MDS I* setback.

16. That Section 6.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 6.3.
17. That Section 7.0 to By-law Number 35-99, as amended, is hereby further amended by deleting Section 7.1: Uses Permitted and replacing it with the following:

7.1 **USES PERMITTED**

No *person* shall within any A2 Zone use any *lot* or *erect*, *alter* or use any *building* or *structure* for any purpose except one or more of the A2 *uses* in Table 7.1:

| TABLE 7.1: USES PERMITTED |
|--|
| • <i>an additional residential unit</i> within the <i>principal dwelling</i> , in accordance with the provisions of Section 5.5; |
| • <i>an animal kennel</i> , in accordance with the provisions of Section 5.3 and Section 7.2.9; |
| • <i>a communications structure</i> ; |
| • <i>a conservation project</i> ; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a farm</i> ; |
| • <i>a garden suite</i> , in accordance with the provisions of Section 5.10; |
| • <i>a group home</i> , in accordance with the provisions of Section 5.12; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • <i>a regulated farm</i> ; |
| • <i>an on-farm composting facility</i> ; |
| • <i>an oil or gas well</i> ; |
| • <i>a private airstrip</i> ; |
| • <i>a public use</i> , in accordance with the provisions of Section 5.21; |
| • <i>a seasonal fruit, vegetable, flower or farm produce sales outlet</i> , provided the produce is the product of the <i>farm</i> on which the outlet is located; |
| • <i>a single detached dwelling</i> if <i>accessory to a farm or regulated farm</i> ; |
| • <i>a wayside sand or gravel pit or stone quarry</i> in accordance with the provisions of Section 5.33. |

18. That Section 7.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsections 7.2.4 and 7.2.5.
19. That Section 7.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 7.2.6 and replacing it with the following new subsection 7.2.6:

7.2.6 LOCATION OF NEW OR ENLARGED ACCESSORY DWELLINGS, ADDITIONAL RESIDENTIAL UNITS AND GARDEN SUITES

New or enlarged accessory *dwelling*s, *additional residential units*, *garden suites*, and temporary *dwelling*s, shall be required to satisfy the minimum distance separation requirements as determined through the application of the *Minimum Distance Separation Formula I (MDS I)*, or not further reduce an *existing* insufficient *MDS I setback*.

- 20. That Section 7.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 7.3.
- 21. That Section 8.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting “a converted dwelling, in accordance with the provisions of Section 5.5” from Table 8.1.
- 22. That Section 8.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the words “Where sanitary sewers and public water supply not available” in Table 8.2, under “Lot Area, Minimum” and replacing them with “Where a *municipal sewage system* is not available”.
- 23. That Section 8.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 8.3.
- 24. That Section 9.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 9.1: Uses Permitted and replacing it with the following:

9.1 **USES PERMITTED**

No *person* shall within any RR Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the RR *uses* in Table 9.1:

| TABLE 9.1: USES PERMITTED |
|---|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a garden suite</i> , in accordance with the provisions of Section 5.10; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a single detached dwelling</i> ; |
| • <i>a wayside sand or gravel pit</i> or <i>stone quarry</i> in accordance with the provisions of Section 5.33. |

- 25. That Section 9.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 9.3.
- 26. That Section 10.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 10.1: Uses Permitted and replacing it with the following:

10.1 **USES PERMITTED**

No *person* shall within any RE Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the RE *uses* in Table 10.1:

| TABLE 10.1: USES PERMITTED |
|--|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a garden suite</i> , in accordance with the provisions of Section 5.10; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a single detached dwelling</i> ; |
| • <i>a wayside sand or gravel pit or stone quarry</i> , in accordance with the provisions of Section 5.33. |

27. That Section 10.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsections 10.3.
28. That Section 11.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 11.1: Uses Permitted and replacing it with the following:

11.1 **USES PERMITTED**

No *person* shall within any ER Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the ER *uses* in Table 11.1:

| TABLE 11.1: USES PERMITTED |
|--|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a garden suite</i> , in accordance with the provisions of Section 5.10; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a single detached dwelling</i> ; |
| • <i>a wayside sand or gravel pit or stone quarry</i> , in accordance with the provisions of Section 5.33. |

29. That Section 11.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsections 11.3.

30. That Section 12.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 12.1: Uses Permitted and replacing it with the following:

12.1 **USES PERMITTED**

No *person* shall within any R1 Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the R1 *uses* in Table 12.1:

| TABLE 12.1: USES PERMITTED |
|---|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a garden suite</i> , in accordance with the provisions of Section 5.10; |
| • <i>a group home</i> , in accordance with the provisions of Section 5.12; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a single detached dwelling</i> . |

31. That Section 12.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting all instances of the words “where sanitary sewers are not available” in Table 12.2 and replacing them with “where a *municipal sewage system* is not available” and deleting all instances of the words “where served by both sanitary sewers and public water supply” in Table 12.2 and replacing them with “where served by both a *municipal sewage system* and *municipal water system*”.

32. That Section 12.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the preamble to subsection 12.3 Special Provisions for a Converted Dwelling (R1-C) and replacing it with the following:

12.3 **SPECIAL PROVISIONS FOR A CONVERTED DWELLING (R1-C)**

An existing converted dwelling containing up to two *dwelling units* is permitted within a *single detached dwelling* on R1-C zoned *lots*.

33. That Section 12.5 to By-Law Number 2003-18, as amended, is hereby amended by restoring the following subsection at the end of subsection 12.5.27.

12.5.28 **Location: Part Lots 34 & 35, Concession 13 (East Zorra), being Part Lot 7 of Registered Plan 1609, R1-28 (Key Map 7)**

12.5.28.1 Notwithstanding any provisions of this Zoning By-Law to the contrary, no *person* shall within any 'R1-28' Zone *use any lot, or erect, alter or use any building or structure* for any purpose except the following:

all uses permitted in Section 12.1 of this Zoning By-Law.

12.5.28.2 Notwithstanding any provision of this Zoning By-Law to the contrary, no *person* shall within any 'R1-28' Zone *use any lot, or erect, alter or use any building or structure* except in accordance with the following provisions:

12.5.28.2.1 FRONT YARD

Minimum Depth **7.0 m (23 ft.)**

12.5.28.2.2 That all provisions of the R1 Zone in Section 12.2 to this Zoning By-Law, as amended, shall apply, and further that all other provisions of this By-Law, as amended, that are consistent with the provisions herein contained shall continue to apply *mutatis mutandis*.

34. That Section 13.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 13.1: Uses Permitted and replacing it with the following:

13.1 **USES PERMITTED**

No *person* shall within any R2 Zone *use any lot or erect, alter or use any building or structure* for any purpose except one or more of the R2 *uses* in Table 13.1:

| TABLE 13.1: USES PERMITTED |
|---|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • <i>a duplex dwelling</i> ; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a semi detached dwelling</i> ; |
| • <i>a single detached dwelling</i> . |

35. That Section 13.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the preamble to Section 13.2 and replacing it with the following:

13.2 **ZONE PROVISIONS**

No *person* shall within any R2 Zone use any *lot* or *erect, alter* or use any *building* or *structure* unless the *lot* is served by both a *municipal sewage system* and *municipal water system* and is in accordance with the provisions in Table 13.2:

36. That Section 13.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the term “converted dwelling” from the heading of the 3rd column of Table 13.2.
37. That Section 14.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 14.1: Uses Permitted and replacing it with the following:

14.1 **USES PERMITTED**

No *person* shall within any R3 Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the R3 *uses* in Table 14.1:

| TABLE 14.1: USES PERMITTED |
|---|
| • <i>an additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • <i>an apartment dwelling</i> ; |
| • <i>a boarding or lodging house</i> ; |
| • <i>a converted dwelling</i> , containing up to four <i>dwelling units</i> , in accordance with the provisions of Section 5.5; |
| • <i>a home occupation</i> , in accordance with the provisions of Section 5.13; |
| • <i>a multiple unit dwelling</i> ; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • <i>a street fronting townhouse</i> . |

38. That Section 14.3 to By-Law Number 2003-18, as amended, is hereby amended by restoring the following subsection at the end of subsection 14.3.6.

14.3.7 **Location: Part Lots 34 & 35, Concession 13 (East Zorra), being Part Lot 7 of Registered Plan 1609, R3-7 (Key Map 7)**

- 14.3.7.1 Notwithstanding any provisions of this Zoning By-Law to the contrary, no *person* shall within any ‘R3-7’ Zone use any *lot*, or *erect, alter* or use any *building* or *structure* for the purpose except the following:

all *uses permitted* in Section 14.1 of this Zoning By-Law.

14.3.7.2 Notwithstanding any provision of this Zoning By-Law to the contrary, no *person* shall within any 'R3-7' Zone *use any lot, or erect, alter or use any building or structure* except in accordance with the following provisions:

14.3.7.2.1 FRONT YARD

Minimum Depth 7.0 m (23 ft.)

14.3.7.2.2 That all provisions of the R1 Zone in Section 12.2 to this Zoning By-Law, as amended, shall apply, and further that all other provisions of this By-Law, as amended, that are consistent with the provisions herein contained shall continue to apply *mutatis mutandis*.

39. That Section 15.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 15.1: Uses Permitted and replacing it with the following:

15.1 **USES PERMITTED**

No *person* shall within any V Zone *use any lot or erect, alter or use any building or structure* for any purpose except one or more of the V *uses* in Table 15.1:

| TABLE 15.1: USES PERMITTED |
|---|
| • an <i>additional residential unit</i> , in accordance with the provisions of Section 5.5; |
| • an <i>automobile service station</i> ; |
| • a <i>bakeshop</i> ; |
| • a <i>business or professional office</i> ; |
| • a <i>commercial school</i> ; |
| • a <i>community centre</i> ; |
| • an <i>existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • a <i>dwelling unit</i> in a portion of a non-residential <i>building</i> ; |
| • an <i>eating establishment</i> ; |
| • a <i>financial institution</i> ; |
| • a <i>fraternal lodge or institutional hall</i> ; |
| • a <i>funeral home</i> ; |
| • a <i>home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a <i>laundromat</i> ; |
| • a <i>medical centre</i> ; |
| • a <i>parking lot</i> ; |
| • a <i>personal service establishment</i> ; |
| • a <i>place of entertainment</i> ; |

| TABLE 15.1: USES PERMITTED |
|---|
| • a <i>public library</i> ; |
| • a <i>public use</i> , in accordance with the provisions of Section 5.22; |
| • a <i>retail store</i> ; |
| • a retail outlet, a wholesale outlet or a business office <i>accessory</i> to a permitted <i>use</i> ; |
| • a <i>service shop</i> ; |
| • a <i>single detached dwelling</i> ; |
| • a <i>studio</i> ; |
| • a <i>veterinary clinic</i> , with no outside kennels or runs. |

40. That Section 15.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the preamble to Section 15.2 and replacing it with the following:

15.2 **ZONE PROVISIONS**

No *person* shall within any V Zone use any *lot* or *erect, alter* or use any *building* or *structure* except in accordance with the provisions in Table 15.2:

The *lot area* provision for residential *uses* are cumulative with the *lot area* provision for non-residential *uses* when such residential *use* is located on the same *lot* with a permitted non-residential *use*. No *person* shall use any *lot* or *erect, alter* or use any *building* or *structure* for the any of the *uses* in Table 15.1 unless the *lot* is served by partial services (a *municipal sewage system* or a *municipal water system*) or by private services (*individual on-site sewage system* and *individual on-site water system*).

41. That Section 15.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 15.3.

42. That Section 16.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting Section 16.1: Uses Permitted and replacing it with the following:

16.1 **USES PERMITTED**

No *person* shall within any CC Zone use any *lot* or *erect, alter* or use any *building* or *structure* for any purpose except one or more of the CC *uses* in Table 16.1:

| TABLE 16.1: USES PERMITTED |
|---|
| • an <i>additional residential unit</i> , within an <i>existing single detached dwelling</i> and/or in a <i>building accessory</i> to an <i>existing single detached dwelling</i> , in accordance with Section 5.5; |
| • an administrative office of the <i>Corporation</i> , the <i>County</i> , the Government of Ontario, or the Government of Canada; |
| • an <i>automobile service station</i> ; |

| TABLE 16.1: USES PERMITTED |
|--|
| • a bakeshop; |
| • a <i>business or professional office</i> ; |
| • a <i>commercial school</i> ; |
| • a <i>community centre</i> ; |
| • an <i>existing converted dwelling</i> , containing up to two <i>dwelling units</i> ; |
| • a <i>dwelling unit</i> in a portion of a non-residential <i>building</i> except that in the case of an <i>automobile service station</i> such dwelling shall not be permitted; |
| • an <i>eating establishment</i> ; |
| • a financial institution; |
| • a <i>fraternal lodge or institutional hall</i> ; |
| • a funeral home; |
| • a <i>group home</i> , in accordance with the provisions of Section 5.12; |
| • a <i>home occupation</i> , in accordance with the provisions of Section 5.13; |
| • a laundromat; |
| • a <i>medical centre</i> ; |
| • a <i>parking lot</i> ; |
| • a <i>personal service establishment</i> ; |
| • a <i>place of entertainment</i> ; |
| • a <i>public library</i> ; |
| • a public use, in accordance with the provisions of Section 5.22; |
| • a <i>recreational or athletic facility or club</i> ; |
| • a <i>retail store</i> ; |
| • a <i>service shop</i> ; |
| • a <i>single detached dwelling</i> ; |
| • a <i>studio</i> ; |
| • a <i>veterinary clinic</i> , with no outside kennels or runs. |

43. That Section 16.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting the preamble to Section 16.2 and replacing it with the following before Table 16.2:

16.2 **ZONE PROVISIONS**

No *person* shall within any CC Zone use any *lot* or *erect, alter* or use any *building* or *structure* except in accordance with the provisions in Table 16.2:

The *lot area* provision for residential *uses* are cumulative with the *lot area* provision for non-residential *uses* when such residential *use* is located on the same *lot* with a permitted non-residential *use*. No *person* shall use any *lot* or *erect, alter* or use any *building* or *structure* for the any of the *uses* in Table 16.1 unless the *lot* is served by a *municipal sewage system* and *municipal water system*.

44. That Section 16.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 16.3.
45. That Sections 17.0, 18.0, and 19.0 to By-law Number 2003-18, as amended, are hereby further amended by deleting all instances of the words “where sanitary sewers are not available” and replacing them with “where a *municipal sewage system* is not available” and deleting all instances of the words “where served by both sanitary sewers and public water supply” and replacing them with “where served by both a *municipal sewage system* and *municipal water system*” throughout Tables 17.2, 18.2, and 19.2.
46. That Section 18.3 to By-Law Number 2003-18, as amended, is hereby amended by restoring the following subsection at the end of subsection 18.3.2.

18.3.3 **Location: Part Lots 34 & 35, Concession 13 (East Zorra), being Part Lot 7 of Registered Plan 1609, MR-3(H) (Key Map 7)**

18.3.3.1 Notwithstanding any provisions of this Zoning By-Law to the contrary, no *person* shall within any ‘MR-3’ Zone use any *lot*, or *erect, alter* or use any *building* or *structure* for any purpose except the following:

all *uses permitted* in Section 18.1 of this Zoning By-Law.

18.3.3.2 Notwithstanding any provisions of this Zoning By-Law to the contrary, no *person* shall within any ‘MR-3’ Zone use any *lot*, or *erect, alter* or use any *building* or *structure* for any purpose except in accordance with the following provisions:

18.3.3.2.1 Holding Provisions

Where the symbol “H” appears on a zoning map following the zone symbol MR-3, those lands shall not be developed or used unless this By-law has been amended to remove the “H” symbol.

18.3.3.2.1.1 Criteria for the Removal of the Holding Provision

Prior to the removal of the “H” symbol, the owner shall prepare a noise/odour study and traffic impact study to the satisfaction of the Township of East Zorra-Tavistock and the County of Oxford for the purpose of identifying appropriate land *use(s)* within the 150 m (492.1 ft) sewage lagoon buffer and further, that appropriate buffering and/or mitigation of odour, noise and traffic impacts are adequately addressed relative to the adjacent residential and institutional uses.

18.3.3.2.2 That all provisions of the MR Zone in Section 18.2 to this Zoning By-Law, as amended, shall apply, and further that all other provisions of this By-Law, as amended, that are consistent with the provisions herein contained shall continue to apply *mutatis mutandis*.

47. That Section 22.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting “a converted dwelling, in accordance with the provisions of Section 5.5 of this Zoning By-law” from Table 22.1.
48. That Section 22.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting all instances of the words “where sanitary sewers are not available” and replacing them with “where a *municipal sewage system* is not available” and deleting all instances of the words “where served by both sanitary sewers and public water supply” and replacing them with “where served by both a *municipal sewage system* and *municipal water system*” throughout Table 22.2.
49. That Section 22.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 22.3.
50. That Section 23.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting “a converted dwelling, in accordance with the provisions of Section 5.5 of this Zoning By-law” from Table 23.1.
51. That Section 23.0 to By-law Number 2003-18, as amended, are hereby further amended by deleting all instances of the words “where sanitary sewers are not available” and replacing them with “where a *municipal sewage system* is not available” and deleting all instances of the words “where served by both sanitary sewers and public water supply” and replacing them with “where served by both a *municipal sewage system* and *municipal water system*” throughout Table 23.2.
52. That Section 23.0 to By-law Number 2003-18, as amended, is hereby further amended by deleting subsection 23.3.

- 53.** This By-Law comes into force in accordance with Sections 34(21) and (30) of the Planning Act, R.S.O. 1990, as amended.

READ a first and second time this 5th day of July, 2023.

READ a third time and finally passed this 5th day of July, 2023.

Phil Schaefer - Mayor

Will Jaques - Clerk

ZN 2-23-03

TOWNSHIP OF EAST ZORRA-TAVISTOCK
BY-LAW #2023-24
EXPLANATORY NOTE

By-law #2023-24 applies to all lands in the Township of East Zorra-Tavistock and no description of a specific property or key map is provided.

The purpose of the By-Law is to introduce general amendments to the Township Zoning By-law to implement the policies of Official Plan Amendment No. 285 (OPA 285). OPA 285 directs Townships to permit Additional Residential Units (ARUs) within single-detached dwellings, semi-detached dwellings, and street fronting townhouses and/or within a detached accessory building on the same lot as those dwelling types, where appropriate and subject to various requirements.

The amended Zoning By-law provisions include the following:

- Adding a new definition for Additional Residential Unit and amending other related definitions;
- Amending Section 5.0 General Provisions to establish standards and requirements for the development of Additional Residential Units, including but not limited to specifying:
 - maximum number of Additional Residential Units permitted on a lot depending on lot location and adequacy of water and sewage servicing;
 - maximum cumulative gross floor area for all Additional Residential Units on a lot;
 - minimum lot area for an Additional Residential Unit in a detached accessory building;
 - minimum setbacks and locations for entrances and stairways; and,
 - minimum requirements for parking.
- Deleting Converted Dwellings and adding Additional Residential Units as a permitted use in various zones across the Township where residential uses are already permitted;
- Amending the provisions of the 'Limited Agricultural Zone (A1)' and 'General Agricultural Zone (A2)' to require approval by the Committee of Adjustment prior to permitting an Additional Residential Unit within a detached accessory structure on an agricultural lot; and,
- Deleting Converted Dwellings as a permitted use in the 'Agri-business Zone (AB)', 'Institutional Zone (I)' and 'Recreational Zone (REC)'.

The Township of East Zorra-Tavistock, after conducting the public hearing necessary to consider the application, adopted the amending By-law #2023-24. The public hearing was held on June 21, 2023 and Council did not receive any comments from the public respecting the application.

Any person wishing further information regarding By-Law #2023-24 may contact the undersigned.

Will Jaques, Clerk
Township of East Zorra-Tavistock
90 Loveys Street, Hickson, ON, N0J 1L0
Telephone: 519-462-2697

File: ZN 2-23-03 (Township of East Zorra-Tavistock)
Report No: 2023-178

**THE CORPORATION OF THE
TOWNSHIP OF EAST ZORRA-TAVISTOCK
COUNTY OF OXFORD
MCLEAN DRAIN 2023
BY-LAW #2023 - 19**

BEING a by-law to provide for drainage works in the Township of East Zorra-Tavistock, in the County of Oxford.

WHEREAS in accordance with the provisions of The Drainage Act, R.S.O. 1990, certain drainage works has been requested on the following lands:

Pt. Lots 11 & 12, Concession 18 and Lots 11-14, Concession 17 in the
Township of East Zorra-Tavistock.

AND WHEREAS the Council of the Township of East Zorra-Tavistock in the County of Oxford has procured a report by Mr. Curtis MacIntyre of the firm of K. Smart & Associates Ltd. of Kitchener, Ontario and the report shall be attached hereto and form part of this by-law;

AND WHEREAS the estimated total cost of constructing the drainage works is \$327,000.00;

AND WHEREAS the Council is of the opinion that drainage of the area is desirable;

THEREFORE the Council of the Township of East Zorra-Tavistock, pursuant to The Drainage Act, R.S.O. 1990 ENACTS AS FOLLOWS:

1. The report dated April 28, 2023, is hereby adopted and the drainage works as therein set forth is hereby authorized, and shall be completed in accordance therewith.

2. (1) The Corporation of the Township of East Zorra-Tavistock may borrow on the credit of the Corporation the amount of \$327,00.00 being the amount necessary for the Engineering and Construction of the drainage works.

- (2) The Corporation may arrange for the issue of debentures in the name of the County of Oxford for the amount borrowed less the total amount of
 - (a) grants received under Section 85 of The Act;
 - (b) commuted payments made in respect of lands and roads assessed within the municipality;
 - (c) moneys paid under Subsection 61(3) of The Act; and
 - (d) moneys assessed in and payable by another municipality

and such debentures shall be made payable within five (5) or ten (10) years from the date of the debenture and shall bear interest at the prevailing rates at the time the said debenture is sold by the County of Oxford.

3. For paying the amount of \$260,857.00 being
 - (a) the amount assessed upon the lands and roads in the Township of East Zorra-Tavistock, except the lands and roads belonging to or controlled by the Municipality and
 - (b) the amount required to pay interest on the portion of the amount borrowed represented by the amount in Clause (a)

Less the total amount of \$85,717.00

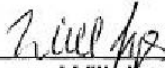
- (c) grants under Section 85 of The Act
 - (d) commuted payments made in respect of the lands and roads assessed
4. For paying the amount of \$66,143.00 being
 - a) the amount assessed upon the lands and roads belonging to or controlled by the Municipality
 - b) the amount required to pay interest on the portion of the amount borrowed represented by the amount in Clause (a)

A special rate shall be levied upon lands and roads as set forth in "Schedule of Assessments" to be collected in the same manner and at the same time as other taxes are collected.

The amount of the special rate levied upon each parcel of land or part thereof shall be divided into five (5) or ten (10) equal amounts and one such amount shall be collected in each year for five (5) or ten (10) years after the passing of this by-law.

5. This by-law shall come into force on the passing thereof, and may be cited as the MCLEAN DRAIN 2023.

READ A FIRST AND SECOND TIME THIS 7th DAY OF JUNE, 2023.



Will Jaques, Clerk



Phil Schaefer, Mayor

**READ A THIRD TIME AND FINALLY PASSED THIS ____ DAY OF _____,
2023.**

Will Jaques, Clerk

Phil Schaefer, Mayor

**NOTICE OF COURT OF REVISION
MCLEAN DRAIN 2023**

You are hereby advised that the Drainage Court of Revision for the MCLEAN DRAIN 2023 will be held on Wednesday, July 5, 2023, at the Innerkip Community Centre, 695566 17th Line, Innerkip, Ontario at 9:15 a.m. Any owner may appeal his/her assessment to the Court of Revision by giving written notice to the undersigned on or before Monday June 26, 2023, at 4:30 p.m.

Will Jaques, Clerk
Township of East Zorra-Tavistock
Hickson, Ontario N0J 1L0

Also take notice that in accordance with The Drainage Act any owner or public utility affected by the drainage works, if dissatisfied with the report of the Engineer on the grounds that:

- (a) the benefits to be derived from the drainage work are not commensurate with the estimated cost thereof;
- (b) the drainage works should be modified on the grounds to be stated;
- (c) the compensation or allowances as provided by the Engineer are inadequate or excessive;

may appeal to the Tribunal. In every case, a written notice of appeal shall be served upon the Council of the initiating municipality within forty (40) days after the mailing of this notice.

DATED: June 7, 2023

**THE CORPORATION OF THE
TOWNSHIP OF EAST ZORRA-TAVISTOCK
COUNTY OF OXFORD
BY-LAW # 2023 - 25**

Being a by-law to confirm all actions and proceedings of the Council.

NOW THEREFORE THE COUNCIL OF THE TOWNSHIP OF EAST ZORRA-TAVISTOCK ENACTS AS FOLLOWS:

All actions and proceedings of the Council taken at its meeting held on the 5th day of July, 2023 except those taken by By-law and those required by law to be done by resolution are hereby sanctioned, ratified and confirmed as though set out herein provided, however, that any member of this Council who has dissented from any action or proceeding or has abstained from discussion and voting thereon shall be deemed to have dissented or abstained, as the case may be, in respect of this By-law as it applies to such action or proceeding.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 5th DAY OF JULY, 2023.

Phil Schaefer, Mayor

seal

Will Jaques, Clerk