



**TOWN OF KINGSVILLE  
REGULAR MEETING OF COUNCIL  
AGENDA**

**Monday, July 8, 2024, 6:00 PM**

**Unico Community Centre**

**37 Beech Street**

**Kingsville, ON N9Y 1A9**

View Livestream at the time of the proceedings at  
<https://www.kingsville.ca/livestream>

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**Pages**

**A. CALL TO ORDER**

**B. LAND ACKNOWLEDGEMENT**

We acknowledge the Three Fires Confederacy (Ojibwe, Potawatomie and Odawa) and the Traditional ancestral, unceded territory of Caldwell First Nation; the original people of Point Pelee, Pelee Island and its surrounding waters. We recognize and respect the First Nations who are stewards of the land and waters of Turtle Island and who have embraced this stewardship since time immemorial. We would also like to acknowledge all the moccasins who have walked lands of Turtle Island.

**C. MOMENT OF SILENT REFLECTION AND NATIONAL ANTHEM**

**D. MAYOR'S WELCOME AND REMARKS**

**E. AMENDMENTS TO THE AGENDA**

**F. DISCLOSURE OF PECUNIARY INTEREST**

When a member of Council has any pecuniary interest, direct or indirect, in any matter which is the subject of consideration at this Meeting of Council (or that was the subject of consideration at the previous Meeting of Council at which the member was not in attendance), the member shall disclose the pecuniary interest and its general nature, prior to any consideration of the matter.

**G. REPORT OUT OF CLOSED SESSION**

Pursuant to Section 239 of the *Municipal Act, 2001*, Council entered into Closed Session at 7:07 p.m. on June 24, 2024, to discuss the following items:

**Item I - Board and Committee Appointments (Communities in Bloom and Joint OPP Detachment Board)** heard under Section 239(2)(b) being personal matters about an identifiable individual including municipal employees. Council considered applications for appointment to Communities in Bloom and the Joint OPP Detachment Board and as a result, appointed Sue Novotny to Communities in Bloom by way of a By-law in the succeeding Open Session. Council gave direction to Administration with respect to an appointment to the Joint OPP Detachment and information on the successful appointee will be made public when available. There is nothing further to report.

**Item II - Status of Crossing Guard Program** heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege, including communications necessary for that purpose. Council considered a report on Crossing Guards in the succeeding Open Session. There is nothing further to report.

**Item III - Legal Matter** heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege, including communications necessary for that purpose. No action resulted from the discussion and there is nothing further to report.

**Item IV - Procurement Contract Involving the Province of Ontario** heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege including communications necessary for that purpose. Council gave direction to Administration and information will be made public when available. There is nothing further to report.

## H. DELEGATIONS

## I. PRESENTATIONS

### 1. ERSPA 2023 Annual Progress Report

1

Katie Stammer, Water Quality Scientist/Source Water Protection Manager at ERCA

Tom Fuerth, Chair of Essex Region Source Protection Committee

## J. MATTERS SUBJECT TO NOTICE

### 1. Moroun Pump Station Improvements

20

#### **Recommended Action**

That the Report provided by N.J. Peralta Engineering Inc, dated June 21, 2024, on the Moroun Pumping Station for Improvements under a Report under Section 78 of the Drainage Act, **BE ADOPTED.**

### 2. 8th Concession Drain – MTO Highway Widening Project

130

#### **Recommended Action**

That the Report provided by Dillon Consulting, dated June 10, 2024, on the 8<sup>th</sup> Concession Drain for improvements on the drain for the MTO Highway Widening Project, under a Report of an Engineer pursuant to Section 78 of the Drainage Act, **BE ADOPTED**.

3. **9th Concession Drain – MTO Highway 3 Culvert Extension** 166

**Recommended Action**

That Report provided by Dillon Consulting, dated June 10, 2024, on the 9<sup>th</sup> Concession Drain for the MTO Highway 3 culvert extension, under a report of an Engineer pursuant to Section 78(5) of the Drainage Act, **BE ADOPTED**.

4. **Union Avenue Drain – Extending to Outlet** 191

**Recommended Action**

That the Report dated April 10, 2024, prepared by Baird AE for the abandonment of the Extension Drain as per Section 40 of the Drainage Act, **BE ADOPTED**.

5. **Cottam Sideroad Branch of the 7th Concession Drain – Improvements for MTO Highway Widening Project** 196

**Recommended Action**

That the Report provided by Dillon Consulting, dated June 10, 2024, on the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain for improvements on the drain for the MTO Highway Widening Project, under a Report of an Engineer pursuant to Section 78 of the Drainage Act **BE ADOPTED**.

6. **Application for Consent and Zoning By-Law Amendment (B 2024-15 and ZBA 2024-11): Surplus Dwelling Severance at 1738 Arner Townline** 239

**Recommended Action**

1. That consent application B-2024-15, to sever an existing dwelling, deemed surplus to the needs of the applicants' farming operation with an area of 1.079 ac (0.44 ha) lot shown as Part 1 on the applicants' sketch, known as 1738 Arner Townline, in the Town of Kingsville, **BE APPROVED**, subject to the following conditions:
  - a. That the necessary deed(s), transfer or changes be submitted electronically, signed and fully executed, including a copy of the reference plan, prior to certification.
  - b. That an easement for water service shall be signed and fully executed to the satisfaction of the town, prior to certification
  - c. The conditions imposed above shall be fulfilled by July 8<sup>th</sup>, 2026 or this application shall be deemed to be refused in accordance with Section 53(41) of the Planning Act.
2. And that By-law 49-2024 being a By-law to amend the Comprehensive Zoning By-law 1-2014 for the Town of Kingsville, to amend the zoning on the retained farm parcel municipally

known as VL Arner Townline from 'General Agricultural (A1)' to 'Agricultural - Restricted (A2)' and the severed residential parcel known as 1738 Arner Townline from 'General Agricultural (A1)' to 'Rural Residential (RR)' **BE APPROVED**; and the Mayor and Clerk **BE AUTHORIZED** to sign same.

7. **Application for Consent and Zoning By-Law Amendment (B 2024-17 and ZBA 2024-10): Surplus Dwelling Severance at 4336 Graham Sideroad**

248

**Recommended Action**

1. That consent application B-2024-17, to sever an existing dwelling, deemed surplus to the needs of the applicants' farming operation with an area of 1.6 ac (0.65 ha) lot shown as Part 1 on the applicants' sketch, known as 4336 Graham Sideroad, in the Town of Kingsville, **BE APPROVED**, subject to the following conditions:
  - a. Provide confirmation to the satisfaction of the Town of existing septic system on the property that meets Ontario Building Code requirements and setbacks in relation to the revised lot line locations.
  - b. The building must comply with the Ontario Building Code for exposing building face and limiting distance. The applicant must provide calculations, documentation and complete any necessary construction to comply with the OBC.
  - c. Provide proof of drainage, acceptable to the municipality, to serve the lands being conveyed and the lands being retained, with the costs of such drainage being solely at the expense of the applicant. Proof of Drainage shall be submitted to the Municipality a minimum of one month prior to the stamping of the deeds.
  - d. Execute an agreement for drainage apportionment due to lands severance or sale approved by the Municipality for each parcel being severed. Drainage Apportionment Request, 12R plan shall be submitted to the Municipality a minimum of one month prior to the stamping of the deeds.
  - e. That the necessary deed(s), transfer or changes be submitted electronically, signed and fully executed, including a copy of the reference plan, prior to certification.
  - f. The conditions imposed above shall be fulfilled by July 8<sup>th</sup>, 2026 or this application shall be deemed to be refused in accordance with Section 53(41) of the Planning Act.
2. And that By-law 50-2024 being a By-law to amend the Comprehensive Zoning By-law 1-2014 for the Town of Kingsville, to amend the zoning on the retained farm parcel municipally known as VL Graham Sideroad from 'General Agricultural (A1)' to 'Agricultural - Restricted (A2)' and the severed residential parcel known as 4336 Graham Sideroad from 'General Agricultural (A1)' to 'Rural Residential (RR)' **BE APPROVED**; and the Mayor and Clerk **BE AUTHORIZED** to sign same.

8. **Application for Redline Amendment SUB 2022-5 and Application for Rezoning ZBA 2024-12 of Heritage Estates Subdivision by 1552843 Ontario Ltd. (Noah Homes)**

**Recommended Action**

1. A resolution in support of the Redline Amendment of the approved Draft Plan of Subdivision, County File No. 37-T-23003, for a revised total of 29 lots and a mix of 15 single family and 28 semi-detached dwellings (43 residential units total) **BE APPROVED** subject to any additional conditions that may be outlined by the County in its approval, and
2. That Zoning By-law Amendment application ZBA 2024-12 to amend the current Lakeshore Residential West Exception 35 – holding (LR-35 (h)) zoning on the subject parcel in the Town of Kingsville **BE APPROVED** to include the following:
  - a. Lot frontages in Lots 11 – 25 for single family residential use reduced from 18m (59 ft) to 12.5 m (42 feet);
  - b. Minimum lot areas in Lots 11 - 25 for single family residential use reduced from 557 m<sup>2</sup> (5,995 ft<sup>2</sup>) to 440 m<sup>2</sup> (4,736 sq.ft.);
  - c. Maximum lot coverage, where there are no legal Additional Dwelling Units, be increased from 40% to 50%;
  - d. Maximum lot coverage, where there are legal Additional Dwelling Units, be increased from 40% to 60%;
  - e. Front yard depth be reduced from 6, (20 ft.) to 5.5m (18 ft.)
  - f. Interior side yard depth for main buildings with an attached garage be reduced from 1.5m (5 ft) to 1.2 m (4 ft)
3. By-law 51-2024 being a by-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville be taken as having been read three times and finally passed and the Mayor and Clerk **BE AUTHORIZED** to sign same.
4. The Registered Development Agreement (CE1173875) between the applicant and Town be amended to reflect the Redline Amendment and the associated rezoning, and to reflect that the development will be completed in one phase;
5. That By-Law 54-2024, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville to remove the Holding symbol (h) on the subject lands be taken as having been read three times and finally passed and the Mayor and Clerk **BE AUTHORIZED** to sign same.

**K. REPORTS - PLANNING AND DEVELOPMENT SERVICES**

No Reports at this time.

**L. REPORTS - FINANCE AND CORPORATE SERVICES**

1. **Council and Committee – Conference, Travel and Other Expense Policy Update**

270

**Recommended Action**

1. That the amendments to the Council and Committee – Conference, Travel and other Expense Policy, as recommended by Committee of the Whole and Administration, **BE APPROVED**.

**M. REPORTS - FIRE RESCUE SERVICES**

No Reports at this time.

**N. REPORTS - PUBLIC OPERATIONS**

No Reports at this time.

**O. REPORTS - LEGAL, BUILDING AND BY-LAW SERVICES**

No Reports at this time.

**P. REPORTS - CAO's OFFICE**

1. **Essex County Nurse Practitioner-Led Clinic and Physician Recruitment and Retention Grants**

282

**Recommended Action**

1. That Council **APPROVES** a grant for the Essex County Nurse Practitioner-Led Clinic ("ECNPLC") for the provision of Nurse Practitioner services out of the medical clinic located at 273 Main Street East Kingsville, in the total amount of \$35,000.00 to be paid from the Town's Health Care Reserve in monthly installments over a 1-year period, subject to certain conditions;
2. The CAO and Director of Finance/Treasurer **BE AUTHORIZED** to enter into the requisite Grant Agreement with the ECNPLC on behalf of the Town;
3. Council **APPROVES** a grant for the TMC Urgent Care Clinic – Kingsville, to assist in their efforts to recruit and retain physicians to practice out of the medical clinic at 273 Main Street East, Kingsville, in the total amount of \$30,000.00, to be paid from the Town's Health Care Reserve in annual installments of \$6000.00 over a 5-year period, subject to certain conditions;
4. That the CAO and Director of Finance/Treasurer **BE AUTHORIZED** to enter into the requisite Grant Agreement with the TMC Urgent Care Clinic – Kingsville on behalf of the Town; and
5. Council **APPROVES** a policy and practice of not bringing forward

for consideration future requests for financial support for medical services or medical practitioners, with an understanding that health care is a provincial responsibility and should be funded and provided to residents without requiring financial support by municipalities which have limited resources and many competing priorities.

**Q. CONSENT AGENDA**

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| 1. Regular Council Meeting Minutes - June 24, 2024 | 286 |
| 2. BIA Minutes - May 14, 2024                      | 293 |

**R. CORRESPONDENCE**

No Correspondence.

**S. NOTICES OF MOTION**

**T. UNFINISHED BUSINESS AND ANNOUNCEMENTS**

**U. BYLAWS** 301

**Recommended Action**

That the following By-laws receive two readings and be provisionally adopted:

**By-law 45-2024** being a By-law to provide for the improvements to the 8<sup>th</sup> Concession Drain and new maintenance schedule for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$1,828,000 in the Town of Kingsville, in the County of Essex

**By-law 46-2024** being a By-law to provide for the realignment of the 9<sup>th</sup> Concession Drain and Kings Highway No. 3 Culvert Extension for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$640,000 in the Town of Kingsville, in the County of Essex

**By-law 47-2024** being a By-law to provide for the realignment and extension of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$1,669,000 in the Town of Kingsville, in the County of Essex

**By-law 55-2024** being a By-law to provide for the improvements for the Moroun Pumping Scheme at a total estimated cost of \$686,257.00 in the Town of Kingsville, in the County of Essex

And That the following By-laws receive three readings and finally pass:

**By-law 53-2024** being a By-law to Amend the Traffic By-law (Jasperson Drive - no stopping)

**By-law 56-2024** being a By-law to confirm the proceedings of The Council of the Corporation of the Town of Kingsville at its July 8, 2024 Regular Meeting of Council.

**V. CLOSED SESSION**

**Recommended Action**

That Council enter into Closed Session at X:XX pm, pursuant to section 239 of the *Municipal Act, 2001*, to discuss the following item:

**Item I - Property Acquisition - Surplus School Properties** to be heard under Section 239(2)(c) a proposed or pending acquisition or disposition of land by the municipality; and, Section 239(2)(k) a position, plan, procedure, criteria, or instruction to be applied to negotiations.

**W. ADJOURNMENT**

**Recommended Action**

That Council adjourns this Regular Meeting at p.m.



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Wednesday, May 1, 2024

Town of Amherstburg  
Town of Essex  
Town of Kingsville  
Town of LaSalle  
Municipality of Leamington  
Municipality of Lakeshore  
Township of Pelee  
Town of Tecumseh  
City of Windsor  
Municipality of Chatham-Kent  
County of Essex

## **Attention: Municipal Clerks for Distribution to Council**

**Re: 2023 Annual Progress Reports on the implementation of the Essex Region Source Protection Plan**

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The Source Protection Authority is required to prepare an annual progress report under S.46 of the Clean Water Act by 1 May of each year. The reports are required to describe the measures taken to implement the Essex Region Source Protection Plan (SPP), the results of any monitoring program, the extent to which the objectives in the SPP are being achieved, and other information required in the Regulations. The information used to prepare the Annual Progress Report comes from Implementing Bodies, who are required by Monitoring Policies in the SPP to prepare and submit a progress report to the SPA by February 1 of each year.

### **Annual Progress Report highlights**

Of the 44 policies in the Essex Region SPP that address SDWTs, 38 (86%) are now fully implemented. Four policies (9%) are considered in progress and the remaining two policies have been reviewed and it has been determined that no further action is required.

Municipalities are required to include considerations for Source Water Protection in their next Official Plan update as per s.40 of the *Clean Water Act*. Zoning by-law conformity may also be required for certain policies in the Source Protection Plan as per s.42 of the *Clean Water Act* (see attached guidance for Official Plan conformity provided by the MECP). The County of Essex, Town of Essex, Town of LaSalle, Town of Tecumseh, and Town of Kingsville have completed their Official Plan conformity exercises; only the Town of Essex has completed their zoning by-law

conformity exercise. The County of Essex as an upper tier municipality does not require ZBL amendments. All Official Plans are required to include mapping to identify vulnerable areas where activities could pose a significant drinking water threat.

The remaining municipalities (6 of 11) have been reporting being in the process of amending their Official Plan to conform with the policies in the Essex Region SPP for the last several years. With the advent of Bill 23 and the delay in the release of the Provincial Direction and Provincial Policy Statement 2023, OP revisions are likely to be further delayed and it is unknown when they will be complete. For these reasons, the Committee unanimously choose to lower the score on Municipal Progress in 2022 and with minimal progress in 2023, it was the Committee's unanimous decision to retain the score of 'L – Limited Progress'. The Committee encourages municipalities to provide a target date by which the necessary information to bring their OPs into conformity with the Essex Region SPP. This can be completed as an issue-specific amendment under section 17 of the Planning Act, or under the mandatory comprehensive five-year review of their official plan under section 26 of the Planning Act.

All of the municipalities in the Essex Region delegated their authority to implement policies under Part IV of the *Clean Water Act* to the Essex Region Conservation Authority through an agreement that began in 2015 and has been extended to December 31, 2024. Risk Management Plans have been established for all of the identified existing significant drinking water threats in the Essex Region SPA. In 2023, three (3) RMPs were established for future (new) fuel threat(s) through s.59 municipal screening processes. Since the SPP took effect, 21 RMPs have been established through the s. 59 process for new (future) threats. Further details can be found in the attached 2023 Risk Management Official Annual Progress Report.

Harmful Algal Blooms (HABs) continue to be an annual occurrence and are identified as a drinking water issue for several of our drinking water intakes. While the policies in SPP related to HABs are non-legally binding, ERCA is committed to implementing relevant actions to reduce phosphorous in our region, and it is essential that we continue to highlight this international issue as a concern for our drinking water intakes.

ERSPA staff have been working with the SPC on a comprehensive review of the SPP and its policies. It is anticipated that these documents will be available for consultation in Fall 2024.



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Katie Stammler, PhD., Source Water  
Protection Program Manager



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Tom Fuerth, P.Eng, Chair, Essex Region  
Source Protection Committee

**Attached:**

- 2023 Essex Region Source Protection Authority Annual Progress Report
- 2023 Risk Management Official Annual Progress Report

# 2023 ERPA Source Protection Annual Progress Report | 1 May 2024

## I. Introduction

This annual progress report outlines the progress made toward implementing the policies in the Essex Region Source Protection Plan (SPP) for the Essex Region Source Protection Area (ERSPA), as required by the *Clean Water Act* and its Regulations. Our policies work by either eliminating or managing activities that could be considered a threat to our sources of drinking water and are based on the foundational knowledge that the actions we take on land have an impact on our local waterways and ultimately our sources of drinking water. Following an extensive process that included broad public input, the Essex Region SPP came into effect on October 1, 2015. This report highlights progress made toward implementation up to December 31, 2023, and highlights the actions taken from January 1 to December 31, 2023.



Scoring for certain elements of the Annual Progress Reports is based on the following:

**Progressing Well/On Target (P)** – Most of the policies have been implemented &/or are progressing.

**Satisfactory (S)** – Some of the policies have been implemented and/or are progressing.

**Limited progress (L)** – A few of policies have been implemented and/or are progressing.

## II. A message from your local Source Protection Committee

### **P – Progressing Well**

The Essex Region Source Protection Committee has reviewed this report and once again it is our unanimous opinion that implementation of the policies in the Essex Region Source Protection Plan is progressing well.

The one area that seems to have reached a stalemate is the section that requires specific action by municipalities. The Committee is aware of the challenges that continue to delay the completion of the required review of Official Plan (OP) and Zoning By-Law documents that govern development. Various changes by the province to the governing laws by which the municipalities must conform have exacerbated their ability to produce and approve new OP and Zoning by-laws as quickly as we might like. The Committee suggests that, rather than waiting for the full review of existing documents to be completed, they see their way to adopt amendments that will be included in the final production of their fully updated documents. We are given to understand that the required amendment that would accomplish conformity with the Source Protection Plan is not onerous and has been adopted in new documents that have been finalized by other municipalities. The Committee also encourages SPA staff to offer their suggestions in this regard. Those municipalities that have not completed the required review exercise should be able to come into compliance with the requirement to incorporate Source Water Protection into their planning documents with this method. The Committee also feels that the Chair and SPA staff should appear before each of the elected council's members to put forward this suggestion.

Although the blue-green algae issue made it through another year at a somewhat lower severity than we have witnessed in previous years, the Committee is of the opinion that Source Protection staff should continue to monitor the ingredients that contribute to the annual occurrence of Harmful Algal Blooms. The Committee has been made aware that funding for some programs that support work on the ground (monitoring and stewardship) was discontinued in 2023, and that consistent and uninterrupted data and relationships are being lost. If we are not able to track conditions in the local environment our hands will be tied in making informed decisions regarding the efficacy of our Source Protection Program. Further, stewardship activities provide frontline interactions to encourage uptake of activities that will reduce nutrient loss to the environment. We encourage various funding sources to reconsider abandoning these programs.

### III. Our Watershed

The Essex Region Source Protection Area (ERSPA) is approximately 1681 km<sup>2</sup> and coincides with the watershed boundaries of the Essex Region Conservation Authority (ERCA). The ERSPA is comprised of 28 smaller sub-watersheds, flowing northward into Lake St. Clair, westward into the Detroit River, or southward into Lake Erie. The area predominantly consists of a flat clay plain with the exception of some sandy areas, primarily in the southern portion of the Region. The predominant land use in the watershed is agriculture, due to the region's excellent farmland and growing conditions.

Municipal drinking water supplies in the Essex Region Watershed are drawn from surface water intakes in the Great Lakes system - Lake Erie, Lake St. Clair and the Detroit River. There are seven municipal Water Treatment Plants (WTPs) in the ERSPA, and one WTP outside of the ERSPA in Wheatley serving part of the Municipality of Leamington. Stoney Point and Lakeshore (Belle River) WTPs have their water intakes located in Lake St. Clair; the A. H. Weeks (Windsor) and Amherstburg WTPs have their intakes in the Detroit River; and the Harrow-Colchester South, Union, Pelee Island West Shore and the Wheatley WTPs have their intakes in Lake Erie. These municipal WTPs serve over 95 percent of the population in the ERSPA. The remaining population, less than five percent, depends on groundwater or hauled water.

In the ERSPA, the handling and storage of large volumes of liquid fuel (>15,000 L) was identified as a significant drinking water threat (SDWT). Modeling exercises showed that a spill of this volume of fuel close to any body of water could result in contamination of the source water at our drinking water intakes. This resulted in the delineation of an extensive Event Based Area (EBA) in which large volumes of fuel are considered a threat to our drinking water. To mitigate these threats, Risk Management Plans (RMPs) that show actions are being taken to prevent spills are required to be established in consultation with a Risk Management Official.

To learn more about Source Protection in the Essex Region, please visit our website:  
<https://essexregionconservation.ca/source-water-protection/>

## IV. At a Glance: Progress on Source Protection Plan Implementation

### 1. Source Protection Plan Policies and Addressing Significant Risks

#### **P – Progressing Well**

Of the 44 policies in the Essex Region SPP that address SDWTs, 38 (86%) are fully implemented and 4 (9%) are considered to be in progress. The remaining two policies have been reviewed and it has been determined that no further action is required.

Three (3) in progress policies use s.58 (risk management plans) in specific vulnerable areas to manage SDWTs. The RMO has conducted a review and has not encountered any existing SDWTs. However, these policies have been challenging to implement and the policy approaches will be reviewed in the next Source Protection Plan update. Any new potential SDWTs are captured during the s.59 screening process. One (1) in progress policy requires Windsor, Lakeshore and Amherstburg to prohibit sewage treatment tanks in IPZ-1s. This policy is implemented in Windsor and Lakeshore and will be included in Amherstburg's next Official Plan update. Importantly, this activity is also prohibited using a Prescribed Instrument policy and there are no existing threats.

### 2. Municipal Progress: Addressing Risks on the Ground

#### **L – Limited Progress**

All of the 11 municipalities in the ERSPA have vulnerable areas where SDWT policies apply. Municipalities are required to ensure that their planning and building decisions conform with the Essex Region SPP and must also ensure that their Official Plan conforms with the SPP upon the next Planning Act review.

The County of Essex, Town of Essex, LaSalle, Tecumseh and Kingsville have completed their required Official Plan (OP) conformity exercises. The remaining municipalities (6 of 11) are in the process of amending their OPs and have been for several years. ERSPA staff have reviewed some draft OP revisions, in some cases multiple times. With the advent of Bill 23 and the delay in the release of the Provincial Direction and Provincial Policy Statement 2023, OP revisions are likely to be further delayed and it is unknown when they will be complete. Importantly, the overall status of OP revisions is minimally changed from the previous annual report with limited progress since the Essex Region SPP came into effect. For these reasons, the Committee unanimously choose to lower the score on Municipal Progress in 2022 and with minimal progress in 2023, it was the Committee's unanimous decision to retain the score of 'L – Limited Progress'. The Committee encourages municipalities to provide a target date by which the necessary information to bring their OPs into conformity with the Essex Region SPP will be incorporated either through a complete update or Official Plan Amendment.

All lower tier municipalities are responsible for day-to-day land use planning and building permit decisions and have integrated source protection requirements to ensure that their planning and building decisions conform with the policies in the Essex Region SPP. Municipalities are encouraged to review this process annually to ensure its use and efficacy. The Essex Region Conservation Authority has been delegated by all of these municipalities to implement Part IV policies on their behalf. At the request of municipalities, ERSPA will deliver additional training to municipal staff in 2024.

### 3. Septic Inspections

Not applicable to the ERSPA. There are currently no policies in the Essex Region SPP that require mandatory septic inspections. However, the Committee notes that high levels of *E.coli* remain a concern for our local waterways and beaches. Landowners are encouraged to have their septic systems inspected and maintained regularly.

### 4. Risk Management Plans

#### **P - Progressing Well**

As of January 2019, threat verification inspections were carried out in accordance with the *Clean Water Act* by the RMO/I for all 384 existing properties originally identified in the ERSPA's Assessment Report to determine whether or not existing activities met the criteria to be considered a SDWT (the handling & storage of fuel). Of these, 96 were identified to be SDWTs. As of 2022, RMPs were established for all 96 existing threats.

Four (4) s.59 applications were reviewed in 2023 resulting in three (3) RMPs being established for new fuel threats. Since the SPP took affect, 21 RMPs have been established through the s.59 process for new threats. To date, all of the RMPs established for new fuel tanks have been for greenhouse construction and crude oil and brine operations. There have not been any applications reviewed for the other Part IV policies applicable to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1.

In 2022, the RMO began conducting compliance reviews for individuals with existing Risk Management Plans issued under a s.58 (existing threats). Due to staffing changes, compliance reviews were not conducted in 2023. Please refer to the supplementary Part IV 2022 Risk Management Services Report for further information and details.

## 5. Provincial Progress: Addressing Risks on the Ground

### **P – Progressing Well**

The Essex Region SPP includes 17 policies that use Provincial Instruments (Environmental Compliance Approvals) to address SDWTs. Screening for future threats became mandatory the date the SPP came into effect (October 1, 2015). Our policies set out a timeline of 5 years (October 1, 2020) to review and make necessary changes to previously issued PIs to address existing SDWTs, this work was completed in 2018. Ontario Ministries screen new applications and amend Prescribed Instruments as needed to address any new SDWTs. As a result of this work, all of the policies that use Provincial Instruments in the Essex Region SPP are fully implemented.

As of December 2018, all 38 of the existing PIs were reviewed. Five of these were considered to be SDWTs where the PI was sufficient and no additional conditions were required to mitigate the SDWT. In 2023, no new applications for SDWTs were reviewed by Provincial Ministries in vulnerable areas of the Essex Region. Since 2016, 37 new applications for PIs have been reviewed in the ERSPA. No new SDWTs have been identified through this process.

## 6. Source Protection Awareness and Change in Behaviour

Road signs have been installed across the ERSPA as part of a provincial awareness initiative. The Ontario Ministry of Transportation (MTO) installed signs five signs in the Essex Region on Hwy 401, Hwy 77 and Hwy 3. Municipalities coordinated installation of more than 60 signs on local municipal and county roads. Signs continue to be replaced as needed.

These road signs identify sections of road where accidental spills could contaminate our sources of drinking water. As part of the Essex Region Source Protection Plan implementation, emergency responders have been notified about these zones so that our sources of drinking water can be protected in the event of a spill. The use of standardized signs throughout Ontario will help to raise public awareness about the importance of protecting our local sources of drinking water.

The main risk to drinking water in our local area is the handling and storage of liquid fuel. If a spill is observed, residents are advised to contact the Spills Action Center at 1-800-268-6060. To learn more about these road signs in the Essex Region, check out our video! <https://www.youtube.com/watch?v=MwO3V1zsUAs>

## 7. Source Protection Plan Policies: Summary of Delay

There have been no significant delays in the implementation of the Essex Region Source Protection Plan.

## 8. Source Water Quality: Monitoring and Actions

Harmful algal blooms (HABs) are an annual occurrence in Lake Erie and Lake St. Clair. HABs are formed by blue-green algae (or cyanobacteria) that produce a neurotoxin called microcystin, which is a parameter listed on Schedule 2 of the Ontario Drinking Water Quality Standards. The Essex Region SPC determined that microcystin was a drinking water issue for Lake Erie intakes in 2014. The data were reviewed for all of the intakes in the Essex Region in 2023, including those in Lake St. Clair, the Detroit River and Lake Erie. The SPC has determined that microcystin is a drinking water issue for all intakes based on that review. The SPP and Assessment Report will be updated accordingly.

Each fall, NOAA releases a final seasonal assessment for the severity of the Lake Erie HAB. The severity index ranges from zero to 10 and indicates the amount of bloom biomass over the peak 30 days of the bloom. These models are not currently able to predict nor report on the toxicity of the bloom. In 2023, the Lake Erie HAB received a score of 5.3, making it a moderately severe bloom but less severe than 2022. It is not yet possible to declare any trend in bloom severity, nor to determine whether on-the-ground actions are responsible for lowering bloom severity. Importantly, peak bloom periods are now longer. In 2010 the peak bloom period was 10 days, in 2022 it was 20-30 days.

The Source Protection Plan includes a policy to continue monitoring for phosphorus and microcystin, and a regional education and outreach policy for phosphorus, microcystin as a drinking water issue, and algae blooms in general. ERCA continues to be a leader in phosphorus monitoring and has integrated HABs into educational programs directed at a variety of target audiences. Unfortunately, in 2023, many of the funding streams that ERCA has relied upon for monitoring were not available. This resulted in a significant decrease in the number of samples taken and the number of sites monitored. Additionally, there were fewer opportunities to participate in outreach events. At the end of 2023, ERCA's Agricultural Stewardship program was put on hold unless or until additional sources of funding become available. At the time of this writing, there are new grants in place or pending that will re-instate some monitoring programs in 2024, but outreach and stewardship are still uncertain.

In 2023, ERCA published two important reports. The [Kingsville Leamington Nutrient Project](#) report uses 10 years of data (2012 – 2022) to explore trends and patterns in greenhouse and non-greenhouse influenced streams. The report uses multiple lines of evidence and shows that nutrient concentrations are higher in greenhouse-influenced streams. Importantly, concentrations are increasing in streams with newly built greenhouses. ERCA is working with Provincial and Federal agencies on next steps for monitoring and mitigation. The [Essex Region Phosphorus Management Plan](#) describes the status of phosphorus concentrations in local waterbodies, identifies sources of phosphorus in the Essex Region as well as knowledge gaps, and reduction strategies. It includes a list of Action Items that are intended to be a living document, updated as actions are completed and/or new actions identified.

## 9. Science-based Assessment Reports: Work Plans

The Essex Region SPA continues to make progress towards completing our s.36 update with a goal of finalizing the update by the end of 2024. The formal consultation process on new and amended policies will begin mid-2024. This process is about a year delayed in part due to the late release of the 2021 Director Technical Rules by the MECP, which were required to prepare new policies and updates to the majority of the existing policies in the Source Protection Plan. Staffing shortages and increased workload in other areas has also contributed to this delay.

## 10. More from the Watershed

Each year, Implementing Bodies are invited to include any success stories related to Source Water Protection through the Annual Reporting process. The SPC has chosen to highlight the actions taken by our municipalities that help meet the goals of Source Water Protection. Since 2019, several of our municipalities have declared a climate emergency and some have approved Climate Change Adaptation Plans that include actions that will also protect water quality through the reduction and/or mitigation of flooding and erosion. Many municipalities have subsidy programs that provide support for downspout disconnection and rain barrels to mitigate high flow events and backflow valves to prevent basement flooding. Municipalities are also updating sewer master plans with the inclusion and encouragement of riparian buffers, and planning for future flood mitigation. Community events like beach clean ups and tree plantings are supported. Municipalities are also examining their own internal processes and updating standard operating procedures for things like road salt application, sediment control during construction, stormwater management, fire fighting, spill containment, and incorporating low impact design where possible. While our municipalities are behind in updating their Official Plans, they have been taking clear actions to protect the environment, which in turn protects our sources of drinking water. The SPC wishes to acknowledge these actions and encourage our municipalities to continue down this path, especially in light of rising development pressures.

To learn more about our source protection region/area, visit our homepage:  
<https://essexregionconservation.ca/source-water-protection/>



### Have you seen this Drinking Water Protection sign?

These signs are appearing across Ontario to raise awareness about the vulnerability of our municipal drinking water sources. Governments at the local and provincial level placed signs along roadways where a pollution spill could have a negative impact on our drinking water sources. The main risk to drinking water in the Essex Region Source Protection Area is the handling and storing of liquid fuel. These signs indicate areas where a spill of a large volume of liquid fuel could impact one of our drinking water intakes. If a spill is identified or if you observe what you suspect to be a harmful algal bloom (classic description is that it looks like green paint and often has a white/yellow scum on top), residents should contact the Spills Action Centre at 1-800-268-6060 or online: [Spills Action Centre](#)

# 2023 Risk Management Official Annual Progress Report

Prepared by:



## PART IV IMPLEMENTATION – RISK MANAGEMENT SERVICES

### INTRODUCTION

Source water is the water that supplies our drinking water treatment plants. Following the Walkerton Inquiry, the *Clean Water Act, 2006* became part of the Ontario government's commitment to protecting municipal drinking water systems from contamination and overuse, now and into the future. The *Clean Water Act* led to the creation of Source Protection Plans (SPPs) across Ontario. The [Essex Region SPP](#) came into effect on October 1, 2015 and the [Thames-Sydenham and Region SPP](#) came into effect on December 31, 2015.

The SPPs contain policies to ensure that [Significant Drinking Water Threat \(SDWT\) activities](#) identified in vulnerable areas near surface water intakes cease to be or never become a risk to source water. Municipalities are required to have a specially trained and certified Risk Management Official and Risk Management Inspector (RMO/I) to implement policies written under Part IV of the *Clean Water Act*. The municipalities in the Essex Region Source Protection Area (ERSPA) and the Municipality of Chatham-Kent in the Thames-Sydenham and Region Source Protection Region (TSRSPR) delegated these obligations to the Essex Region Conservation Authority (ERCA). This agreement began in 2015 and is renewed on a three-year cycle. The terms of the current agreement expire on December 31, 2024.

There are eight municipal surface water intake systems serving the municipalities in the ERSPA and the southernmost portion of the TSRSPR that have vulnerable areas where Part IV policies apply:

- Stoney Point Intake (Lake St. Clair)
- Lakeshore (Belle River) Intake (Lake St. Clair)
- Windsor (A.H) Weeks Intake (Detroit River)
- Amherstburg Intake (Detroit River)
- Harrow - Colchester Intake (Lake Erie)
- Union Intake (Lake Erie)
- Wheatley Intake (Lake Erie)
- Pelee Island (Lake Erie)

This annual progress report details the progress made by the RMO/I toward the implementation of Part IV policies in both the ERSPA and TSRSPR Source Protection Plans, as required annually by the *Clean Water Act* and its Regulations. The report includes actions taken by the RMO/I between October 1, 2015 and December 31, 2023, highlighting actions between January 1, 2023 and December 31, 2023.

### SIGNIFICANT DRINKING WATER THREATS

Activities on the land can pose threats to sources of municipal drinking water through spills and runoff. The above grade handling and storage of large volumes of liquid fuel was determined to be a SDWT in both the ERSPA and TSRSPR in an extensive vulnerable area (Event Based Area). There are additional SDWT activities identified in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1. The land portion of these areas, however, are small and/or predominantly residential or municipal land use where the identified activities are not likely to exist.

## **PART IV POLICIES, *CLEAN WATER ACT***

Part IV policies can be used to prohibit (Section 57) or manage (Section 58) activities identified as SDWTs. These policies apply to both existing and future (new) SDWTs located within vulnerable areas identified as Intake Protections Zones (IPZs) or Event Based Areas (EBA). Policies written using restricted land uses (Section 59) are intended to act as a screening tool by municipal planning and building staff to identify any potential new SDWTs that would be subject to Section 57 or Section 58 policies. In the Essex Region Source Protection Area, activities are only prohibited if they do not currently occur in identified vulnerable areas and are not likely to occur in the future. Most of the policies written to address identified and future SDWTs in the SPPs use Section 58, which requires the development of a Risk Management Plan (RMP) to minimize the risks to sources of municipal drinking water.

### **PROHIBITION (SECTION 57, PART IV POLICIES)**

The Essex Region SPP contains six policies that prohibit specific SDWT activities using s.57 of the Clean Water Act. These prohibition policies currently only apply to Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1 where the designated land use precludes many of these activities. Prohibited activities include the following under specific circumstances as indicated in their relevant policies:

- The application and storage of Agricultural Source Material (ASM)
- The application and storage of Non-Agricultural Source Material (NASM)
- The storage of road salt (>5000 tonnes)
- The storage of snow (>1 ha)

There is no agriculturally zoned land in any of the subject vulnerable areas, therefore the application and storage of both ASM and NASM as defined in the policies cannot occur. In 2022, The RMO confirmed through a detailed review of aerial photography in ERCA's Georcortex, street view imagery from Google, and consultation with the City of Windsor that there are no existing storage structures for salt, nor large areas for snow storage in the subject vulnerable areas that meet the criteria to be a SDWT. The RMO is satisfied that there are no existing activities that are prohibited using s.57 polices. Municipalities have received training to screen for potential SDWTs that meet these criteria, and none have been identified since the Plan came into effect in 2015.

### **RISK MANAGEMENT PLANS (SECTION 58, PART IV POLICIES)**

Risk Management Plans (RMPs) are agreements between the RMO and the person engaged in the activity, typically the landowner or business operator, to prescribe how a SDWT activity is managed on a specific property using appropriate risk management measures (RMMs). RMPs outline existing RMMs and identify additional RMMs required to prevent spills and contain one should it occur. RMPs may be straightforward in circumstances where persons are already implementing RMMs. RMPs are meant to be flexible and allow the activity to continue to occur, provided that RMMs agreed upon are followed. The person engaged in the activity is responsible for maintaining RMMs on site. The RMO/I monitors the implementation of RMPs once they are established and conducts compliance inspections. RMPs can be amended at any time following the effective to date to accurately reflect any changes on the site or to the SDWT activity.

The RMO/I provides guidance and assistance in the development of RMPs through site visits, emails, phone calls and additional meetings. Resources and templates were developed by Risk Management staff and are provided to the proponent during the negotiation of the RMP. The following risk management measures are typically included in RMPs: documentation of regular fuel tank inspections, an updated spill prevention and containment plan, spill emergency response plan and training for staff, and documentation that fuel storage tanks adhere to applicable fuel regulations and remain safe for refueling and storage.

The total number of RMPs established for existing and new significant drinking water threats, and the number of RMPs issued by Order in each municipality in the ERSPA and TSRSPR are reported in Table 1a and Table 1b. Table 2 provides a detailed annual accounting of the activities the RMO/I is required to report to the MECP in compliance with Section 81 of the *Clean Water Act* for the ERSPA. The RMO/I provides responses to the TSRSPR for inclusion in their report to the MECP.

There are three Part IV policies that remain in progress. These policies address the storage of hazardous waste and pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and the application of pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and Windsor IPZ-2. The RMO has conducted a thorough review of available information and did not find any existing SDWTs. The RMO is now working with municipalities to confirm that these activities do not currently exist and that new activities are being identified through s.59 screening. The specific pesticides identified are typically only used for agriculture. Importantly, these policies will be updated to align with the 2021 Director Technical Rules.

#### **EXISTING ENUMERATED SIGNIFICANT DRINKING WATER THREAT ACTIVITIES**

There were 384 potential SDWTS identified in the ERSPA Source Protection Plan and 33 potential SDWTS identified in the TSRSPR Source Protection Plan when the Plans were written. Threat verification inspections were completed to determine whether the fuel tanks installed on site met the criteria to be considered a SDWT (e.g. capacity, location in relation to the Event Based Area and contents of the fuel tanks). These threat verification inspections and windshield surveys confirmed that there were 96 existing SDWTS in the ERSPA and 9 existing SDWTS in the TSRSPR that required a RMP. As of October 2022, RMPs have been established for all existing SDWTS in both Source Protection Areas.

Of the existing SDWTS, six RMPs were issued by Order in the ERSPA and six in the TSRSPR. Eight of these properties are owned and operated by a corporation that oversees crude oil and brine operations. There was a breakdown in communication that necessitated the completion of the RMPs by Order. The remaining four RMPs issued by Order were for absentee owners of greenhouse cannabis operations.

#### **RESTRICTED LAND USES AND THE WRITTEN DIRECTION (SECTION 59, PART IV POLICIES)**

Section 59 (Restricted Land Use) policies serve as a screening process to identify new potential SDWTS through incoming municipal building and planning applications before they are established. If a project meets the criteria outlined in the Written Direction, proponents are notified that they must complete and submit a [Section 59 Application](#) to the RMO/I for review. Building or planning applications cannot proceed until the applicant has demonstrated that a SDWT activity will not pose a risk to drinking water sources (e.g. RMP established) and a written notice to proceed from the RMO/I has been issued.

Between October 1, 2015 and December 31, 2022, the RMO has received 55 applications in the ERSPA and 4 applications in the TSRSPR through Section 59 screening for new potential fuel threats in the Event Based Area. Of these, there were 21 instances in the ERSPA and 2 instances in the TSRSPR where an application met the criteria to be considered a SDWT, triggering the need for a RMP. In these cases, the process for developing a RMP was expedited and a notice to proceed was issued once the RMP was finalized and agreed to. In 2023, three RMPs in the ERSPA was established through the s.59 screening process. To date, all of the RMPs established for new fuel tanks have been for greenhouse construction and crude oil and brine operations. There have not been any applications reviewed for the other Part IV policies applicable to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1.

## COMPLIANCE MONITORING

The RMO began working with individuals with existing Risk Management Plans to ensure compliance. A compliance checklist was circulated to all individuals who were issued a s.58 notice to proceed (existing threats) with a Risk Management Plan established. The compliance check is a self-assessment that allows the RMO to ensure that all documents are up to date and that properties with significant drinking water threat activities continue to implement appropriate Risk Management Measures.

The checklist includes the following items: Proof of adherence to the applicable fuel regulations (ensuring fuel tanks are certified to obtain fuel and/or installed by a TSSA technician), proof of fuel tank inspections, updates to the spill prevention and containment plan, updates to the spill and emergency response plan, and proof of employee training. Unfortunately, due to staffing shortage, compliance monitoring was put on hold for 2023.

## MUNICIPAL INTEGRATION

The Risk Management Official will be providing refresher training to Planning and Building staff for municipalities in 2024 at their request. In addition, [training was recorded](#) that applies to all municipalities and is available on YouTube for new municipal staff or those wishing a refresher.

## MOVING FORWARD IN 2024

Continuing actions and next steps for Risk Management Services in 2024 include:

- Continue monitoring established risk management plans to ensure compliance
- Review Section 59 Applications circulated to riskmanagement@erca.org as a result of incoming municipal building and planning applications for new developments
- Deliver municipal training sessions on Section 59 processes and Source Protection Plan policies
- Respond to requests from developers, consultants and municipal staff during pre-planning for sites identified through the Section 59 process
- Continue working with local businesses and landowners on negotiating and establishing Risk Management Plans; continue to assist and provide guidance to those affected by Part IV policies
- Renegotiate agreements with municipalities to continue providing Risk Management Services

March 2024

Table 1a – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the ERSPA since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Essex Region Source Protection Area (ERSPA)										
	Amherstburg	Essex	Kingsville	Lakeshore	LaSalle	Leamington	Pelee	Tecumseh	Windsor	Total
Total Identified threats in the AR	16	31	93	29	3	164	3	12	33	384
No RMP required (AR)	16	28	62	26	3	121	1	10	29	296
RMPs Required (AR)	-	3	31	3	-	43	2	2	4	88
Threats identified after the AR through field verification (AR +)	-	-	6	-	-	2	-	-	-	8
RMPs established (AR +)	-	3	37	3	-	45	2	2	4	96
RMPs established (s.59)	-	1	2	-	-	18	-	-	-	18
Number of RMPs Issued by Order under Part IV of the CWA	-	-	3	-	-	3	-	-	-	6
<b>Total RMPs established</b>		<b>3</b>	<b>39</b>	<b>3</b>		<b>63</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>117</b>

Table 1b – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the TSRSR since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Thames Sydenham and Region Source Protection Region (ERSPR)				
	Lakeshore	Leamington	Chatham Kent	Total
Total Identified threats in the AR	6	9	18	33
No RMP required (AR)	5	6	13	23
RMPs Required (AR)	1	3	5	10
Total threats identified after the AR through field verification (AR +)	-	-	-	-
RMPs established (AR)	1	3	5	9
RMPs established (s.59)	-	2	-	2
Number of Orders Issued Under Part IV of the CWA	-	<b>3</b>	<b>3</b>	<b>6</b>
<b>Total RMPs established</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>11</b>

March 2024

Table 2 – Detailed activity report for the ERSPA provided by the RMO/I to the MECP to comply with Section 81 of the *Clean Water Act*. The RMO/I provides responses to TSRSPR for inclusion in their report to the MECP.

Essex Region Source Protection Area (ERSPA)								
Additional Part IV Reportables under Section 81 of the <i>Clean Water Act</i> (ERSPA)	2016	2017	2018	2019	2020	2021	2022	2023
RMPs established for existing threats (s.58)	0	1	14	34	38	7	2	0
RMPs established for new threats (s.59)	4	0	1	1	2	8	1	3
Total RMPs agreed to or established	4	1	15	35	40	15	3	3
s.59 Applications Received	18	2	2	4	7	12	9	4
S. 59 notices issued for activities to which neither S. 57 nor S.58 policies applied	14	2	1	3	5	4	6	2
S. 59 notices issued for activities to which a S.58 policy applied	4	0	1	1	2	8	1	2
Total S. 59 notices issued	18	2	2	4	7	12	7	4
Inspections* carried out for activities that are prohibited under S. 57	0	0	0	0	0	0	0	0
Inspections* carried out for activities that require a RMP under S. 58	14	32	47	63	32	0	2	0
Inspections* carried out for activities that were determined not to require a RMP under S.58	55	160	82	7	3	0	1	0
Total number of inspections	69	192	129	70	35	0	3	0
Notices issued where there were cases of contraventions and/or non-compliance with S.57	0	0	0	0	0	0	0	0
Notices issued where there were cases of contraventions and/or non-compliance S.58	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S. 57	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S.58	0	0	0	0	0	4	8	0
Total number of notices and/or orders issued under Part IV of the CWA	0	0	0	0	0	4	8	0

\*Inspections imply that the RMO/I had a physical presence on the site, including follow-up site visits, e.g., threats verification visit, including drive-bys, if applicable. Phone calls and emails are not considered to be an inspection.



**Date:** July 8, 2024  
**To:** Mayor and Council  
**Author:** Lu-Ann Marentette, Drainage Superintendent  
**RE:** Moroun Pump Station Improvements

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## **RECOMMENDED ACTION**

That the Report provided by N.J. Peralta Engineering Inc, dated June 21, 2024, on the Moroun Pumping Station for Improvements under a Report under Section 78 of the Drainage Act **BE ADOPTED.**

## **BACKGROUND**

A request was received by the Essex Region Conservation Authority to facilitate the creation of a wetland.

## **DISCUSSION**

A portion of the ERCA lands, as part of this report, will be removed from the watershed for the east side of the Moroun Pumping Station. To do so, several meetings were held with the landowners, the Department of Fisheries and Oceans, and the Ministry of Natural Resources. During these meetings, the Engineer took all concerns and suggestions in mind when designing the proposed abandonment of the ERCA lands and improvements to the existing Adams Drain and Moroun Pump Station.

To take the ERCA lands out of the Moroun Pump Station a berm will need to be constructed and reconfigured. Parts of the Moroun Pump Station dyke on ERCA lands are also going to be abandoned as part of this report.

## **FINANCIAL CONSIDERATIONS**

The Essex Region Conservation Authority will be paying 100% of the cost of engineering and construction, with an estimate of \$686,257.00.

Since the area assessed to the newly created watershed has changed the engineer also provided for a new maintenance schedule for the Moroun Pump Station and Auxiliary Gravity Outlets and the Flood Protection Dyke.

## ENVIRONMENTAL CONSIDERATIONS

DFO – Authorization is required and the process for same has begun.  
MNR - Lakes and Rivers Improvement Act  
ERCA - Permit

## CONSULTATIONS

PREPARED BY:



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Lu-Ann Marentette  
Drainage Superintendent

REVIEWED BY:



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Tim Del Greco P.Eng.  
Senior Manager, Capital Projects and Engineering



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Richard J.H. Wyma CSLA  
Director of Planning and Development



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John Norton  
CAO



## ENGINEER'S REPORT

(Drainage Act, RSO 1990, c. D.17)

**PROJECT** | **Moroun Pumping Scheme Improvements**  
(Geographic Township of Gosfield South)  
Town of Kingsville, County of Essex  
**Project No. D21-118**

June 21, 2024

**N.J. Peralta Engineering Ltd.**

45 Division Street North  
Kingsville, ON N9Y 1E1  
519-733-6587  
peraltaengineering.com

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**MUNICIPAL DRAINS AND THE DRAINAGE ACT**

The "Drainage Act" is one of the oldest pieces of legislation in Ontario, passed in 1859. It provides a democratic procedure for the construction, improvement and maintenance of drainage works. A procedure whereby the Municipality may assist in providing a legal drainage outlet for surface and subsurface waters not attainable under common law. Accordingly, provides much-needed assistance to facilitate the problems of obtaining a legal drainage outlet, engineering and cost distribution.

The Drainage Act provides a legal procedure by which an "area requiring drainage" may receive an outlet drain constructed to dispose of excess stormwater runoff to a sufficient outlet. This drainage infrastructure is otherwise known as a "Municipal Drain". Municipal Drains are identified by Municipal By-Law that adopts an Engineer's Report. The drainage engineer has the obligation to prepare an unbiased Engineer's Report based on information presented in written form, orally, and from visual inspection; in accordance with currently accepted design criteria. These reports form the legal basis for construction and management of the Municipal Drain. As such, an Engineer's Report shall contain specific details such as plans, profiles, and specifications that define the location, size and depth of the drainage infrastructure, together with establishing how costs are shared amongst all stakeholders.

Through the democratic procedure, the Engineer's Report is presented to all Stakeholders in front of Municipal Council (or a Drainage Board appointed by Council) for consideration. The Drainage Act provides an appeal process to address various aspects of Municipal Drains. These appeal bodies are the Court of Revision, the Ontario Drainage Tribunal and the Drainage Referee.

For additional information, Fact Sheets, and reference materials regarding the Drainage Act and Municipal Drains, please visit: <http://www.omafra.gov.on.ca/english/landuse/drainage.htm>

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## APPENDICES

### **Appendix “A” – Environmental Considerations**

- Appendix A-1 – ERCA Correspondence
- Appendix A-2 – DFO Authorization
- Appendix A-3 – Seed Mix

### **Appendix “B” – Design Drawings – Sheets 1 to 5**

### **Appendix “C” – Future Maintenance Schedules of Assessment**

- Appendix C-1 – Pump Station and Auxiliary Gravity Outlets
- Appendix C-2 – Flood Protection Dyke

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**PROJECT** | **Moroun Pumping Scheme  
Improvements**  
(Geographic Township of Gosfield South)  
Town of Kingsville, County of Essex  
**Project No. D21-118**

June 21, 2024

**Mayor and Municipal Council**

Corporation of the Town of Kingsville  
2021 Division Road North  
Kingsville, Ontario N9Y 2Y9

**I. INTRODUCTION**

In accordance with the instructions received by email of December 15, 2022, from the Town of Kingsville, we have completed the necessary survey, examinations, investigations, etc. and have prepared the following report that provides for the drainage improvements to the Moroun Pumping Scheme. The request for improvements was submitted to conduct the necessary review and implementation of drainage works to facilitate the creation of a wetland within the lands currently owned by the Essex Region Conservation Authority (280-28310) in Lots 20 through 23, Concession 1 Western Division (WD). These investigations were initiated by a resolution passed by Council for our firm to undertake the preparation of an Engineer's Report for the works within this drain, in accordance with the Drainage Act. Drawings showing the existing components and location of the Moroun Pumping Scheme, and the general details of the proposed works, are included herein as part of this report.

The initial request was submitted by Kevin Money (Director of Conservation Services), representing the Essex Region Conservation Authority (280- 28310), to provide an Engineer's Report for the required drainage improvements to facilitate the subject property.

Our appointment and the works related to the improvements to the Moroun Pumping Scheme, proposed under this report, are in accordance with Section 78 of the "Drainage Act, RSO 1990, Chapter D.17, as amended in 2021". We have performed all of the necessary surveys, investigations, etc., for the Moroun Pumping Scheme, and we report thereon as follows.

**II. BACKGROUND AND WATERSHED CHARACTERISTICS**

The Essex Region Conservation Authority (ERCA) has developed a Management Plan for ERCA-owned Cedar Creek properties. The purpose of the Cedar Creek Properties Management Plan is to protect an outstanding natural landscape while providing compatible visitor use opportunities. This plan has been initiated with the goals of protecting and conserving ecological values, managing biodiversity, protecting aquatic and terrestrial habitats, connecting communities, and restoring landscapes.

The subject lands associated with this project are identified by ERCA as the "Armstrong property". The Armstrong property is one of the larger areas of natural cover within the Cedar Creek Area of Natural and Scientific Interest (ANSI). The site is located north of Essex County Road 50, approximately one (1) kilometre west of the McCain Side Road. The property is bordered on the north by Cedar Creek and along the south by County Road 50. The property is adjacent to privately owned agricultural lands on its west boundary and bounded by privately owned agricultural and residential properties on its south boundary.

The southeastern corner of the subject property was formerly part of the original river delta marsh which formed in the area at the Cedar Creek mouth prior to flowing out into Lake Erie (riverine at mouth marsh wetland type). In this area, soils are classified as Marsh (Ma). This soil type is described as low-lying areas subject to flooding; covered with water most of the year. Topography and drainage associated with this soil type are very flat with very poor natural drainage. Due to its conversion to agriculture, these soils no longer exhibit marsh characteristics but are most likely similar to areas associated with Cedar Creek which have soils which are classified as Bottom Land (B.L.). These areas are described as low-lying land along stream courses; subject to occasional flooding; with variable texture, undulating topography and variable drainage.

The Moroun Pumping Scheme is an existing Municipal Drain that services approximately 300 hectares (741 acres) of primarily agricultural lands. This watershed extends through Lots 20 through 36, Concession 1 WD within the Town of Kingsville and the Town of Essex. The Moroun Pumping Scheme resides within the subject property and is further located within the Cedar Creek watershed. This Municipal Drain has a direct connection to and provides protection from, the Cedar Beach Canal that is associated with Lake Erie. This Municipal Drain serves as the primary drainage outlet for the Adams Drain and Ford Road Drain tributaries and discharges runoff via a pump station and auxiliary gravity outlets directly into the Cedar Beach Canal. The Moroun Pumping Scheme also includes a 763-metre-long drainage channel and earthen dyke along the north side of the Cedar Beach Canal, located north of the residential lots along County Road 50, in Registered Plan 1425.

With the implementation of the Moroun Pumping Scheme, the subject Armstrong property remains protected from the impacts of Cedar Creek and Lake Erie with the intention to be utilized for agricultural purposes. With the lands now under the control of ERCA, they have identified these lands as an ideal area to re-instate as a wetland through their management plan.

### **III. DRAINAGE HISTORY**

A review of the Town of Kingsville's drainage records indicates that the Moroun Pumping Scheme is an existing Municipal Drain that has been created through the provisions of the Drainage Act. We found that the Engineer's Report prepared by W. J. Settingington, P.Eng., dated June 15, 1981, passed through Municipal By-Law No. 445, serves as the initial By-Law, as petitioned for by the affected landowners. This report provided for the initial construction and installation of a new pump station, drainage channel, and earthen flood protection dyke along the Cedar Beach Canal through the provisions of the Drainage Act. The primary purpose of this report was to reinstate and protect the affected agricultural land from high lake levels.

In addition to the original Moroun Pumping Scheme report and by-law, a report titled "Adams Drain and Extension, Ford Road Drain, and Moroun Pumping Scheme" was prepared by N.J. Peralta, P.Eng., dated August 25<sup>th</sup>, 2010 and passed through Municipal By-Law No. 151-2010. The report was prepared primarily

for the improvements and extension of the Adams Drain and Ford Road Drain. However, these improvements ultimately affected the watershed area of the Moroun Pumping Scheme and required an updated Maintenance Schedule of Assessments that formed part of this report.

We have utilized the above-mentioned reports to verify the general parameters of the Municipal Drain, together with verifying the watershed limits and the flow parameters for the proposed drain improvements as part of this report.

#### **IV. PROJECT INITIATION AND ENVIRONMENTAL CONCERNS**

In late 2021, the existing earthen dyke along the north side of the Cedar Beach Canal, forming part of the Moroun Pumping Scheme, had failed and ultimately flooded a large portion of the lands currently owned by the Essex Region Conservation Authority (280-28310). As a part of the Municipal Drain infrastructure, the dyke failure was repaired through the maintenance processes of the Drainage Act. However, with the lands no longer in agricultural production, the lands remained flooded long after the dyke was repaired. Near the end of 2022, Kevin Money contacted the Town of Kingsville to initiate the Drainage Act process to permanently remove the subject lands from the Moroun Pumping Scheme watershed.

In March of 2023, the Moroun Pump was inadvertently activated to lower water levels in the surrounding agricultural lands to the west. With the ERCA lands remaining flooded, the lowering of the water level of the Moroun Pumping Scheme watershed exposed various fish and mussels within the flooded area and located along the perimeter of the flooded ERCA lands. With the exposure and potential harm to the aquatic life, DFO was contacted and attended the site. The DFO Officer had requested that no further pumping be conducted and the lands re-flooded until a time when sufficient information has been reviewed by the DFO to establish an appropriate course of action to continue the use of the Moroun Pump. The Town of Kingsville immediately retained a qualified biologist to perform a fish and mussel salvage operation and proceeded to re-flood the lands.

#### **V. ENVIRONMENTAL PRE-CONSULTATION/SCOPING MEETING**

As a regulatory requirement, through the provisions of the Drainage Act, applicable Federal and Provincial legislation and policy must be considered when completing drainage works.

The Drainage Act specifically identifies the rights of the Conservation Authority, through the Conservation Authorities Act, for all Municipal Drains within their jurisdiction. Upon receiving the request for improvements to the Moroun Pumping Scheme, and prior to our appointment to this project, the Town of Kingsville had submitted a notice to the Essex Region Conservation Authority (ERCA) Regulatory Branch as required through Section 78(2) of the Drainage Act, for their comments and concerns related to the requested works.

As previously noted, prior to the scheduled On-Site Meeting, we received the initial comments from various agencies and scheduled an Environmental Scoping Meeting with representatives of the available agencies. The ERCA had confirmed that the Moroun Pumping Scheme is located within the limit of regulation through Section 28 of the Conservation Authorities Act and is subject to the necessary permitting for the proposed works.

In addition to the comments provided by the ERCA, it would be prudent to reach out to the DFO, MECP, and MNRF, to obtain preliminary comments from the governing agencies as part of our regulatory obligations through provisions of the Drainage Act.

Prior to proceeding with the required On-Site meeting with all affected stakeholders, we felt it would be prudent to arrange a meeting and/or receive comments from all affected environmental agencies with potential interests in the project. On March 29, 2023, an email was issued to all potential environmental parties for their comments/concerns and to arrange a meeting related to the requested works. The distribution list included ERCA, the Department of Fisheries and Oceans (DFO), the Ministry of Natural Resources (MECP), the Ministry of Environment, Conservation and Parks (MECP), along with Town of Kingsville Staff. As a result, a virtual Environmental Scoping Meeting was initially scheduled for April 19, 2023. With only a select group attending the first meeting, a secondary virtual meeting was scheduled for May 3, 2023.

### **Environmental Scoping Meeting #1 (April 19, 2023)**

<b>Name</b>	<b>Affiliation</b>
Dan Lebedyk	Essex Region Conservation Authority
Kevin Money	Essex Region Conservation Authority
Jamie Wedgewood	Ministry of Natural Resources and Forestry (MNRF)
James Groenwold	Ministry of Natural Resources and Forestry (MNRF)
Tony Peralta, P.Eng.	N.J. Peralta Engineering Ltd.

The following information was generally discussed:

1. Upon introductions, a brief description of the site and intended project scope, details of the Municipal Drain, and historical background were shared with all in attendance. Mr. Peralta confirmed that the project is intended to legally restore a portion of the ERCA lands back to its naturalized state by removing the protection of these lands from the Moroun Pumping Scheme. Mr. Peralta further identified the Town's obligations related to maintaining the Municipal Drain through the provision of the Drainage Act.
2. Mr. Peralta provided an explanation of the intended design concept. This concept included the isolation of the ERCA lands from the Moroun Pump, the creation/reinforcement of the west dyke to protect the agricultural lands to the west, and permanently removing a portion of the existing dyke along the Cedar Beach Canal to allow for lake water to freely enter the isolated ERCA lands. The isolation of the ERCA lands will allow for modifications to the Moroun Pump to better facilitate the lands within the Adams Drain. All of these works shall be completed while considering the safeguard and protection of the adjacent residential lands, while minimizing the impacts on the existing natural habitat.
3. The MNRF representatives identified that they did not have any comments or glaring concerns with the intended works. With the reintroduction of natural features, it would be likely that a Lakes and Rivers Improvement Act (LRIA) Authorization may be required.

4. Mr. Peralta added that MECP representatives could not attend this meeting. However, they provided their comments in the form of an email, as it relates to the Endangered Species Act (ESA). In summary, the MECP identified that the proposed work will likely fall under the ESA exemption through Section 23.9 for existing Municipal Drains, under the Drainage Act.
5. The ERCA, as a regulatory body, provided written comments. In summary, the engineering design will need to demonstrate that the proposed works will have no negative impacts on the drainage scheme and adjacent landowners. Furthermore, consideration must be given to the 1:100-year flood elevations for both Cedar Creek and Lake Erie, together with any hydraulic impacts to adjacent properties.
6. General timelines for the proposed works were discussed. Mr. Peralta identified that this meeting has been set ahead of the public consultation through the prescribed On-Site Meeting. As such, we are still in the early stages of the Drainage Act process. Mr. Money also confirmed that the intention is to initiate the engineering process while ERCA looks to procure funding from environmental partners.
7. Due to the sensitive nature of impacts on fish and mussels, DFO was invited to the meeting. However, no DFO representatives were present and no comments were provided. As such, it was determined that a second meeting was warranted to ensure that we seek guidance and comments from the DFO.

On this note, the meeting was concluded.

#### **Environmental Scoping Meeting #2 (May 3, 2023)**

<b>Name</b>	<b>Affiliation</b>
Kevin Money	Essex Region Conservation Authority
Nathan Murray	Department of Fisheries and Oceans (DFO)
William (Bill) Glass	Department of Fisheries and Oceans (DFO)
Tony Peralta, P.Eng.	N.J. Peralta Engineering Ltd.

The following information was generally discussed:

1. Upon introductions, a brief description of the site and intended project scope, details of the Municipal Drain, and historical background were shared with all in attendance. Mr. Peralta confirmed that the project is intended to legally restore a portion of the ERCA lands back to its naturalized state by removing the protection of these lands from the Moroun Pumping Scheme. Mr. Peralta further identified the Town's obligations related to maintaining the Municipal Drain through the provision of the Drainage Act.
2. Mr. Murray emphasized that since the ERCA lands have been flooded for an extended period, these lands are now considered aquatic habitat lands and steps should be taken to maintain this status. Any further changes to these lands will require DFO's authorization.
3. Mr. Peralta provided an explanation of the intended design concept as outlined in the initial Environmental Scoping Meeting from April 19, 2023.

4. The DFO representatives were in general agreement with the long-term goals for the subject property, so long that the process in which these works are undertaken does not cause further harm to the aquatic species and their habitats. They further identified that upon isolating the Adams Drain from the floodable lands, the existing aquatic species within the Adams Drain will need to be addressed relative to the existing pump station.
5. Further discussion regarding the interim mitigation measures within the flooded ERCA lands conducted by the Town of Kingsville, in an effort to avoid any further issues with fish and mussels, together with their habitat. DFO representatives identified that so long as the lands were reflooded, they had no further concerns. However, recognizing that this was not a long-term solution.
6. To address the short-term and long-term solutions, it was recommended that a DFO "Request for Review" be submitted to outline the proposed works, together with the mitigation plan, for review by the DFO. It was further suggested that a qualified Biologist provide recommendations for mitigation to assist with the plan. As a result, a DFO Letter of Advice or Letter of Authorization is likely required to proceed with any work.

On this note, the meeting was concluded.

Further to the correspondence provided, together with details outlined in the Environmental Scoping Meetings, we felt that we had sufficient guidance and instructions to warrant the continuation of the project towards arranging the required On-Site Meeting with all affected stakeholders.

## **VI. PRELIMINARY INVESTIGATIONS AND ON-SITE MEETING**

After reviewing all the available drainage information and documentation provided by the Kingsville Drainage Department, and further to our Environmental Scoping Meetings with affected agencies, we arranged the required On-Site Meeting for July 12, 2023, located at Moroun Pump entrance next to 1370 County Road 50 (Heritage Road). The following people attended this meeting:

<b>Name</b>	<b>Affiliation</b>
Chris Cullen	Landowner – 1259 Heritage Road
John Stewart	Landowner – 1231 Heritage Road
Vic Chepeka	Landowner – 1230 Heritage Road
Robert Bernath	Landowner – 1247 Heritage Road
John Sim	Landowner – 1370 Heritage Road
Chris Snip	Landowner – 1284 Heritage Road
Jin Quan	Landowner – Heritage Road
Chuck Grover	Landowner – 1500 Heritage Road
Brad Noland	Landowner – 277 Ford Road
Mary-Jo Lyman	Landowner – 1333 Heritage Road
Lois Derkach	Landowner – 1288 Heritage Road
Phil Buttery	Landowner – 1328 Heritage Road
Susan Higgins	Landowner – 1211 Canal Street
William Dubuque	Landowner – 1223 Canal Street

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George Johnston	Landowner – 1215 Canal Street
Edward Arnew	Landowner – 1213 Canal Street
Pat Taylor	Landowner – 1194 Centre Avenue
Patty Nadasdi	Landowner – 1466 Heritage Road
Bev Todd	Landowner – 1468 Heritage Road
Cam Iler	Landowner – 955 Iler Road
Paul Lowes	Landowner – 1628 Heritage Road
Greg Iler	Landowner – 955 Iler Road
Robert Quick	Landowner – 1298 Heritage Road
Gord Arner	Landowner – 1830 Heritage Road
Bruce Sovran	Landowner – 1175 Arner Townline Road
Valerie Vriegen (Dunmore)	Landowner – 1357 Heritage Road
Ruth Stewart	Landowner – 1231 Heritage Road
Henry Wall Holdings	Landowner
Kevin Money	Essex Region Conservation Authority
Mark Fishleigh	County of Essex
Lindsay Dean	Town of Essex
Shaun Martinho	Town of Kingsville
John Norton	Town of Kingsville
Dennis Rogers	Town of Kingsville
Kiara Kirkland	N.J. Peralta Engineering Ltd.
Tony Peralta, P.Eng.	N.J. Peralta Engineering Ltd.

The following information was discussed:

1. Upon introductions, it was generally discussed that a written notice had been submitted to the Town of Kingsville by the Essex Region Conservation Authority (280-28310) to initiate improvements to the existing Municipal Drain, known as the "Moroun Pumping Scheme" within their lands.
2. Mr. Peralta explained the general intent of the initial request for improvements. Generally speaking, the subject property has historically been utilized as agricultural land until the time when the ERCA purchased the property. The ERCA is currently in the process of reintroducing these lands to their natural state as a marsh/wetland.
3. The Moroun Pumping Scheme pump is the primary drainage outlet for lands extending to the west of the pump station, and extending into the Town of Essex, as part of the Adams Drain watershed. The associated Moroun Pumping Schme dyke provides lake protection along the north side of the Cedar Beach canal. Therefore, in order to fulfill the intent to convert these lands to a marsh/wetland, modifications to the Moroun Pumping Scheme are required. In doing so, an engineering solution is required to ensure that these improvements do not create any negative impacts on the Adams Drain watershed, along with any neighbouring lands.
4. All in attendance were advised that the invitation to this meeting was extended to those within the Moroun Pumping Scheme watershed and those in the vicinity of the subject ERCA lands. Those landowners outside of the watershed were invited as a courtesy to keep the adjacent landowners

- informed on the intent of the project. Following this meeting, only properties directly affected by the project will continue to be informed of any further meetings.
5. Until 2021, the subject lands remained dry and protected by the Moroun Pumping Scheme dykes adjacent to the Cedar Beach canal. In 2021, the dyke experienced a failure and the subject lands became inadvertently flooded with lake water from the canal. The break had since been repaired. However, the ERCA lands remain flooded.
  6. Mr. Peralta further explained that a Municipal Drain is a communally accepted and owned drainage infrastructure that has been created through the provisions of the Drainage Act of Ontario. This Act provides for a democratic procedure for the construction, improvement, and maintenance of the drainage works. A Municipal Drain is adopted, administered, and maintained through Municipal By-Law. Therefore, once adopted as a Municipal Drain, the By-Law provides the Municipality with the authority to enter private lands, as the caretaker of the communal infrastructure. The Municipality's role is to ensure the drain is kept up and maintained on the watershed's behalf.
  7. Mr. Peralta further explained the purpose of the "On-Site Meeting". He explained that this meeting is a mandatory requirement of the Drainage Act and is intended to be the initial step in the process to provide a general introduction to the project and to help establish a general scope of work based on the submitted request and subsequent discussions of this meeting. Mr. Peralta provided those in attendance with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Factsheets and encouraged landowners to review these documents and provide their input.
  8. Mr. Peralta further explained that through the provisions of the Drainage Act, landowners who contribute to and/or benefit from the drainage works are assessed their fair share of the project costs. However, based on the intent to improve the Municipal Drain for the sole purpose of developing a marsh/wetland, the initial cost of these improvements is likely to be borne by the ERCA, likely through outside funding. However, once improved/constructed, the cost of any future maintenance to restore the improved system will be levied to all affected owners based on the added benefits to the overall system and the contribution of runoff from each property.
  9. Further discussion ensued regarding the current state of the flooded lands. The landowners were advised that temporary measures have been taken to keep these lands flooded. However, the water levels will be monitored to ensure that no adverse impacts are created on adjacent lands. As a result of this project, a permanent solution will be initiated to ensure a balance between the associated watersheds.
  10. The landowners were advised that pre-consultation with all of the affected environmental government agencies has already occurred to ensure compliance with all applicable legislation. These agencies include the Department of Fisheries and Oceans (DFO), the Ministry of Natural Resources and Forestry (MNRF), the Ministry of Environment, Conservation and Parks (MECP), and the Essex Region Conservation Authority (ERCA). Through consultation with these agencies, additional measures may need to be included as part of this project to satisfy their requirements. As a result, the approvals of these agencies would be considered an integral part of the advancement of this project.

11. In addition to the environmental requirements, the proposed improvements shall conform to regional design requirements related to any property development and Municipal Drains. As such, Mr. Peralta further identified that the drainage improvements will ensure that the minimum requirements for minor and major flow conveyance are maintained through the system.
12. Mr. Peralta opened up discussions with the landowners and requested that they provide their comments and concerns regarding the Moroun Pumping Scheme, as it relates to this overall project. He further explained that the information shared at this meeting will help establish the overall scope and direction of this project.
13. Various landowners identified that the current state of the property is something that the neighbouring properties enjoy as it brings added value to the community. As such, they questioned whether the permanent solution would continue to allow for access by small watercraft (canoes, small boats, etc.). Mr. Money identified that it would be ideal for it to remain accessible. However, at this time it is difficult to confirm that this will happen.
14. Landowners on Canal Street requested confirmation that the proposed works will not affect Canal Street. Mr. Peralta confirmed that the improvements to the system are intended to ensure that no negative impacts are created by this project. As such, the improvements will not create any further hazards than currently exist.
15. Some landowners questioned why the ERCA lands need to be isolated from the pump. Mr. Peralta clarified that the ERCA lands currently form part of the overall watershed of the Moroun Pump watershed and are connected to the Adams Drain. The Adams Drain watershed relies on the Moroun Pump to regulate the water levels in the system and to avoid flooding on agricultural lands. With the intent to connect these lands to the lake, water levels in the system will fluctuate with the lake. Without the isolation of these lands from the Moroun Pump, the agricultural lands will continue to be impacted by the lake.
16. The overall drainage report future maintenance processes, and general timelines were reviewed with the landowners present. Mr. Peralta asked if there were any further requests for improvements on the drainage system that should be considered as part of this project. No requests were brought forward.
17. There were various questions directed to ERCA related to the maintenance of the lands once the wetland was in place (grass mowing, phragmites, species habitat, etc.). These questions were outside the scope of this project and addressed by Mr. Money.

At the conclusion of the discussions, we advised that we would remain in close consultation with the environmental stakeholders towards the preparation of our Engineer's Report, to review the details of the proposed works.

On this note, the On-Site Meeting had concluded.

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## **VII. FIELD SURVEY, INVESTIGATIONS, AND BIOLOGICAL CONSULTATION**

Based on the information gathered at the On-Site Meeting and through consultation with the ERCA it was determined that this project shall focus on permanently returning the ERCA lands to a naturalized marsh/wetland while ensuring that no negative impacts are created to the adjacent lands and lands within the Adams Drain. With the understanding of the general scope of work for this project, we arranged for our Survey Crew to attend the site to perform a topographic survey, including taking all necessary levels and details of the existing drainage system through the subject property. We further performed a topographic survey of the outlet portion and existing dykes located adjacent to the Cedar Beach canal and the outlet portion of the Adams Drain.

Benchmarks were looped from previous work carried out on the drain and were utilized in establishing a relative site Benchmark at each end of the project site. We also surveyed the drain for a considerable distance north and east of the project site to verify existing parameters and/or establish a new design grade profile (if necessary). We also took cross-sections of the existing dykes and identified all of the necessary details along the existing and proposed alignments to complete our review, analysis, and design.

To verify the watershed area, we investigated and reviewed all of the past Engineer's Reports on the Moroun Pumping Scheme and Adams Drain. In addition, we utilized current LiDAR information to cross-check the watershed limits and to validate the general topography and elevations of all affected lands in the project area. All of the above investigations not only provided us with the correct watershed area but also provided us with accurate information to assist us with necessary review and analysis, together with the preparation of our Construction Schedule of Assessment and Future Maintenance Schedules of Assessment for this project.

Due to the ecological sensitivities of this watercourse, it was recommended that a qualified aquatic biologist be retained to assist with the DFO "Request for Review" submission to evaluate and provide recommendations for mitigation to assist with the plan. Following the breach of the Moroun Pumping Scheme dyke, the Town of Kingsville acquired the services of Todd Leadley to provide fish and mussel salvage and remediation services. Todd Leadley is part of the Great Lakes Institute for Environmental Research through the University of Windsor and a member of the Real-Time Aquatic Ecosystem Observation Network (RAEON). With Mr. Leadley's extensive knowledge of the drainage system, and the familiarity of the project he was awarded this project to assist with the Fisheries Act submission, approval, and implementation.

## **VIII. DESIGN CONSIDERATIONS AND HYDRAULIC ANALYSIS**

Further to the regulatory requirements outlined by the ERCA's initial comments, the proposed works should not create any negative impacts on the drainage system and adjacent lands. Furthermore, with the intent to hydraulically connect these subject lands to Cedar Creek and Lake Erie, the proposed design must consider the 1:100-year flood elevations associated with Cedar Creek and Lake Erie.

"A Guide for Engineers Working Under the Drainage Act in Ontario" - OMAFRA Publication 852 (2018), is the current reference documentation used by Engineers carrying out work on Municipal Drains through provisions of the Drainage Act. Based on this document, the 2-year return period (50% chance of occurring each year) storm design is the recommended design standard applied to Municipal Drains within rural

Ontario specific to open drain channels and low-hazard agricultural access crossings. The exception is for residential, industrial, and commercial properties where flooding could create significant damage to the surrounding properties. Therefore, a higher 5 to 10-year return period storm design could be utilized for minor storm analysis. As identified within this guide, the Municipality and Conservation Authority may have specific design standards that should be considered. Based on our consultation and review of this project, it has been identified that the ERCA regulates the 1:100 return period event. Therefore, this return period shall be considered as part of the analysis and design considerations.

### **Impacts of Lake Erie Water Levels**

The Lake Erie water levels naturally vary and respond monthly, seasonally and annually to a variety of variables. Therefore, they are extremely difficult to predict on a yearly basis. Generally speaking, water levels are typically lower in the winter months and higher in the summer. These natural fluctuations are essential to the ecological environment, but high and low lake levels may impact local communities.

Relatively speaking, Lake Erie's historical average mean water level is at an approximate elevation of 174.170 metres. The lake levels have historically fluctuated between the all-time low elevation of 173.180 metres (set in 1936), to an all-time of 175.140 metres (set in 2019). During lake events (wind/wave), Lake Erie experiences a standing wave oscillating in a body of water (called a seiche), which creates a rise/fall in lake elevation. This fluctuation in water level is estimated to be approximately 0.600 metres for Lake Erie. At the time of the Moroun Pumping Scheme Engineer's Report in 1981, the lake levels were identified at an elevation of 174.360 metres, which is above the historical average mean water level of Lake Erie. The dyke elevations established within this report were set to an elevation of 176.000 metres. Taking into consideration the details above, together with a suitable freeboard, the elevations within the 1981 report correspond with the current safeguards and design standards set for development around Lake Erie.

The subject ERCA lands, together with the downstream portion of the Adams Drain, are relatively low compared to the historical average mean water level of Lake Erie. As a result, the Moroun Pump has been installed to provide a sufficient outlet for the watershed during periods of relatively high lake water levels. The existing pump station operates on a float system set at specific elevations to engage the pump to meet the desired water levels. With the ERCA lands no longer requiring a drainage outlet through the pump station, the floats can be modified to better suit the land elevations of which the pump will now serve. Utilizing our topographic survey and available LiDAR mapping adjustments to the float system have been analyzed to better suit the needs of the watershed.

## **IX. PRELIMINARY DESIGN AND FURTHER CONSULTATION**

Based on our analysis, a preliminary design was prepared that outlined the required improvements to isolate the ERCA lands, while safeguarding and protecting the affected adjacent lands. In an effort to confirm our compliance with the comments provided by the ERCA, we arranged a virtual meeting with the ERCA and Town of Kingsville Staff to review the preliminary design in detail. The following people attended this meeting:

Name	Affiliation
Lu-Ann Marentette	Town of Kingsville - Drainage Superintendent
Tim Del Greco, P.Eng.	Town of Kingsville - Senior Manager, Capital Projects and Engineering
James Bryant, P.Eng.	ERCA - Director of Watershed Management Services
Hannah Waldt, P.Eng.	N.J. Peralta Engineering Ltd.
Tony Peralta, P.Eng.	N.J. Peralta Engineering Ltd.

The following information was discussed:

1. Following introductions Mr. Peralta provided a project history, and details of the existing drainage infrastructure that forms part of the Municipal Drain and further shared preliminary drawings and the results of their analysis.
2. With the potential impacts to adjacent lands, the question of "level of service" was brought forward relative to the floodproofing elevation of any associated dykes. Upon discussion, it was agreed upon that that an appropriate top of dyke elevation should be set at 176.000 metres. This elevation provides safeguards against the extreme situation during a 1:100-year storm, lake levels are at an all-time high of 175.140 metres in combination with a lake seiche. Coincidentally, this elevation matches that of the original Moroun Pumping Scheme dyke elevations.
3. Mr. Bryant inquired about the reason for a new north-south dyke along the west side of the subject lands rather than augmenting the existing dyke. Mr. Peralta advised that the majority of the existing dyke varies in elevation and does not meet the specified flood-proofing elevation. Furthermore, this dyke is heavily vegetated with mature trees that provide habitat for various aquatic and terrestrial species. Modifying and/or augmenting the existing dyke would require significantly more work/cost and the removal and/or destruction of such habitat. The destruction of such habitat would likely trigger an ESA permit or authorization that would create significant delays to the overall project. Therefore, to avoid impacts on Species at Risk (SAR) and to reduce overall costs, it would be most advantageous to construct a new dyke to the specified flood-proofing elevation rather than augmenting the existing one.
4. Further discussion ensued regarding the flood-proofing of the residential lands along Canal Street. The residential properties along Canal Street are currently located immediately adjacent to and impacted by, the Cedar Beach Canal and the Cedar Creek floodplain. Some of these lands are currently lower than the desired floodproofing elevation of 176.000 metres and therefore, do not have any formal flood-proofing provisions to protect against high lake levels. Based on the current configuration and existing level of service, we discussed the potential impacts on these lands if a floodproofing dyke is installed along the north side of these properties. If lake levels were to exceed the all-time high water levels, lake water can currently move freely through the affected lands between the canal and the proposed wetland/marsh. Installing a new dyke at the north end of the residential lots will ultimately cut-off any natural conveyance of lake water and potentially trap lake water between the canal and the dyke. Although, the optics of not installing flood-proofing measures appear unfavourable, installing flood-proofing measures could potentially create adverse impacts on these lands. Therefore, it was determined that the status quo would present the least impact on these lands.
5. The proposed Municipal Drain improvements would significantly alter the original intent of the drainage system. As such, portions of the existing infrastructure would be abandoned as part of the Municipal

Drain and new infrastructure would be incorporated. It was explained that, although the subject ERCA lands are intended to be removed from the Moroun Pumping Scheme watershed, the new dykes required for the protection of the Adams Drain will still need to form part of the Municipal Drain. As such, new maintenance provisions will need to be established as part of the system.

6. Mr. Bryant questioned how the lake will be introduced to the proposed wetland/marsh once the lands have been isolated and what controls will be available in the future. Mr. Peralta explained that following the dewatering process, a coffer dam could be installed along the south side of the Cedar Beach Canal. Once the coffer dam is installed, a permanent removal of a portion of the existing dyke could be initiated. Once the dyke excavation is complete, lake water can be slowly introduced into the ERCA lands. With the intent to have these lands accessible to the public through navigable means (canoes, boats, etc.), the use of a sluice gate or wier would require added monitoring and maintenance that could have negative impacts on the system. Mr. Bryant generally agreed that the coffer dam could be an appropriate option.

Based on these discussions, our proposal generally conforms with the regulatory requirements of the ERCA. As a result, they found the preliminary design to be acceptable moving forward as long as the recommendations/mitigations of the other environmental agencies were considered.

## **X. FINDINGS AND RECOMMENDATIONS**

Based on our topographic survey, detailed investigations, discussions, and review with affected landowner, Municipal Staff, information derived from the On-Site Meeting, together with the review and correspondence with the ERCA and other environmental government agencies; we have proceeded to establish the required details to adequately address the specified improvements within the Moroun Pumping Scheme. Our findings and recommendations are outlined within the following subheadings.

### **ERCA, DFO, and MECP Considerations**

During the course of our investigations, this drainage project was discussed and reviewed in detail with James Bryant, P.Eng, of the ERCA, to deal with any ERCA concerns and comments related to this Municipal Drain. The Moroun Pumping Scheme is located within the regulated area and is under the jurisdiction of the ERCA. Therefore, an ERCA Permit is required for the improvements to the Moroun Pumping Scheme. Upon their request, design proposals were submitted to the ERCA for their review and consideration. Upon discussions and their review of the design proposal, the ERCA provided us with their general acceptance and comments through email correspondence included herein as **Appendix "A"**.

As part of the Biological Evaluation for this project, Todd Leadley has been retained to assist with Fisheries Act submissions, approvals, and field assessments for the proposed drainage works. With Mr. Leadley's assistance, the proposed works within this Municipal Drain were "self-assessed", through the DFO website and the utilization of the "Guidance for Maintaining and Repairing Municipal Drain in Ontario" to determine whether this project shall be reviewed by the DFO. As part of this review, we engaged in various meetings and correspondence with DFO to address their comments and concerns. As a result of these discussions, a formal "Request for Review" was submitted to DFO for their review and consideration. We further engaged in follow-up discussions and reviews towards general approval. The DFO has identified that the proposed works will require a "Fisheries Act Authorization" pursuant to paragraphs 34.4(2)(b) and 35(2)(b) of the

Fisheries Act, together with an irrevocable letter of credit to cover the cost of the offsetting plan. A copy of the DFO authorization documentation is included within **Appendix "A"**.

Through our discussion and review with DFO, First Nations engagement and consultation shall form part of their approval process. DFO outlined their commitment to achieving reconciliation with Indigenous Peoples through a renewed, nation-to-nation, government-to-government, and Inuit-Crown relationship based on recognition of rights, respect, cooperation, and partnership as the foundation for transformative change. Based on this information, an Indigenous consultation meeting was arranged with Caldwell First Nation, Walpole Island First Nation, and the Aamjiwnaang First Nation to discuss and review the details of the project.

The Ministry of Natural Resources and Forestry (MNRF) has transitioned the responsibilities of the Species at Risk Provincial Legislation to the Ministry of Environment, Conservation and Parks (MECP). Section 23.9 of the Endangered Species Act, 2007 allows the Municipality to conduct the eligible repair, maintenance, and improvement work under the Drainage Act that exempts these works from Sections 9 and 10 of this Act, so long as they follow the rules within Ontario Regulation 242/08. In recognition of the impacts that these species may experience as a result of the subject works, the Town of Kingsville shall provide comprehensive mitigation measures as well as species identification guides for reference. These references shall be provided to the successful Tenderer and shall be available for viewing at the Municipal Office for those interested.

Through discussions with representatives of the MNRF, the MNRF is the legislative authority for the Lakes and Rivers Improvement Act (LRIA) which governs the design, construction, operation, maintenance and safety of dams in Ontario. With the modifications to the existing and proposed dykes of the Moroun Pumping System potentially influencing Cedar Creek and Lake Erie, they have identified that the proposed improvements would likely require a submission related to the LRIA. As a result, an application will be submitted to the MNRF for review and consideration.

Through correspondence with the ERCA, the Self-Assessment through DFO, and the application to the MNRF, we have provided for all of the ERCA, DFO, MNRF, and MECP concerns and comments in our design and recommend that these drainage works be constructed in total compliance with all of the above.

### **Moroun Pumping Scheme Improvements**

Prior to the preparation of our report, we had various discussions and meetings with environmental stakeholders, the representatives of the Owner, and the Town of Kingsville. We reviewed the particulars of the proposed improvements to ensure that they coincide with the needs of the affected property Owner and the watershed. From our investigations, examinations, calculations, discussions, and determinations with the affected parties, the following findings were noted and recommendations regarding the necessary improvements are provided as follows:

1. Parcel 280-28310, currently owned by the ERCA and located within Lots 19 through 26, Concession 1 Western Division, is an existing agricultural parcel of land. The southeast portion of these lands was formerly part of the original river delta marsh connected to the mouth of Cedar Creek, into Lake Erie. With the implementation of the Moroun Pumping Scheme, the subject lands were converted to agricultural use. With the subject lands having considerable environmental significance, the ERCA has

acquired the parcel and intends to reintroduce these lands to their natural state as a marsh/wetland. In order to do so, modifications to the Moroun Pumping System are required to ensure the protection and safeguarding of the surrounding lands impacted by the pumping system.

2. The Moroun Pumping System is comprised of a pump station, drainage channel, and earthen flood protection dyke along the Cedar Beach Canal. This drainage system provides the necessary conveyance of runoff, together with the necessary protection from high lake levels. This Municipal Drain serves as the primary drainage outlet for the Adams Drain and Ford Road Drain tributaries where modifications to the drainage system will alter the functionality of the overall drainage system.
3. In order to ensure that no adverse effects are created by the improvements to the subject property, a hydraulic analysis was conducted for this project to analyze the existing parameters and proposed requirements. Through this analysis, it was confirmed that the existing dyke system provides protection and safeguards against the extreme situation during a 1:100-year storm, lake levels and in combination with a lake seiche. As such, we recommend that any new flood protection dykes be set to the same level of service while having a minimum floodproofing elevation of 176.000 metres. In order to facilitate the creation of the proposed wetland, a new flood protection dyke is required along the west portion of the project site. This flood protection dyke is intended to protect the lands within the Adams Drain watershed that utilize the Moroun Pumping Scheme as their primary drainage outlet. The proposed flood protection dyke along the west limit of the project site shall be continuous and constructed having a 3.70-metre top width with a minimum of 2.0 horizontal to 1.0 vertical side slopes. This flood protection dyke shall extend from the existing south dyke, located east of the auxiliary gravity outlets along the Cedar Beach Canal, at approximately Station 0+055.0 and extend northerly to approximately Station 1+200.0. This new flood protection dyke shall form part of the Moroun Pumping Scheme and replace the existing flood protection dyke and open drain along the Cedar Beach Canal.
4. We further recommend the excavation and grading of a constructed wetland area with the centre of the area excavated deeper and graded towards the existing Cedar Beach Canal. The excavated area shall also include a sediment/refuge pool connected to the Cedar Beach Canal having a minimum depth of 1.50 metres and an irregular shape of approximately 800 square metres (roughly 40.0 metres x 20.0 metres). The sediment/refuge pools shall include rock erosion protection at the inlet end of the pool to help minimize erosion and act as an indication of where the pool is located.
5. As part of the creation of the proposed wetland, the subject lands shall have a direct connection to Lake Erie. Therefore, we recommend that a portion of the existing flood protection dyke alongside the Cedar Beach Canal be excavated at the lowest point, having a bottom width of a minimum of 20.0 metres. This break in the existing dyke shall hydraulically connect the proposed wetland to Lake Erie and allow for lake water to freely move through the system. At this location, this break in the existing dyke shall be constructed in association with the sediment/refuge pool and we further recommend that sloped quarried limestone erosion protection be installed on both sides of the dyke excavation, connected to the Cedar Beach Canal.
6. Based on the details of the project, we recommend the following sequence of operations toward the isolation of the subject project area and the implementation of the proposed wetland:

- a. Initiate a dewatering process utilizing the existing Moroun Pump and/or other pumping equipment.
  - b. During the dewatering process, have a team of biologists perform a fish and mussel salvage operation, which includes fish protection measures at the pump.
  - c. Once the site is dewatered, disconnect the subject lands from the Moroun Pumping Scheme by installing an earthen plug at the southwest corner of the property, located immediately east of the existing pump station and auxiliary gravity outlets.
  - d. Once isolated, excavate and grade the subject lands to create a centrally deeper area with a sediment/refuge pool(s). All excess material extracted from the area shall be utilized to construct a new flood protection dyke along the west side of the project area to protect the lands to the west.
  - e. Following the full construction of the west dyke and the completion of the necessary grading, the existing flood protection dyke at the south limit of the property (adjacent to the Cedar Beach Canal) shall be opened up to allow lake water to flood the subject lands.
7. Based on our evaluation of the residential properties along Canal Street are currently located immediately adjacent to and impacted by, the Cedar Beach Canal and the Cedar Creek floodplain. Some of these lands are currently lower than the desired floodproofing elevation of 176.000 metres and therefore, do not have any formal flood-proofing provisions to protect against high lake levels. Through our evaluation, it was determined that if lake levels were to exceed the all-time high water levels, lake water could currently move freely through the affected lands between the canal and the proposed wetland/marsh. Therefore, installing a berm/dyke at the north end of the residential lots will ultimately cut off any natural conveyance of lake water and potentially trap lake water between the canal and the dyke. Although, the optics of not installing flood-proofing measures appear unfavourable, installing flood-proofing measures could potentially create adverse impacts on these lands. Therefore, it was determined that no additional flood-proofing measures shall be implemented along the north side of the existing residential lands located along Canal St. and the status quo would present the least impact on these lands.
8. Access routes and working corridors have previously been established within the governing Moroun Pumping Scheme Report. However, with the works being proposed under this report specific to a particular area, we recommend establishing a new access route and working corridors for the initial construction and future maintenance of these specified works. Updated working corridors for future maintenance have been re-established herein. All working corridors (new and old) for the Moroun Pumping Scheme shall be a free unencumbered and uninterrupted easement in perpetuity on, in, over, under, across, alongside and through the lands described herein, for the purpose of installing, maintaining, replacing, altering, cleaning, repairing, providing, and operating the open channel and existing enclosure. We further recommend that this area shall remain free and clear of any new buildings, structures, fences, concrete or asphalt paving, or other structures or obstructions of any kind. In the event, that any such item is placed on any of the lands referred to herein, the Owner or Owners of the said lands at the time shall be liable for the cost incurred by the transferee, its servants, agents, and assigns, in the removal of such items.

9. We further recommend that all ancillary work required to complete the proper functionality of the proposed wetland also be conducted and performed as part of this project and that all of the work associated with this project be provided to the full satisfaction of both the Municipality's Drainage Superintendent and the Consulting Engineer.
10. With the lands within the project area being removed from the watershed, the level of protection related to the pump operations shall be adjusted to better suit the affected agricultural lands and the remaining floodable lands within the ERCA lands. As such, we recommend that the existing ON/OFF floats associated with the Moroun Pump be adjusted to operate between elevation 174.500 meters (ON) and elevation 174.200 (OFF). Operating the pump between these elevations will allow for the necessary relief to the associated agricultural lands and maintain the portion of the floodable marshlands (west of the Adams Drain) currently owned by the ERCA, that will continue to remain within the Moroun Pumping Scheme watershed.
11. The proposed works as part of this project intended to remove a portion of the ERCA lands from the Moroun Pumping Scheme, it is necessary to prepare an updated Maintenance Schedule of Assessment to properly allocate future maintenance costs to all lands and roads that will continue to contribute to the Moroun Pumping Scheme.
12. With the necessary modifications to the existing Moroun Pumping Scheme, portions of the existing system will no longer be required as part of the Municipal Drain. As such, we recommend that the existing flood protection dyke along the Cedar Beach Canal located east of the existing pump and auxiliary gravity outlets, together with the associated open drain shall be abandoned, and replaced with the newly constructed continuous flood protection dyke extending north along the west side of the project site. The abandonment of the existing dyke and associated open drain is in accordance with Section 19 of the "Drainage Act, RSO 1990, Chapter D.17, as amended 2021".

In summary, a new wetland is being constructed within the subject property and connected to the existing Cedar Beach Canal. In order to facilitate this wetland, we recommend the installation of the proposed flood protection dyke along the west limit of the project site in order to remove the subject lands from Moroun Pumping Scheme. We further recommend that all works be completed in accordance with this Report, the attached Specifications, and the accompanying Drawings and that all of the works associated with same be carried out in accordance with Section 78 of the "Drainage Act, RSO 1990, Chapter D.17, as amended 2021".

## **XI. ALLOWANCES AND COMPENSATION**

### **Allowances For Land Taken**

The improvements required to modify the Moroun Pumping Scheme are being conducted primarily within the subject property currently owned by ERCA. These lands have already been compensated for the land taken under previous Engineer's Reports and By-Laws. Therefore, further compensation for the use of these lands to construct the improved drainage system shall not be required and only a nominal value of \$1.00 per property be paid to re-establish the legal right for the improved Municipal Drain through these lands and to establish the right to access along the drain for future maintenance.

We find that the following Owners are entitled to and should receive the following amounts as compensation for the Value of Land Taken, in order to conduct the necessary improvements to the Moroun Pumping Scheme:

1)	Essex Region Conservation Authority	Owner	Lots 19-26, Concession 1 W.D	<u>\$ 1.00</u>
<b>TOTAL FOR LAND TAKEN</b>				<u><b>\$ 1.00</b></u>

This compensation shall allow for the use of the land necessary to construct and maintain the proposed flood protection dyke required to facilitate the new wetland. We have used nominal values for compensation in consideration of the fact that the existing features are located primarily within the subject property and the impact on these lands is required to facilitate the development of their lands.

We have provided for this land taken compensation in our estimate, as is provided for under Section 29 of the "Drainage Act, RSO 1990, Chapter D.17, as amended 2021".

**Compensation For Damages**

All areas disturbed by this work are specified for full restoration. Therefore, the works will not have any direct or indirect damage to the affected lands. Accordingly, no allowances or compensation for damages will be provided under Section 30 of the "Drainage Act, RSO 1990, Chapter D.17, as amended 2021".

**XII. ESTIMATE OF COST**

Our estimate of the total cost of this work, including all incidental expenses, is the sum of **Six Hundred Eighty Six Thousand Two Hundred Fifty Seven Dollars (\$ 686,257.00)** made up as follows:

<b>CONSTRUCTION ITEMS</b>					
Item	Description	Est Qty	Unit	Unit Price	Total
1.	<b>Water, Sediment, and Erosion Control Plans;</b> Provide a Water, Sediment, and Erosion Control Plan required to obtain necessary permits and approval; Provide all labour, equipment and materials to implement the Water, Sediment, and Erosion Control Plan, as outlined within the specifications, complete.	1.0	Lump Sum	\$ 10,000.00	\$ 10,000.00
2.	<b>Earthen Isolation Plug;</b> Provide all labour, material and equipment to install a native fill earthen plug within the existing open channel located east of the existing gravity outlets towards isolating the project area from the Moroun Pump, including grubbing and brushing, excavation, fill placement, grading, compaction and topsoil, seed, and mulch, complete:	1.0	Lump Sum	\$ 10,000.00	\$ 10,000.00
3.	<b>Stripping Topsoil;</b> Provide all labour and equipment to excavate and strip all topsoil within the project site, including the excavation and disposal of all rocks, timber features, and deleterious materials; All scavenged topsoil shall be windrowed along the project site to be used for restoration works, complete.	28,000	m <sup>2</sup>	\$ 2.36	\$ 66,000.00
4.	<b>Creation of Depressed Wetland Area;</b> Provide all labour and equipment to excavate and shape the depressed wetland area utilizing the grades and elevations specified in the accompanying design drawings; All excavated materials excavated from the wetland area are intended to be stockpiled and utilized for the creation of the proposed West Dyke, including excavation, stockpiling, grading, complete.	12,900	m <sup>3</sup>	\$ 15.00	\$ 193,500.00

Item	Description	Est Qty	Unit	Unit Price	Total
5.	<p><b>Construction of the West Dyke (Extending North-South) - Station 0+055.0 to Station 1+051.4;</b>                      Provide all labour and equipment to construct a new dyke along the west limit of the project site from Station 0+055.0 to Station 1+051.4 having a top width of 3.70 metres with 2.0 horizontal to 1.0 vertical side slopes, utilizing existing native materials excavated from the Wetland area, including placement, grading, compaction, and readied for placement of topsoil and seed, complete;</p>	996.4	LM	\$ 126.00	\$ 125,500.00
6.	<p><b>Topsoil and Seeding;</b>                      Place and spread 100mm thick scavenged topsoil over newly created West Dyke and carry out seeding and mulching over the new dyke, complete.</p>	12,000	m <sup>2</sup>	\$ 3.12	\$ 37,400.00
7.	<p><b>Sediment/Refuge Pool;</b>                      Provide all labour, equipment and materials to construct an irregularly shaped refuge pool (approximately 40.0 metres by 20.0 metres) having an approximate depth of 1.50 metres below grade (approximately 1,200 m<sup>3</sup>) at the downstream portion of the wetland area and adjacent to the opening to the Cedar Beach Canal, including 1.5 horizontal to 1.0 vertical side slopes, excavation, placement of a 5.0-metre by 5.0-metre quarried limestone erosion protection on filter cloth at its upstream end, including, excavation, compaction, grading and restoration, complete.</p>	1.0	Lump Sum	\$ 25,800.00	\$ 25,800.00
8.	<p><b>Remove Portion of South Dyke (Extending East-West);</b>                      Provide all labour, equipment to remove approximately 20.0 metres of the existing South Dyke along the Cedar Beach Canal including the installation of a coffer dam, excavation, grading, complete.</p>	1.0	Lump Sum	\$ 43,400.00	\$ 43,400.00
a)	<p>Provide 300mm thick quarried limestone at each end including placement, compactions, and restoration, complete.</p>	80.0	Tonne	\$ 100.00	\$ 8,000.00
b)	<p>Provide and place synthetic filter cloth underlay, complete.</p>	120	m <sup>2</sup>	\$ 5.00	\$ 600.00

Item	Description	Est Qty	Unit	Unit Price	Total
9.	<b>Clean up and Restoration;</b> Provide all labour, equipment and materials to clean up the project site on completion of the work.	1.0	Lump Sum	\$ 5,000.00	\$ 5,000.00
10.	Net HST for the above construction items (1.76%)				\$ 9,244.00
<b>TOTAL FOR CONSTRUCTION =</b>					<b>\$ 534,444.00</b>

<b>INCIDENTALS</b>	
Report, Estimates and Specifications	\$ 42,800.00
Survey, Assistance, Expenses and Drawings	\$ 53,500.00
Additional Hydraulic Analysis	\$ 5,300.00
Updated Maintenance Schedules	\$ 5,300.00
Duplicating Report and Drawings	\$ 1,200.00
Estimated Cost for Letting Contract including the preparation of Tender Documents and Tender Review	\$ 1,700.00
Estimated Cost for Part-Time Inspection, Supervision and Project Management during Construction (approx. 2-week duration)	\$ 13,600.00
Cost for Biological Consultation and Construction Monitoring	\$ 15,000.00
Cost for First Nations Consultation and Construction Monitoring	\$ 10,000.00
Net HST on the above items (1.76%)	\$ 2,612.00
Estimate Cost for ERCA Permit	\$ 800.00
<b>TOTAL FOR INCIDENTALS =</b>	<b>\$ 151,812.00</b>
<b>TOTAL FOR ALLOWANCES (brought forward) =</b>	<b>\$ 1.00</b>
<b>TOTAL FOR CONSTRUCTION (brought forward) =</b>	<b>\$ 534,444.00</b>
<b>TOTAL ESTIMATE =</b>	<b>\$ 686,257.00</b>

### **XIII. DRAWINGS AND SPECIFICATIONS**

As part of this report, we have attached design drawings for the Moroun Pumping Scheme Improvements, consisting of Sheets 1 through 5. The design drawings illustrate the existing details and recommended improvements to the Municipal Drain, together with a general watershed plan and affected landowners.

Furthermore, Benchmarks were established therein for the work required for this project. The drawings attached within **Appendix "C"** have been reduced in size and the scale therefore varies. However, full-scale drawings can be viewed at the Town of Kingsville Municipal Office, if required.

Also attached, we have prepared Standard Specifications and Special Provisions that set out the required construction details for the various aspects of the works to be conducted under this report.

#### **XIV. CONSTRUCTION SCHEDULE OF ASSESSMENT DETAILS**

We would recommend that all of the costs associated with the improvements to the Moroun Pumping Scheme Improvements, as identified and detailed herein, be assessed in accordance with the attached **Construction Schedule of Assessment**.

In summary, all construction works, together with the associated incidental and engineering costs under this project, are required to facilitate the subject property owned by Essex Region Conservation Authority (280-28310) in Lots 20 through 23, Concession 1 Western Division (WD), in the Geographic Township of Gosfield South.

It shall be noted that the attached Construction Schedule of Assessment is to be utilized for the distribution of costs related to the construction works being provided for under this report and this Construction Schedule of Assessment shall not be utilized for the sharing of any future maintenance works conducted to same.

#### **XV. FUTURE MAINTENANCE**

With the proposed changes that form part of this report, the Municipal Drain now includes the existing pump and auxiliary gravity outlets, together with the newly installed dyke located along the west side of the new wetland, east of the Adams Drain. Prior to these improvements, the Moroun Pumping Scheme also included the existing dyke and associated open drain along the north side of the Cedar Beach Canal, located east of the existing pump and auxiliary gravity outlets. Based on the new configuration of the drainage system, the modified dyke and open drain are now considered private features associated with the wetland and no longer form part of the Municipal Drain. With the removal of the wetland area from the Moroun Pumping Scheme watershed, an updated maintenance schedule of assessment is required to reflect these changes.

After the completion of all of the works associated with this Engineer's Report, we recommend that the Moroun Pumping Scheme, as outlined below, be kept up and maintained in the future by the Town of Kingsville.

##### **Moroun Pump and Auxiliary Gravity Outlets**

The existing pump station and all associated appurtenances, together with the auxiliary gravity outlets form part of the drainage outlet for the Moroun Pumping Scheme. We recommend that these drainage features be kept up and maintained through the Town of Kingsville and at the expense of the lands and roads included within the **Future Maintenance Schedule of Assessment - Pump Station and Auxiliary Gravity Outlets** attached herein and included within **Appendix "C"**.

When future maintenance works are performed to the pump station and auxiliary gravity outlets, we recommend that the cost for these works of future maintenance shall be shared by the abutting landowners and upstream affected lands and roads, following the same proportions established within the **Future Maintenance Schedule of Assessment - Pump Station and Auxiliary Gravity Outlets** included within **Appendix "C"**. This Schedule of Assessment has been developed based on an assumed cost of **\$10,000.00** and the future maintenance costs shall be levied pro-rata to the affected lands and roads that contribute runoff to the drainage outlet for which future maintenance works have been carried out. Therefore, when **\$10,000.00** worth of future maintenance work is expended on these features, the assessment to each individual affected property owner and road shall be levied per the noted Maintenance Schedule of Assessment. It should be clearly understood that the amounts shown within this Schedule are only for prorating future maintenance costs for the drain and do not form part of the current cost for the work.

### **New Flood Protection Dyke**

The new dyke located at the west limit of the project site, and east of the Adams Drain, shall replace the former flood protection dyke and open drain along the Cedar Beach Canal. This new dyke serves as protection to the lands contributing to the Adams Drain and the Moroun Pumping Scheme. This new dyke extends from Station 0+055.0 to Station 1+200.0. We recommend that this new dyke be kept up and maintained through the Town of Kingsville and at the expense of the lands and roads included within the **Future Maintenance Schedule of Assessment - Flood Protection Dyke** attached herein and included within **Appendix "C"**.

When future maintenance works are performed to the flood protection dyke, we recommend that the cost for these works of future maintenance shall be shared by the abutting landowners and upstream affected lands and roads, following the same proportions established within the **Future Maintenance Schedule of Assessment - Flood Protection Dyke** included within **Appendix "C"**. This Schedule of Assessment has been developed based on an assumed cost of **\$10,000.00** and the future maintenance costs shall be levied pro-rata to the affected lands and roads that contribute runoff to the drainage outlet for which future maintenance works have been carried out. Therefore, when **\$10,000.00** worth of future maintenance work is expended, the assessment to each individual affected property owner and road shall be levied per the noted Maintenance Schedule of Assessment. It should be clearly understood that the amounts shown within this Schedule are only for prorating future maintenance costs for the drain and do not form part of the current cost for the work.

### **Existing Cedar Beach Canal Dyke and Open Drain**

As previously noted, the existing dyke and open drain east of the auxiliary gravity outlets located along the Cedar Beach Canal has been modified to allow lake water to enter freely between the Canal and the new wetland. As a result, these drainage features no longer serve as protection and conveyance of flows for the Moroun Pumping Scheme and have subsequently been abandoned as part of this report. Therefore, any maintenance and upkeep of these features (or any alterations made thereto) shall no longer be the responsibility of the Town of Kingsville. The current Owner/Occupant, Essex Region Conservation Authority (280-28310) shall be solely responsible for all future maintenance to these features, together with any associated future costs.

### **Future Maintenance Schedules**

The attached Future Maintenance Schedules of Assessment are to be utilized only for the maintenance of the associated portions of the identified Municipal Drain. If spot maintenance is performed within the specified reach of the drain, it is recommended that only those lands adjacent and upstream of the maintenance site be assessed for any future costs. It shall be noted that these schedules shall not be utilized for any other maintenance and repair works being conducted to any feature outside of what has been identified herein.

### **Working Corridors for Future Maintenance**

Once all construction has been completed for this project, the Contractor shall be expected to keep all future equipment and forces within the following working corridors for any future maintenance performed on the improved Moroun Pumping Scheme:

New Flood Protection Dyke: The Contractor shall be permitted to access the new dyke from the previously established access route from County Road 50 as identified and further illustrated within the 1981 Moroun Pumping Scheme report. Once access is obtained onto the private lands the Contractor shall be expected to keep the construction equipment and forces along the top width of the new dyke located east of the auxiliary gravity outlets and extending from Station 0+055.0 to Station 1+200.0. The working corridor shall follow the alignment of the dyke and consist of the full width of the dyke necessary to complete the maintenance works and outlined within the accompanying cross-sections.

Moroun Pump Station and Auxiliary Gravity Outlets: When future maintenance is performed on the Moroun Pump and/or the auxiliary gravity outlets, all working corridors and future maintenance provisions shall be addressed per the plans and specifications within the Engineer's Reports for the "Moroun Pumping Scheme" prepared by W. J. Settingington, P.Eng., dated June 15, 1981.

All of the above provisions for future maintenance under this report shall remain as aforesaid until otherwise determined under the provisions of the "Drainage Act, RSO 1990, Chapter, D.17, as amended 2021".

All of which is respectfully submitted,

**N.J. PERALTA ENGINEERING LTD.**



Antonio B. Peralta, P.Eng.

ABP/kk



CONSTRUCTION SCHEDULE OF ASSESSMENT

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
7	280-28310	1 WD	20 to 26	357.36	126.00	50.992	Essex Region Conservation Authority	\$ 686,257.00	\$ -	\$ 686,257.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>								<b>\$ 686,257.00</b>	<b>\$ -</b>	<b>\$ 686,257.00</b>
<b>TOTAL ASSESSMENT</b>					<b>126.00</b>	<b>50.992</b>		<b>\$ 686,257.00</b>	<b>\$ -</b>	<b>\$ 686,257.00</b>

1 Hectare = 2.471 Acres

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# SPECIFICATIONS

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## STANDARD SPECIFICATIONS

General  
(Revised January 2024)

### **I. GENERAL CONDITIONS FOR SPECIFICATIONS**

The specifications, together with the accompanying drawings and appendices, delineate the furnishing of all labour, equipment, materials, and supplies required for the performance of all operations relating to the construction and/or improvements of a Municipal Drain under the most recent revision of the Drainage Act and/or amendments made thereto. These specifications serve to supplement and/or amend the current Ontario Provincial Standard Specifications and Standard Drawings, adopted by the Ontario Municipal Engineers Association. "Special Provisions" are included as part of the overall document and shall be read in conjunction with these standard specifications. Where a discrepancy occurs between the requirements of the Standard Specifications and the Special Provisions, the Special Provisions shall govern. In the event that the Specifications, Information to Tenderers, or the Form of Agreement do not apply to a specific condition or circumstance with respect to this project, the applicable section or sections from the Canadian Construction Documents Committee (CCDC) shall govern and be used to establish the requirements of the work.

Any reference to "Drainage Superintendent" and/or "Consulting Engineer" within this document shall refer to the person (or persons) appointed by the Council of the Municipality having jurisdiction over the drainage works.

All work shall be done in a first-class and workmanlike manner, complete in all respects and including all items specified herein, or as necessary for the accomplishment of a complete, satisfactory, and approved installation.

### **II. REVIEW OF SITE, PLANS, AND SPECIFICATIONS**

As part of the Tender process, each tenderer shall visit the site(s) and review all documentation associated with the project prior to their tender submission and satisfy themselves with the full extent of the scope of work and conditions to complete the project. The Contractor may request, at any time prior to the closing of the tender, to examine any associated information available from the Drainage Superintendent and/or Consulting Engineer. Claims that there are any misunderstandings of the terms and conditions of the Contract related to site conditions will not be permitted.

The quantities identified within the Construction Items, Drawings and/or Specifications are estimates only and are intended for the sole purpose of identifying the general extent of the proposed work. The tenderer shall be responsible to verify the quantities for accuracy prior to submitting their tender.

**III. MAINTENANCE PERIOD**

The successful tenderer shall guarantee and warrant the work for a period of twelve (12) months from the time that substantial completion is issued. Upon the expiry of the maintenance period, with ordinary wear and tear, the work shall remain in such condition as will meet with the approval of the Consulting Engineer, and it will be responsible for rectification in a manner satisfactory to the Consulting Engineer. The cost thereof, of any imperfect work due to or arising from materials, equipment or plant incorporated into or used in the construction thereof, or due to or arising from workmanship or methods of construction, that is discovered by any means at any time prior to the issuance of the Final Certificate. The Consulting Engineer shall decide as to the nature, extent, cause of, and responsibility for imperfect work and the necessity for and the method of rectification thereof. In the event that the Contractor fails to comply with the above and address any deficiencies, the Municipality may complete these deficiencies, with the guidance of the Consulting Engineer, to make such repairs or complete such works, and the whole costs, charges and/or expenses so incurred may be deducted from any amount due or collected from the Contractor.

**IV. LIABILITY OF THE CONTRACTOR**

The Contractor, its agents, workforce and/or sub-contractors, shall satisfy itself as to the exact location, nature and extent of any existing structure, utility or other objects that it may encounter during the course of the work. The Contractor will be responsible for any damage caused by it to any person, property, public utilities, and/or municipal infrastructure. The Contractor shall indemnify and save harmless, the Municipality and the Consulting Engineer for any damages which it may cause or sustain during the progress of the work. The Contractor shall not hold the Municipality or the Consulting Engineer liable for any legal action arising out of any claims brought about by such damage caused by it.

**V. GENERAL COORDINATION**

The Contractor shall be responsible for the coordination with other organizations, agencies, and utility companies in connection with the works. The Contractor shall not take action against the Municipality or the Engineer for delays caused by the site being unavailable to them by the Municipality or Consulting Engineer because of the acts, omissions, conduct or misconduct of other organizations or utility companies engaged in other work.

**VI. LEGAL SURVEY BARS AND MONUMENTS**

The Contractor is to note that legal survey bars may exist within the work site, and it shall take whatever steps necessary to protect these features. If any iron bar or monument is damaged or removed by the Contractor, it shall arrange for an Ontario Land Surveyor licensed in the Province of Ontario to restore same, all at the Contractor's expense.

**VII. MAINTAINING CONVEYANCE**

The drainage works shall not be conducted at times when flows in the drain are elevated due to local rain events, storms, or seasonal floods. Work shall be completed during times when the drain is dry or frozen.

When performing excavation work, care should be taken not to interfere with, plug up, or damage any existing surface drains, swales, and lateral or main tile ends. The Contractor shall be responsible to maintain permanent flow at all times. Temporary damming of flow is permitted to conduct the necessary works. However, the Contractor is responsible to monitor and ensure no damage occurs as a result of its actions. Under no circumstances shall temporary damming be permitted for an extended period (ie. overnight, etc.) without a suitable water control plan approved by the Drainage Superintendent, Consulting Engineer and/or the Conservation Authority.

#### **VIII. APPROVALS, PERMITTING, AND INSPECTION**

The works proposed under this project is subject to the approval, inspection, regulations, and by-laws of all Municipal, Provincial, and Federal entity, or any other agency having jurisdiction associated with the drainage works established herein. The Contractor shall ensure that all applicable permits and approvals are procured from all affected authorities prior to carrying out any of the prescribed works identified within the Contract, or in the vicinity of any public utility, railway and/or road authority.

The drainage works forming part of this project, including all appurtenances, shall be completely inspected by the Town Drainage Superintendent and/or the Consulting Engineer's Inspector prior to its completion. Under no circumstance shall the Contractor commence the construction or backfill of any underground feature without the site presence of the Drainage Superintendent and/or the Consulting Engineer's Inspector to inspect and approve said installation. The Contractor shall provide a minimum of forty-eight (48) hours' notice to the Drainage Superintendent and/or the Consulting Engineer prior to the commencement of the work. All works shall be performed during normal working hours of the Drainage Superintendent and/or the Consulting Engineer from Monday to Friday unless written authorization is provided by them to amend these working hours.

Upon completion of the works and prior to the demobilization and removal of all equipment and materials from the site, the Contractor shall notify the Drainage Superintendent and/or Consulting Engineer to arrange a final inspection of the works. The final inspection is intended to ensure that all aspects of the drainage work are satisfactorily completed and/or identify any outstanding deficiencies. Any outstanding deficiencies shall be addressed expeditiously as weather permits.

#### **IX. TRAFFIC CONTROL**

The Contractor shall ensure that the travelling public is always protected while utilizing the roadway for its access. The Contractor shall be required to carry out all the necessary steps to direct traffic and provide temporary diversion of traffic around work sites, including provision of all lights, signs, flag persons, and barricades required to protect the safety of the travelling public. The Contractor shall be required to submit a Traffic Control Plan to the Consulting Engineer for approval from the governing Road Authorities. The Traffic Control Plan shall be carried out in accordance with the requirements of the Ontario Traffic Manual's Book 7 for Temporary Conditions. Should the Contractor have to close any roads for the proposed works, it shall arrange to obtain the necessary authorizations from the Municipality, County, or Provincial Roads Departments (if applicable) and distribute notification of detours around the site. The Contractor shall also ensure that all emergency services, school bus companies, etc. are contacted about the disruption to access

at least 48 hours in advance of same. All detour routes shall be established in consultation with the Municipality and County Roads Department (if applicable).

Due to the extent of the work and the area for carrying out the work, the Contractor shall be required to carry out all of the necessary steps to direct traffic and provide temporary diversion of traffic around work sites, including the provision of all lights, signs, flag persons, and barricades required to protect the safety of the travelling public. Any accesses or areas used in carrying out the works are to be fully restored to their original conditions by the Contractor, including topsoil placement and lawn restoration as directed by the Drainage Superintendent and/or the Consulting Engineer. Restoration shall include but not be limited to all necessary levelling, grading, shaping, topsoil, seeding and mulching, and granular placement required to make good any damage caused.

The Contractor shall note that any deviation from the specified access for the construction of the culvert without the explicit approval of the adjacent landowners and the Drainage Superintendent could result in the Contractor being liable for damages sustained. The value for such damage shall be determined by the Drainage Superintendent and the Consulting Engineer and be subsequently deducted from the Contract Price. Where applicable, the Contractor shall be responsible for any damage caused by them to any portion of the road right-of-way. They shall take whatever precautions are necessary to avoid damage to the roadway. Any damage to the roadway must be restored to its' original condition upon completion of the works.

#### **X. FENCING AND/OR STRUCTURES**

Where it is necessary to take down any fence and/or structure to proceed with the work, same shall be done by the Contractor across or along that portion of the work where such fence and/or structure is located. The Contractor shall be required to exercise extreme care in the removal of any fencing and/or structure, to ensure minimum damage to same. The Contractor shall be required to replace any fence and/or structure that is taken down in order to proceed with the work, and the fence and/or structure shall be replaced in a neat and workmanlike manner. The Contractor shall not be required to procure any new materials for rebuilding the fence and/or structure provided that it has used reasonable care in the removal and replacement of same. When any fence and/or structure is removed by the Contractor, and the Owner thereof deems it advisable and procures new material for replacing the fence and/or structure so removed, the Contractor shall replace the fence and/or structure using new materials and the materials from the present fence and/or structure shall remain the property of the Owner.

#### **XI. BENCHMARKS**

For use by the Contractor, Benchmarks have been established along the course of the work. The plans include details illustrating the available Benchmarks and the work to be carried out. Benchmarks have been indicated and the Elevations have been shown and shall be utilized by the Contractor in carrying out its work. The Contractor shall note that specific design elevations and grades have been provided for the proposed works. The plans also set out side slopes, bottom width, and other requirements relative to its installation. In all cases, the Contractor is to utilize the specified Benchmarks to establish the identified elevations and grades. The Contractor shall ensure that it takes note of the direction of flow and sets all grades to match the direction of flow within the drain.

## **XII. ENVIRONMENTAL CONSIDERATIONS**

Prior to commencing work, the Contractor must familiarize themselves with all associated environmental approvals and mitigations. The Contractor shall review the results of any environmental reviews performed for the project, including documents for the purpose of identification of known Species at Risk within the project area and mitigation measures for species and habitat protection. It is the responsibility of the Contractor to make certain that necessary provisions are undertaken to ensure the protection of all Species at Risk and their habitats throughout the course of construction. The Contractor will be responsible for providing the necessary equipment and materials required by any mitigation plans and shall contact the Drainage Superintendent immediately if any Endangered Species are encountered during construction.

## **XIII. FINAL CLEANUP AND RESTORATION**

The whole of the work shall be satisfactorily cleaned up, and during the course of the construction, no portion shall be left in any untidy or incomplete state before subsequent portions are undertaken. Following the completion of the work, the Contractor is to trim up any broken or damaged limbs on trees which are to remain standing, and it shall dispose of said branches along with other brush, thus leaving the trees in a neat and tidy condition. The whole of the work shall be satisfactorily cleaned up, and during the course of the construction, no work shall be left in any untidy or incomplete state before subsequent portions are undertaken.

Any accesses or areas used in carrying out the works are to be fully restored to their original conditions by the Contractor, including topsoil placement and lawn restoration as directed by the Drainage Superintendent and/or the Consulting Engineer. Restoration shall include, but not be limited to, all necessary levelling, grading, shaping, topsoil, seeding and mulching, and granular placement required to make good any damage caused. Any damages caused, resulting from non-compliance with the above-noted provisions, shall be restored by the Contractor to its original condition, at the Contractor's expense. All roadways, driveways and access bridges, or any other means of access onto the job site shall be fully restored to their former condition at the Contractor's expense. In the event that the Contractor fails to satisfactorily clean up any portion of these accesses, the Consulting Engineer shall order such cleanup to be carried out by others and the cost of same to be deducted from any monies owing to the Contractor.

## **XIV. GENERAL CONDITIONS**

- a) The Drainage Superintendent or Consulting Engineer shall have the authority to carry out minor changes to the work where such changes do not lessen the efficiency of the work.
- b) The Contractor shall provide a sufficient number of layout stakes and grade points so that the Drainage Superintendent and Consulting Engineer can review same and check that the work will generally conform with the design and project intent.
- c) The Contractor will be responsible for any damage caused by it to any portion of the Municipal Road system, especially to the travelled portion. When excavation work is being carried out and the excavation equipment is placed on the travelled portion of the road, the travelled portion shall be protected by having the excavation equipment placed on satisfactory timber planks or timber pads. If

any part of the travelled portion of the road is damaged by the Contractor, the Municipality shall have the right to have the necessary repair work done by its employees and the cost of all labour and materials used to carry out the repair work shall be deducted from the Contractor's contract and credited to the Municipality. The Contractor, upon completing the works, shall clean all debris and junk, etc., from the roadside of the drain, and leave the site in a neat and workmanlike manner. The Contractor shall be responsible for keeping all public roadways utilized for hauling materials free and clear of mud and debris.

- d) The Contractor will be required to submit to the Municipality, a Certificate of Good Standing from the Workplace Safety and Insurance Board prior to the commencement of the work and the Contractor will be required to submit to the Municipality, a Certificate of Clearance for the project from the Workplace Safety and Insurance Board before Final Payment is made to the Contractor.
- e) The Contractor shall furnish a Performance and Maintenance Bond along with a separate Labour and Material Payment Bond within ten (10) days after notification of the execution of the Agreement by the Owner unless otherwise established within the Tender Documents. One copy of said bonds shall be bound into each of the executed sets of the Contract. Each Performance and Maintenance Bond and Labour and Material Payment Bond shall be in the amount of 100% of the total Tender Price. All Bonds shall be executed under corporate seal by the Contractor and a surety company, authorized by law to carry out business in the Province of Ontario. The Bonds shall be acceptable to the Owner in every way and shall guarantee faithful performance of the contract during the period of the contract, including the period of guaranteed maintenance which will be in effect for twelve (12) months after substantial completion of the works.

The Tenderer shall include the cost of bonds in the unit price of the Tender items as no additional payment will be made in this regard.

- f) The Contractor shall be required, as part of this Contract, to provide Comprehensive Liability Insurance coverage for not less than \$5,000,000.00 on this project unless otherwise established in the Tender Documents, and shall name the Municipality and its' officials, and the Consulting Engineer and its staff as additional insured under the policy. The Contractor must submit a copy of this policy to both the Municipal Clerk and the Consulting Engineer prior to the commencement of work.
- g) Monthly progress orders for payment shall be furnished the Contractor by the Drainage Superintendent. Said orders shall be for not more than 90% of the value of the work done and the materials furnished on the site. The paying of the full 90% does not imply that any portion of the work has been accepted. The remaining 10% will be paid 60 days after the final acceptance and completion of the work and payment shall not be authorized until the Contractor provides the following:
  - i) a Certificate of Clearance for the project from the Workplace Safety and Insurance Board
  - ii) proof of advertising
  - iii) a Statutory Declaration, in a form satisfactory to the Consulting Engineer and the Municipality, that all liabilities incurred by the Contractor and its Sub-Contractors in carrying out the Contract have been discharged and that all liens in respect of the Contract and Sub-Contracts thereunder have expired or have been satisfied, discharged or provided for by payment into Court.

The Contractor shall satisfy the Consulting Engineer or Municipality that there are no liens or claims against the work and that all of the requirements as per the Construction Act, 2018 and its' subsequent amendments have been adhered to by the Contractor.

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# **SPECIAL PROVISIONS**

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**PROJECT** | **Moroun Pumping Scheme  
Improvements**  
(Geographic Township of Gosfield South)  
Town of Kingsville, County of Essex  
**Project No. D21-118****I. GENERAL SCOPE OF WORK**

These Special Provisions, along with the Report, Appendices, Standard Specifications and the accompanying drawings, consider the furnishings of all labour, equipment and materials required for the performance of all operations related to the improvements to a Municipal Drain known as the “Moroun Pumping Scheme” under the provisions of the “Drainage Act, RSO 1990, Chapter, D.17, as amended 2021”. These improvements to the drainage system shall consist of the creation of a wetland, the installation of a new flood protection dyke along the west side of the project site, and the modification to the existing dyke system located along the north side of the Cedar Beach Canal. These works shall include all excavation, grading, spreading of excavated material, installation of general erosion protection, seeding and mulching, restoration, and other ancillary work to provide a complete and satisfactory job.

All work shall be carried out in accordance with these Special Provisions and Standard Specifications that serve to supplement and/or amend the current Ontario Provincial Standard Specifications and Standard Drawings, adopted by the Ontario Municipal Engineers Association. The Contractor shall review the information outlined within **Appendix “A”** The works shall be further carried out in accordance with the accompanying drawings labeled herein as **Appendix “B.”** Where there are differences between the Special Provisions and the Standard Specifications included herein, the Special Provisions shall govern. The features included as part of this project shall be of the size, type, depth, etc., as is shown in the accompanying drawings, as determined from the **Benchmark**, and as may be further laid out at the site at the time of construction. All work carried out under this project shall be completed to the satisfaction of the Drainage Superintendent or the Consulting Engineer.

**II. CONSERVATION AUTHORITY AND DFO CONSIDERATIONS**

The Contractor shall be required to implement stringent erosion and sedimentation controls during the course of the work to minimize the amount of silt and sediment being carried downstream. It is intended that work on this project be carried out during relatively dry weather to ensure the proper site and drain conditions and to avoid conflicts with sediment being deposited into the outlet drainage systems. All disturbed areas shall be restored as quickly as possible with grass seeding and mulching installed to ensure a protective cover and to minimize any erosion from the work site subsequent to construction. The Contractor may be required to provide temporary silt fencing and straw bales as outlined further in these specifications.

All of the work shall be carried out in accordance with any permits or authorizations issued by the Conservation Authority or the Department of Fisheries and Oceans (DFO), copies of which shall be provided,

if available. The Contractor is advised that no work shall be carried out in the existing drain from March 15 to July 15, of any given year.

As part of its work, the Contractor shall implement the following measures that shall ensure that any potential adverse effects on fish and fish habitat shall be mitigated:

- a. As per standard requirements, work shall not be conducted at times when flows in the drain are elevated due to local rain events, storms, or seasonal floods. Work shall be done in the dry.
- b. All disturbed soils on the drain banks and within the channel, including spoil, must be stabilized immediately upon completion of work. The restoration of the site must be completed to a like or better condition than what existed prior to the works. The spoil material must be hauled away and disposed of at a suitable site or spread an appropriate distance from the top of the drain bank to ensure that it is not washed back into the drain.
- c. To prevent sediment entry into the drain, in the event of an unexpected rainfall, silt barriers and/or traps must be placed in the channel during the works and until the site has been stabilized. All sediment and erosion control measures are to be in accordance with related Ontario Provincial Standards. It is incumbent on the proponent and its contractors to ensure that sediment and erosion control measures are functioning properly and are maintained/upgraded as required.
- d. Silt or sand accumulated in the barrier traps must be removed and stabilized on land once the site is stabilized.
- e. All activities including maintenance procedures should be controlled to prevent the entry of petroleum products, debris, rubble, concrete, or other deleterious substances into the water. Vehicular refuelling and maintenance should be conducted away from the water.

Not only shall the Contractor comply with all of the above, but it shall also be required to further comply with notes included within the correspondence with the ERCA and the Letter of Advice provided by the DFO. Both of these documents are included in **Appendix "A"**.

### **III. MECP CONSIDERATIONS**

Under the Species at Risk Provincial Legislation, set in place with the Ministry of Environment, Conservation and Parks (MECP), Section 23.9 of the Endangered Species Act, 2007, allows the Municipality to conduct eligible repair, maintenance, and improvement work under the Drainage Act that exempts these works from Sections 9 and 10 of this Act, so long as they follow the rules within Ontario Regulation 242/08.

Prior to commencing work, the Municipality will complete an "Endangered Species Act Review" for the subject drain and will provide the Contractor with the results of said review, including documents for the purpose of identification of known Species at Risk within the project area and mitigation measures for species and habitat protection. It is the responsibility of the Contractor to make certain that necessary provisions are undertaken to ensure the protection of all Species at Risk and their habitats throughout the course of construction.

The Contractor will be responsible for providing the necessary equipment and materials required by the mitigation plans and shall contact the Drainage Superintendent immediately if any Endangered Species are encountered during construction.

#### **IV. ENVIRONMENTAL CONSIDERATIONS**

Due to the sensitive nature of this project, Biological investigations were performed to identify natural heritage features (aquatic and terrestrial) along the course of the drainage works. This evaluation was conducted to satisfy the requirements of the Conservation Authorities Act through the Essex Region Conservation Authority (ERCA), the Fisheries Act through the Department of Fisheries and Oceans (DFO), and the Endangered Species Act through the Ministry of Environment, Conservation, and Parks (MECP). As such, specific approvals and authorizations have been issued for this project and these details have been included in **Appendix "A"**. The Contractor shall familiarize themselves with these documents and be responsible to make certain that necessary provisions are undertaken to ensure the protection of all Species at Risk and their habitats throughout the course of construction. The Contractor will be responsible for providing the necessary equipment and materials required by the mitigation plans and shall contact the Tonw of Kingsville Drainage Superintendent immediately if any Endangered Species are encountered during construction.

Prior to any work conducted on the project, the Contractor shall submit a suitable Water, Sediment and Erosion Control Plan. All of these plans shall be submitted for review and approval from all applicable environmental approval agencies. Due to the direct connection to the Cedar Beach Canal and Lake Erie, a Team of Biologist has been retained to conduct a fish salvage operation during the detwatering process. The Contractor shall provide all labour and equipment to assist the biologists when conducting the fish salvage operation to ensure that no fish, mussels, or turtles are harmed by the proposed works. Any species found within the project site shall be removed and relocated downstream of the project site. The fish salvage operations shall be completed to the full satisfaction of the Drainage Superintendent, ERCA, DFO, MECP and/or the MNRF.

In addition to the fish salvage operations, the Contractor shall be responsible to provide Fish Exclusion Measures within the length of the existing open drain where work is being performed. The Fish Exclusion Measures shall be initiated prior to the start of the drain filling process by use of a standard fish seine net. During the dewatering process, a fish seine exclusion net shall be installed at the pump intake to protect from any species being harmed by the pump. The fish seine shall be installed a sufficient distance from the pump intake to ensure that there will be no impacts to the seine or fish. A seine net shall also be installed in the water upstream of the existing pump and shall be dragged through the water along the entire length of the Adams Drain. The fish seine net shall not be a permanent fixture during the course of the construction works and shall be removed once passed through the water.

The above-noted works shall be completed by the Contractor, at its own expense, and such labour, equipment and materials, and the cost for same shall form part of the Schedule of Items and Prices. Furthermore, all of the above shall be completed to the full satisfaction and compliance of the Drainage Superintendent, ERCA, DFO and/or the MNRF.

## **V. ACCESS TO WORK**

The Contractor is advised that all the work carried out on this project extends within the private lands of Essex Region Conservation Authority (280-28310), located east of the existing Moroun Pump and auxiliary gravity outlets and west of the residential properties along Canal Street. The Contractor may utilize the entire width of the existing Moroun Pump driveway access, from County Road 50 and located immediately west of 1370 County Road 50, to permit the completion of all the work required for this project.

Under no circumstances shall the Contractor utilize other private lands, nor shall they utilize Canal Street to access the subject lands. The Contractor shall note that any deviation from the above-mentioned access without the explicit approval of the adjacent landowners and the Drainage Superintendent could result in the Contractor being liable for damages sustained. The value for such damage shall be determined by the Drainage Superintendent and the Consulting Engineer and be subsequently deducted from the Contract Price.

## **VI. WORKING CORRIDORS**

### **Initial Construction**

Once access is obtained onto private lands, the Contractor may also utilize the full project site area, bounded by the existing dyke north of the Cedar Beach Canal, the existing vegetated berm east of the Adams Drain, and extend north along the west limit of the site to the Cedar Creek.

### **Future Maintenance**

Upon the completion of the wetland construction, the subject lands shall be deemed private and shall not form part of the Municipal Drain. The former flood protection dyke and open drain that previously formed part of the Moroun Pumping Scheme no longer forms part of the Municipal Drain and will no longer be maintained by the Town of Kingsville. As such, these features are deemed private and shall be the sole responsibility of the Owner/Occupant of the lands currently owned by the Essex Region Conservation Authority (280-28310), for all future maintenance, together with any associated future costs.

When future maintenance is required to the existing pump station, auxiliary gravity outlets, and the newly constructed flood protection dyke, the Contractor shall be permitted to access from the previously established access route from County Road 50 to the pump station and auxiliary gravity outlets. Once access is obtained onto the private lands the Contractor shall be expected to keep the construction equipment and forces along the top width of the new dyke located east of the auxiliary gravity outlets and extending from Station 0+055.0 to Station 1+200.0. The working corridor shall follow the alignment of the dyke and consist of the full width of the dyke necessary to complete the maintenance works and as outlined within the accompanying cross-sections.

### **General**

The Contractor shall refrain from using any other lands within the subject work site unless otherwise permitted by the Owner and Drainage Superintendent during construction. Confirmation of other permitted working areas must be obtained from the Owner and Drainage Superintendent in writing.

The Owner may permit access to the Contractor to stockpile any excess excavated materials for future use by the Owner.

Any accesses or areas used in carrying out the works are to be fully restored to their original conditions by the Contractor, including topsoil placement and lawn restoration as directed by the Drainage Superintendent and/or the Consulting Engineer. Restoration shall include, but not be limited to all necessary levelling, grading, shaping, topsoil, seeding and mulching, and granular placement required to make good any damage caused. Any damages caused, resulting from non-compliance with the above-noted provisions, shall be restored by the Contractor to its original condition, at the Contractor's expense.

The Contractor is advised that all excavated material from the work along the residential and lawn area shall be hauled away and disposed of by the Contractor at its own expense. In all cases, the disposal of any trucked material will be the responsibility of the Contractor and any work at the disposal site shall be established between the Contractor and the Site Owner. The Contractor shall ensure that any permits required for fill disposal are obtained from the appropriate authority. The Contractor shall be responsible for keeping all private and public roadways free and clear of mud and debris resulting from its use of same for access and hauling purposes.

## **VII. REMOVAL OF BRUSH, TREES AND RUBBISH**

Prior to the construction of the wetland within the subject property, the Contractor is to prepare the site for this operation.

### **Initial Construction**

Due to the sensitive nature of the project, it is anticipated that any brushing or tree removal shall only be required within the existing flood protection dyke along the north side of the Cedar Beach Canal, from the existing Moroun Pump Station easterly to the proposed connection between the new wetland and the canal.

Any such brush and/or trees removed shall be utilized as environmental habitat for the various species intended to occupy the proposed wetlands. Therefore, all vegetation salvaged from the brushing operations (ie. logs, branches, root balls, etc.) shall be strategically placed within the proposed wetland/refuge pool under the supervision of the Owner, Consulting Engineer, and/or the Drainage Superintendent. All logs and branches shall be secured in place utilizing a large footer rock/boulder or T-bars and cables supports. Under no circumstances shall any of the usable vegetation be burnt or removed from the site.

It shall be noted that the existing brush line along the west limit of the project site shall remain and be protected throughout the course of construction. Under no circumstances shall any healthy trees be removed without the written consent of the affected Property Owners.

### **Future Maintenance**

Due to the sensitive nature of this project, the Contractor must protect as much vegetation as possible when traversing onto the flood protection dykes. The preservation of trees, bushes, and herbaceous vegetation shall be the Contractor's being a primary concern. However, due to the nature of any future repair, the

top width of the dyke is the only means of access. Therefore, the Contractor shall be allowed to remove any vegetation necessary to provide access to the repair location.

All such brush, trees or rubbish shall be close cut and the whole shall be burned or otherwise satisfactorily disposed of by the Contractor. The brush and trees removed along the course of the work are to be put into piles by the Contractor in locations where they can be safely burned by it, or hauled away and disposed of, by the Contractor to a site to be obtained by it at its expense. Prior to and during the course of the burning operations, the Contractor shall comply with the guidelines prepared by the Air Quality Branch of the Ontario Ministry of the Environment, Conservation and Parks and shall ensure that the Environmental Protection Act is not violated. The Contractor will be required to notify the local fire authorities and cooperate with them in the carrying out of any work. The removal of brush and trees shall be carried out in close consultation with the Municipal Drainage Superintendent or Consulting Engineer to ensure that no decorative trees or shrubs are disturbed by the operations of the Contractor that can be saved. It is the intent of this project to save as many trees and bushes as practical within the roadway allowances and on private lands.

Following the completion of the work, the Contractor is to trim up any broken or damaged limbs on trees which are to remain to stand, and it shall dispose of said branches along with other brush, thus leaving the trees in a neat and tidy condition.

### **VIII. WETLAND EXCAVATION**

The Contractor is to note that the excavation of the new wetland shall be done in a very meticulous manner, to the general lines, levels, grades and cross-sections as shown on the accompanying drawings, or as may be further established by the Drainage Superintendent or the Consulting Engineer at the time of the work. The widths of the wetland and any side slopes of the excavation shall generally conform to the dimensions given on the drawings. The overall wetland shape and side slopes are not intended to be rigid and exact with clean lines and slopes, but rather consist of irregular edges with varying side slopes and depths. However, in no case shall the wetland bottom project above the grade line as shown on the accompanying drawings and as determined from the Benchmark.

Prior to any wetland excavation, the Contractor is expected to strip all of the topsoil from the full width of the new wetland site. This topsoil shall be windrowed and stockpiled within the project site area while maintaining a minimum distance of 4.0 metres from the limit of the wetland excavation. Once all topsoil is satisfactorily stripped from the wetland area, the Contractor shall commence with any excavation works. The stripped topsoil shall be re-used for spreading over all newly constructed earthen dykes and side slopes. Any surplus topsoil shall remain on-site and stockpiled and/or spread for the use of the Owner.

Laser Control must be provided to maintain the minimum channel line and grades, and the Contractor shall have a qualified Operator to set up and operate the equipment. In some instances, but only at the discretion of the Consulting Engineer, an approved system of batter boards may be utilized for this purpose. However, the cost of placing grade stakes and determining the cut information, shall be provided by and/or paid for entirely by the Contractor.

## **IX. REFUGE POOLS**

At the location noted on the accompanying drawings, the Contractor shall construct a refuge pool at the upstream end of the connection to the Cedar Beach Canal. Said pools shall have an irregular shape, having an approximate dimension of 40.0 metres by 20.0 metres. The refuge pool shall have a minimum depth of approximately 1.50 metres and have 1.5 horizontal to 1.0 vertical side slopes, all as shown and detailed on the plans. The Contractor will also be required to provide general erosion protection at the upstream end of each refuge pool that is constructed. The erosion protection shall be centred at the entrance to the refuge pool and shall extend across the pool bottom, and up the side slopes to provide a 5.0 metre by 5.0 metre protection mat against erosion of the entranceway to the refuge pool. The refuge pools shall further be installed in accordance with the details illustrated on Sheet 5 of the accompanying drawings. The refuge pools shall be constructed to the full satisfaction of the Municipal Drainage Superintendent and Consulting Engineer.

## **X. EARTHEN PLUG, EARTHEN DYKE CONSTRUCTION, AND SPREADING OF EXCAVATED MATERIAL**

The Contractor shall provide all labour and equipment, to spread all excavated material to the north and construct the new earthen berm/plug along the west limit of the project area, to the lines, levels, and grades as shown and detailed in the accompanying drawings. Overall, the spread material and earthen berm/plug shall be constructed with a top width of 3.70 metres set to a minimum elevation of 176.000 metres, as noted on the plans. The berm shall also be constructed no steeper than 2.00 horizontal to 1.00 vertical finished side slopes.

The Contractor is advised that the berm/plug shall be constructed utilizing material excavated from the excavation of the wetland area. Any excess fill material may be utilized to supplement the dyke construction or placed elsewhere on site per the Owner's direction. It is expected that the excavation work from the wetland construction will provide sufficient material for the construction of the entire dyke. Should adequate fill not be available onsite for the proposed berm construction, the Contractor may borrow additional fill from the wetland and/or refuge pool site.

All material used for the installation of the flood protection dyke shall be satisfactorily compacted in place to a minimum Standard Proctor Dry Density of 95% by means of mechanical compaction equipment capable of remoulding the select native fill in place in minimum lifts of 150mm thickness. Material shall be compacted conforming to OPSS Form 501 and should be keyed into the native soils to ensure a good bond. The Contractor shall provide at least 48 hours advance notice of proceeding with any placement of compacted fill within the existing drain. This will allow the Drainage Superintendent and/or Engineer to arrange for the necessary inspection and testing by a Geotechnical Consultant, as required. The Contractor shall co-operate with the Drainage Superintendent and/or the Engineer and the Geotechnical Consultant in establishing a procedure for backfilling that achieves the necessary results. The Contractor shall provide the Geotechnical Consultant with any co-operation and assistance necessary for the consultant to carry out his testing and inspections so that a report may be provided to the Engineer upon completion of the works indicating that the necessary compaction levels have been achieved.

Any rocks, stones, boulders, or cobbles larger than the fully compacted layer depth shall be removed and utilized as potential habitat within the wetland and/or refuge pool.

Once the earth works are complete, the entirety of the constructed dyke shall be covered with top soil and seed as described in section **XIII. TOPSOIL, SEEDING AND MULCHING** outlined below.

#### **XI. CONNECTING THE WETLAND TO THE CEDAR BEACH CANAL**

As part of the creation of the proposed wetland, the subject lands shall have a direct connection to the Cedar Beach Canal. Currently, the existing dyke along the north side of the canal serves as flood protection for the subject lands. With the creation of the wetland a hydraulic connection between the new wetland and canal will require the excavation of a portion of the existing dyke. As such, the Contractor will be required to install a temporary sheet pile coffer dam of sufficient size and depth to adequately prevent canal water to enter the site during these operations. Once an appropriate coffer dam has been implemented, the Contractor shall excavate approximately 20.0 metres (bottom width) of the existing dyke to the elevation specified and located approximately 280.0 metres east of the existing auxiliary gravity outlets, having a 2.0 horizontal to 1.0 vertical slope to the top elevation of the existing dyke. The excavations shall be constructed to the general shape and dimensions as indicated on Sheet 5 of the accompanying drawings. At each end of the excavated dyke, the Contractor shall install sloped quarried limestone erosion protection. The quarried limestone erosion protection shall be installed per the details outlined within the subsequent heading "General Erosion Protection".

#### **XII. GENERAL EROSION PROTECTION**

Where specified, or as directed by the Drainage Superintendent or Consulting Engineer, the Contractor shall install sloped quarried limestone erosion protection, on a slope no steeper than 2.00 horizontal to 1.00 vertical. It shall have a depth of 300mm and shall extend from the top bank to the toe of the bank, all in accordance with the "**Standard Erosion Protection Detail**" shown within the accompanying drawings. Where sloped quarried limestone is to be placed, it shall be underlain with a synthetic non-woven geotextile filter fabric. All work shall be completed to the full satisfaction of the Drainage Superintendent and/or the Consulting Engineer.

The quarried limestone shall be provided as shown and detailed and shall vary in size from a minimum of 100mm (4") to a maximum of 250mm (10"). The quarried limestone pieces shall be carefully tamped into place with the use of a shovel bucket so that, when complete, the quarried limestone erosion protection shall be consistent, uniform, and tightly laid in place. Prior to placing the quarried limestone, the Contractor shall place non-woven geotextile filter fabric "MacTex MX140" conforming to OPSS 1860 Class 1 or approved equal, as an underlay underneath all areas to be covered in quarried limestone erosion protection. The Contractor shall take extreme care not to damage the geotextile filter fabric when placing the quarried limestone. The placement of the geotextile filter fabric and the quarried limestone, and the completion of the quarried limestone erosion protection shall be conducted to the full satisfaction of the Drainage Superintendent and/or Consulting Engineer.

#### **XIII. TOPSOIL, SEEDING AND MULCHING**

Once the new flood protection dyke has been constructed, the Contractor is to cover all newly constructed side slopes with a minimum thickness of 50mm (2") of the stripped topsoil, and all of these areas are to be seeded and mulched. The Contractor is also required to place stripped topsoil, with a minimum thickness

of 100mm (4") over the top width of the new dyke. The Contractor shall also provide stripped topsoil with a minimum thickness of 100mm (4") on all other disturbed areas as a result of its operations so that all areas are fully restored to their original conditions. All of the above-mentioned topsoiled surfaces shall be seeded and mulched with the recommended seed mixes.

Upon the completion of the project, the Contractor shall note that if any surplus topsoil remains from the site, it shall be neatly stockpiled by the Contractor at a location on-site designated by the Owner and Drainage Superintendent for future use by the Owner. Under no circumstances shall the surplus topsoil be removed from the site without the expressed written permission from the Owner and/or Drainage Superintendent.

The placing and grading of all topsoil shall be carefully and meticulously carried out according to Ontario Provincial Standard Specifications, Form 802, dated November 2019, or as subsequently amended or as amended by these Specifications.

Once all topsoil has been properly placed and fine-graded, the Contractor shall seed and mulch the area. Seeding and mulching operations shall be carried out according to Ontario Provincial Standard Specifications, Form 804, dated November 2014, or as subsequently amended or as amended by these Specifications. **The seeding mixture for all areas surrounding the wetland (uplands) shall be a Base Restoration Seed mix, applied at a rate of 10kg/hectare. For all areas within the wetland (riparian lands), the seeding mixture shall be a Water's Edge Seed mix, applied at a rate of 10kg/hectare.** Details of these seed mixtures are included within **Appendix "A"** and are available from St. Williams Nursery & Ecology Centre, Norfolk County, Ontario, or equal. If the species listed above are unavailable, other native prairie plant species indigenous to Essex County may be included in the seed mix. However, no native plant species listed on the Ontario Noxious Weed list can be included. As part of the seeding and mulching operation, the Contractor shall be required to provide either a hydraulic mulch mix or a spread straw mulch with an adhesive binder in accordance with OPSS 804 dated November 2014, or as subsequently amended, to ensure that the grass seed shall be protected during germination and provide a thick, uniform cover to protect against erosion, where necessary. All areas hand seeded by the Contractor, if deemed necessary by the Drainage Superintendent, shall be covered with a straw mulch to reduce the extent of erosion and facilitate germination of the grass seed.

In order to promote good germination, if the seeding and mulching operation is carried out in the spring, the seeding mixture shall contain oats, and if the seeding and mulching operation is carried out in the fall, the mixture shall contain rye. The seeding and mulching operations within the newly excavated side slopes shall be carried out as soon as practical. All other areas shall only be carried out as weather conditions permit in either the months of May or June in the Spring or during the months of September and October in the Fall unless written permission is obtained from either the Drainage Superintendent or the Consulting Engineer

All of the work related to the placements of topsoil and the seeding and mulching operation shall be meticulously done and shall be carried out to the full satisfaction of the Drainage Superintendent and the Consulting Engineer. In addition, all work shall satisfy the Essex Region Conservation Authority (ERCA) and the Department of Fisheries and Oceans (DFO) and comply with all Permits and Authorizations issued by said Authorities. Substantial Completion shall not be provided for this work until the completed plantings have been inspected and approved by ERCA and DFO.

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# APPENDIX "A"

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## **APPENDIX A-1**

### Essex Region Conservation Authority Correspondence

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## Kiara Kirkland

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**From:** Tony Peralta  
**Sent:** June 21, 2024 2:43 PM  
**To:** James Bryant; Summer Locknick  
**Cc:** Lu-Ann Marentette; Hannah Waldt; Kevin Money  
**Subject:** Moroun Pumping Scheme Improvements - Town of Kingsville - D21-118  
**Attachments:** 20240621 PLANS Moroun Pumping Scheme Improvements - A.Peralta.pdf

Good afternoon James and Summer;

Further to our ongoing correspondence regarding the necessary improvements to the Moroun Pumping Scheme to facilitate the construction of a wetland, below and attached, you will find the design proposal intended to be implemented for this project.

Currently, a flood protection dyke and open drain forms part of the Municipal Drain along the Cedar Beach Canal that serves as protection against the lake levels. In order to implement the wetland, this flood protection dyke shall be partially excavated to allow for lake water to enter the site and a new flood protection dyke shall be installed along the west limit of the project site. The following are the details of the proposed work:

1. The wetland area shall include a deeper area near the proposed connection to the Cedar Beach Canal. The excavated materials shall be utilized to create an isolation plug and flood protection dyke along the west limit of the project site.
2. Once the project site is isolated, the existing dyke along the Cedar Beach Canal will be excavated to hydraulically connect the lake to the wetland.
3. As part of the wetland construction, a minimum 1.50m deep refuge shall be constructed having an irregular shape (with approximate dimensions of 20m by 40m). The depth of the refuge pool has been established to provide sufficient water storage during times of low lake levels.
4. In order to ensure that no adverse effects are created by the improvements to the subject and surrounding properties, a hydraulic analysis was conducted for this project to analyze the existing parameters and proposed requirements.
  - a. The analysis concluded that any new flood protection dyke shall be set to a minimum floodproofing elevation of 176.000m.
  - b. The proposed dyke shall be constructed with a top width of 3.70m (similar to the existing dyke) to the specified top elevation while having a 2.0 horizontal to 1.0 vertical slope. This top width will also serve as the working corridor for any future repairs or improvements required.
  - c. As it relates to the land associated with Canal Street, the analysis further concluded that should the lake levels exceed the all-time high, lake water could currently move freely through the affected lands between the canal and the proposed wetland/marsh. Therefore, installing a flood protection berm/dyke adjacent to the residential lots will ultimately cut off any natural conveyance of lake water and potentially trap lake water between the canal and the berm/dyke. Although, the optics of not installing flood-proofing measures appear unfavourable, installing flood-proofing measures could potentially create adverse impacts on these lands. Therefore, it was determined that no additional flood-proofing measures shall be implemented adjacent to the existing residential lands located along Canal St. and the status quo would present the least impact on these lands.

5. The existing flood protection dyke and open drain shall be abandoned as part of the Municipal Drain and shall be replaced with the new flood protection dyke along the west side of the project site.
6. With the subject lands removed from the Moroun Pumping Scheme watershed, the level of protection related to the pump operations shall be adjusted to better suit the affected agricultural properties and the remaining floodable area within the ERCA lands.

As it relates to the environmental regulations, our office conducted an “Environmental Scoping Meeting” with all applicable agencies and further addressed all regulatory requirements set out for this project.

We trust that this information is satisfactory. However, if you have any questions, or concerns, or require additional information regarding the details outlined above, please contact us at your earliest opportunity as we intend on moving towards the final design stage and finalizing this report shortly.

Regards,



**Tony Peralta, P.Eng.**

[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com) | 519-733-6587 x 122

N.J. Peralta Engineering Ltd. - Consulting Engineers

45 Division St. N., Kingsville ON N9Y 1E1

[peraltaengineering.com](http://peraltaengineering.com)

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**From:** Tony Peralta <[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com)>

**Sent:** Thursday, February 29, 2024 8:23 AM

**To:** James Bryant <[JBryant@erca.org](mailto:JBryant@erca.org)>; Kevin Money <[KMoney@erca.org](mailto:KMoney@erca.org)>

**Cc:** Lu-Ann Marentette <[lmarentette@kingsville.ca](mailto:lmarentette@kingsville.ca)>; Hannah Waldt <[h.waldt@peraltaengineering.com](mailto:h.waldt@peraltaengineering.com)>; Nolan Harris <[n.harris@peraltaengineering.com](mailto:n.harris@peraltaengineering.com)>

**Subject:** RE: Maroon Drain/Cedar Creek Wetland

Good morning James;

Thank you for the comments.

I have also reached out to Kevin to discuss the maintainability of the N-S berm/dyke once constructed. Seeing that it will be the only access to provide future repairs, we will need to ensure it is wide enough to support construction equipment. Furthermore, this berm/dyke will form part of the Maroun Pumping Scheme, where maintenance provisions will be included in the report.

This information helps solidify our design approach and we will continue moving forward towards completing the Drainage Report.

If you have any further questions, comments, or concerns, please feel free to contact us.

Regards,



**Tony Peralta, P.Eng.**

[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com) | 519-733-6587 x 122

N.J. Peralta Engineering Ltd. - Consulting Engineers

45 Division St. N., Kingsville ON N9Y 1E1

[peraltaengineering.com](http://peraltaengineering.com)

**IMPORTANT:** We have temporarily relocated to Unit 1-38 Erie Street North, Leamington ON N8H 2Z3 during the construction of the new office building at our Kingsville location.

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**From:** James Bryant <[JBryant@erca.org](mailto:JBryant@erca.org)>  
**Sent:** Wednesday, February 28, 2024 8:28 AM  
**To:** Tony Peralta <[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com)>; Kevin Money <[KMoney@erca.org](mailto:KMoney@erca.org)>  
**Cc:** Lu-Ann Marentette <[lmarentette@kingsville.ca](mailto:lmarentette@kingsville.ca)>  
**Subject:** RE: Maroon Drain/Cedar Creek Wetland  
**Importance:** High

Hi Tony,

Kevin and I had a conversation yesterday and here's the highlights that should help you:

- Kevin is not looking to install any special infrastructure to facilitate maintenance. If something needs to be done, coffer dams will likely be the method of choice. Therefore, no gates required which should simplify the opening design.
- I believe we established the Berm height for the N-S berm to be 176.00m CVGD28:78
- Kevin and I did not discuss future maintenance etc. or management plans related to the Berm. I suggest you talk directly with Kevin if there is more detail needed for this. Kevin will have a management plan for the property, although it's necessary to determine who will maintain the berm in good working order (ERCA, or the Municipality through the Act).
- The E-W berm has been a topic amongst us all over the past month or so. I still believe that demonstrating that the homes on Canal Street are susceptible to flooding regardless of a berm will simplify the design for this project (essentially negating the need for the flood protection berm north of these properties).

I will call you as a follow up to this to make sure that I didn't miss anything.

Cheers,

—  
James



JAMES BRYANT, P.Eng.  
Director of Watershed Management Services  
Essex Region Conservation Authority  
360 Fairview Avenue West, Suite 311 | Essex, Ontario | N8M 1Y6  
P. 519-776-5209 x 246 | F. 519-776-8688  
[jbryant@erca.org](mailto:jbryant@erca.org) [www.essexregionconservation.ca](http://www.essexregionconservation.ca)

**While this email is sent when it is convenient for me, I do not expect a response or action outside of your own regular working hours.**

The ERCA Office is open to the public **Tuesdays, Wednesdays and Thursdays** to provide "counter service"; however, services continue to be delivered online and through email. Please consult ERCA's website for more information and direction regarding online services (i.e. permitting, cottage bookings, seasonal passes etc.)

---

**From:** Tony Peralta <[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com)>  
**Sent:** Tuesday, February 27, 2024 9:00 AM  
**To:** Kevin Money <[KMoney@erca.org](mailto:KMoney@erca.org)>  
**Cc:** Lu-Ann Marentette <[lmarentette@kingsville.ca](mailto:lmarentette@kingsville.ca)>; James Bryant <[JBryant@erca.org](mailto:JBryant@erca.org)>  
**Subject:** RE: Maroon Drain/Cedar Creek Wetland

Good morning Kevin;

We understand that you will be meeting with James this morning. Attached, you will find our “internal” document outlining our last meeting notes. This should help you with your discussions with James.

Once you have reviewed the details of the project, we suggest another virtual meeting to discuss your findings.

Regards,



**Tony Peralta, P.Eng.**  
[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com) | 519-733-6587 x 122  
N.J. Peralta Engineering Ltd. - Consulting Engineers  
45 Division St. N., Kingsville ON N9Y 1E1  
[peraltaengineering.com](http://peraltaengineering.com)

**IMPORTANT:** We have temporarily relocated to Unit 1-38 Erie Street North, Leamington ON N8H 2Z3 during the construction of the new office building at our Kingsville location.

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**From:** Kevin Money <[KMoney@erca.org](mailto:KMoney@erca.org)>  
**Sent:** Tuesday, February 27, 2024 8:36 AM  
**To:** Tony Peralta <[tony@peraltaengineering.com](mailto:tony@peraltaengineering.com)>; Lu-Ann Marentette <[lmarentette@kingsville.ca](mailto:lmarentette@kingsville.ca)>  
**Subject:** Maroon Drain/Cedar Creek Wetland

Hi Tony,

Just wondering how the engineering and design are coming along for this and when you would be ready to submit to DFO for permits.

Thanks,



KEVIN MONEY  
Director of Conservation Services  
Essex Region Conservation Authority  
360 Fairview Avenue West, Suite 311 • Essex, Ontario • N8M 1Y6  
P. 519-776-5209 x 351 • [kmoney@erca.org](mailto:kmoney@erca.org) • [essexregionconservation.ca](http://essexregionconservation.ca)  
**At ERCA we continue to work flexibly, so while I am emailing you when it suits me, you do not need to respond outside of your business hours**

## **APPENDIX A-2**

# Department of Fisheries and Oceans Authorization

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Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Ontario and Prairies Region  
Fish and Fish Habitat  
Protection Program  
867 Lakeshore Road  
Burlington, ON L7S 1A1

Région de l'Ontario et des Prairies  
Programme de la protection  
du poisson et de son habitat  
867 Lakeshore Road  
Burlington, ON L7S 1A1

June 4, 2024

*Our file*      *Notre référence*  
24-HCAA-00134

The Corporation of the Town of Kingsville  
ATTENTION: Lu-Ann Marentette  
2021 Division Road North  
Kingsville, ON, N9Y 2Y9

**Subject: Dyke Repairs and Water Drawdown, Adams Drain/Armstrong Wetland, Kingsville – Application for Authorization under the *Fisheries Act* Required, but Prohibited Effects on Listed Aquatic Species at Risk Are Not Likely.**

Dear Lu-Anne Marentette:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on January 19, 2024. We understand that you propose to:

- Drawdown the entire Armstrong property wetland area as well as part of Adams Drain and the flooded areas adjacent to Adams Drain for a maximum total footprint of 222,000m<sup>2</sup>;
- Salvage fish and mussels during the drawdown for up to four days;
- Install a new dyke adjacent and parallel to the existing North/South dyke on the western side of the Armstrong property for a maximum fill footprint of 11,000m<sup>2</sup>;
- Connect the newly installed North/South dyke to the existing East/West dyke; and
- Intentionally breach the East/West dyke to allow permanent connect of the Armstrong property wetland to Cedar Creek.

We understand the following aquatic species listed under the *Species at Risk Act* may use the area in the vicinity of where your proposal is to be located:

- Northern Sunfish listed as Special Concern.

Our review considered the following information:

- Request for review form and associated documents submitted to DFO on January 19, 2024;
- Teams meeting between Colby Nolan (DFO), Tony Peralta (Peralta Engineering), Kevin Money (ERCA), and Lu-Ann Marentette on April 26, 2024;
- Email correspondence between Colby Nolan, Tony Peralta, and Todd Leadly (University of Windsor) from April 22 – May 7, 2024.

Your proposal has been reviewed to determine whether it is likely to result in:

.../2



- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

Based on the review of the above information, the Program has concluded that the following work, undertaking or activity is likely to result in the death of fish by means other than fishing, and/or the harmful alteration, disruption or destruction of fish habitat:

- Water drawdown resulting in a disruption footprint up to a maximum of 222,000m<sup>2</sup>; and
- Dyke installation resulting in ~11,000m<sup>2</sup> of destruction via infill.

Your proposal requires authorization pursuant to paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* in order to proceed. As your proposal is not likely to result in prohibited effects on listed aquatic species at risk, no permit will be required under the *Species at Risk Act*.

Please submit the following information and documents to apply for a *Fisheries Act* authorization:

- a completed Application Form for the Issuance of an Authorization under Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* (Non-Emergency Situations) (<http://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-005-eng.html>);
- the required information and documentation set out in the *Authorizations Concerning Fish and Fish Habitat Protection Regulations* (the Regulations) (<http://www.gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors286-eng.html>); and
- an irrevocable letter of credit or another equivalent financial guarantee, including a Performance Bond (for requirements see: <http://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/applicants-guide-candidats-eng.html#131>) to cover the cost of offsetting plan, if you are not exempted from providing one as set out in subsection 2(2) of the Regulations.

Should you choose to relocate or redesign your proposal, this could reduce the potential impacts of your proposal to a level where the aforementioned prohibited effects to fish and fish habitat can be avoided and authorization under the *Fisheries Act* would no longer be required. If you choose to modify your proposal to avoid a need for authorization, please submit your revised Request for Review form.

Before an authorization can be issued, DFO may be required to address section 35 of the Constitution Act, 1982 the duty to consult and possibly accommodate with respect to

.../3

potential adverse impacts on Aboriginal or Treaty rights. This may require DFO to consult with potentially affected groups to discuss potential impacts and means to address (accommodate) them.

As you are aware, Bill C-68 included new provisions (sections 42.2 to 42.5) in the *Fisheries Act* that require the Minister of Fisheries and Oceans to establish a public registry to facilitate public access to certain records, including amongst other items, authorizations issued pursuant to paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*. While the public registry provisions of the *Fisheries Act* are not yet in force, the Department has begun to post a list of authorizations issued since August 28, 2019, when amendments to the fish and fish habitat protection provisions of the Act came into force.

If DFO issues such an authorization at the end of its review of your proposed works, undertakings or activities taking place in or near water, information pertaining to this authorization will be posted to the *Fisheries Act* Registry and accessible from the Department's website at <https://www.dfo-mpo.gc.ca/pnw-ppe/registry-registre-eng.html> as well as from the Open Government Portal at: <https://open.canada.ca/data/en/dataset/2c09d2fd-9a8e-4d8c-b5af-95747e36eaac> and the Common Project Search at <https://common-project-search.canada.ca/>. Information and data will be updated as the Department continues to develop the *Fisheries Act* Registry.

Any disclosure of information will be conducted in accordance with the *Access to Information Act* and the *Privacy Act*. Should you have any documents that contain sensitive or proprietary information that you believe should be protected from public disclosure, please contact us prior to providing them to DFO to discuss whether and how the information may be protected.

Please be advised that any unauthorized work, undertaking or activity that violates sections 34.4 and 35 of the *Fisheries Act*, sections 32, 33 and/or subsection 58(1) of the *Species at Risk Act* could lead to corrective action such as enforcement.

If you have any questions with the content of this letter, please contact Colby Nolan at our Burlington office by phone at (416) 919-4615 or by email at [Colby.Nolan@dfo-mpo.gc.ca](mailto:Colby.Nolan@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



William Glass  
Team Leader, Coastal and Marine  
Fish and Fish Habitat Protection Program

Copy: Kevin Money – ERCA  
Tony Peralta – Peralta Engineering  
Todd Leadly – University of Windsor



# Application Form for the Issuance of an Authorization under Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act* (Non-Emergency Situations)

I, the undersigned, hereby request an authorization for the purpose of paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*. I understand that this authorization, if granted, is only from the standpoint of the Minister of Fisheries and Oceans in regards to the above named provisions and does not release me from my obligation to obtain permission from other concerned regulatory agencies or from other act or regulations such as *Species at Risk Act* or the *Aquatic Invasive Species Regulations*.

Texts in brackets refer to the provisions of the *Authorizations Concerning Fish and Fish Habitat Protection Regulations* (hereafter "the Regulations") or of their Schedules.

## 1. Applicant Contact Information

Applicant's Name:

1.) The Corporation of the Town of Kingsville  
Lu-Ann Marentette (Drainage Superintendent)  
2.) Essex Region Conservation Authority  
Kevin Money (Director of Conservation Services)

If applicable:

Authorized Representative's Name:

Tony Peralta (N.J. Peralta Engineering Ltd.)

Address:

1.) 2021 Division Road North, Kingsville, Ontario, N9Y 2Y9  
2.) 360 Fairview Avenue West, Suite 311, Essex, Ontario, N8M 1Y6

Address:

45 Division Street North, Kingsville, Ontario, N9Y 1E1

Telephone No.:

1.) 519-733-2305 Ext. 267  
2.) 519-776-5209 Ext. 351

Telephone No.:

519-733-6587 Ext. 122

Fax No.:

Fax No.:

E-mail:

1.) Imarentette@kingsville.ca  
2.) kmoney@erca.org

E-mail:

tony@peraltaengineering.com

DFO File Referral No. (if known):

24-HCAA-00134

## 2. Checklist for Prescribed Information [schedule 1]

An applicant does not need to re-submit documents that have already been submitted to DFO for review. An applicant may reference documents such as Environmental Impact Statements, technical supplements, etc. in their application but must provide the appropriate reference to any document cited, including the chapter, section, page reference and date of submission.

Type of Information/ Documentation	Have you submitted the following? (Yes/No)	Identify the appropriate reference document: Title, Chapter, Section, Page Number and Date of Submission	DFO Comments (For official use only)
Financial Guarantee [paragraph 2(1)(b)]	No	See attachment	
Description of Proposed work, undertaking or activity [schedule 1, section 2]	Yes	DFO Request for Review, Section B "Description of Project," page 2-3, submitted on January 19th, 2024	



Project engineering specifications, scale drawings and dimensional drawings (for physical works) [schedule 1, section 3]	<input type="text" value="No"/>	See attachment	
Phases and schedule information [schedule 1, section 4]	<input type="text" value="No"/>	See attachment	
Location information [schedule 1, sections 5& 6]	<input type="text" value="Yes"/>	DFO Request for Review, Section C and D, page 3-4, and "Appendix B - Field Report from Biologist" page 1-3, submitted on January 19th, 2024	
Descriptions of any consultations undertaken prior to application (if any) [schedule 1, section 7]	<input type="text" value="No"/>	See attachment	
Description of Fish and Fish Habitat (Aquatic Environment) [schedule 1, section 8]	<input type="text" value="Yes"/>	"Appendix B - Field Report from Biologist", submitted as part of DFO Request for Review on January 19th, 2024	
Description of Effects on Fish and Fish Habitat [schedule 1, section 9]	<input type="text" value="Yes"/>	DFO Request for Review, Section E "Potential Effects of the Proposed Project," page 4-5, submitted on January 19th, 2024	
Description of Measures and Standards to Avoid or Mitigate death of fish or harmful alteration, disruption or destruction of fish habitat [schedule 1, section 10]	<input type="text" value="Yes"/>	DFO Request for Review, Section E "Potential Effects of the Proposed Project," page 6, submitted on January 19th, 2024	
Description of monitoring measures to assess effectiveness of measures and standards described in section 10 [schedule 1, section 11]	<input type="text" value="No"/>	See attachment	
Description of contingency measures that will be implemented if measures and standards (section 10) do not meet their objectives [schedule 1, section 12]	<input type="text" value="No"/>	See attachment	
Description of the death of fish after measures and standards are implemented [schedule 1, section 13]	<input type="text" value="No"/>	See attachment	
Description of the Residual harmful alternation, disruption or destruction of fish habitat after measures and standards are implemented [schedule 1, section 14]	<input type="text" value="No"/>	See attachment	
Habitat Credits [schedule 1, section 15]	<input type="text" value="No"/>	See attachment	
Offsetting Plan (including geographic coordinates and small scale site plan) [schedule 1, section 16]	<input type="text" value="No"/>	See attachment	



### 3. Fisheries Management Objectives

Did you consider local Fisheries Management Objectives in your planning process?

Yes  No

If yes, please identify the Fisheries Management Objective(s)/Plan considered and, if applicable, reference the relevant sections.

Please identify any effects that the proposed work, undertaking or activity may have on achieving these objectives.

### Applicant Declaration

I solemnly declare that the information provided for this application are true, complete and correct, and I make this declaration conscientiously believing it to be true knowing that it is of the same force and effect as if made under oath. This declaration applies to all material submitted as part of this application for paragraphs 34.4(2)(b) and 35(2)(b) *Fisheries Act* Authorization.

Tony Peralta

Applicant's signature (and corporate seal):

21/06/2024

Date

Information about the above-noted proposed work, undertaking or activity is collected by DFO under the authority of the *Fisheries Act* for the purpose of administering the Fish and Fish Habitat Protection Provisions of the *Fisheries Act*. Personal information will be protected under the provisions of the *Privacy Act* and will be stored in the Personal Information Bank number DFO PPU 680. Under the provisions of the *Privacy Act*, individuals have a right to, and on request shall be given access to, any personal information about them contained in a personal information bank. Instructions for obtaining personal information are contained in the Government of Canada's Info Source publications available at [www.infosource.gc.ca](http://www.infosource.gc.ca) or in Government of Canada offices. Information other than "personal" information may be accessible or protected as required by the provision of the *Access to Information Act*.

If you require additional space to provide relevant information, please attach that information and indicate the title of the form being used and the section to which you are responding.

## **DFO Application for Issuance of an Authorization**

Moroun Pumping Scheme Dyke Enhancements (D21-118) – Town of Kingsville

### **Schedule 1, Section 1 – Offsetting Cost Estimate**

The cost estimate to complete the construction monitoring and post-construction performance monitoring specified in the offset plan is provided in the table below. The costing includes all labour and materials required to complete the offset. The value of the proposed letter of credit has been calculated using criteria described in “An Applicant’s Guide to Submitting an Application for Authorization under Paragraph 35(2)(b) of the Fisheries Act, November 2013” Annex A and as per project-specific discussion with the DFO.

<b><u>Item</u></b>	<b><u>Cost Estimate</u></b>
<b><u>Construction</u></b>	
Construction of a passive connecting channel between the wetland and the Cedar Creek Channel that connect with Lake Erie	\$5000
<b><u>Structural Performance Monitoring</u></b> – confirming water depth in passive connection	
Year 1	\$1000
Year 2	\$1000
Year 3	\$1000
<b><u>Biological Performance Monitoring</u></b> – presence of new native fish in wetland	
Year 1	\$5000
<b>Total</b>	\$13,000

### **Schedule 1, Section 3** - Project Engineering Specifications, Scale Drawings and Dimensional Drawings (for Physical Works)

Preliminary design drawings are attached as a part of this submission.

### **Schedule 1, Section 4** – Phases and Schedule Information

Construction will begin approximately on July 15, 2024 and end on December 31, 2024.

Based on the details of the project, we recommend the following sequence of operations toward the isolation of the subject project area and implementation of the proposed wetland.

- a. Initiate a dewatering process utilizing the existing Moroun Pump and/or other pumping equipment.
- b. During the dewatering process, have a team of biologists, proponent staff and volunteers perform a fish and mussel salvage operation, which includes fish protection measures at the pump.

## **DFO Application for Issuance of an Authorization**

Moroun Pumping Scheme Dyke Enhancements (D21-118) – Town of Kingsville

- c. Once the site is dewatered, disconnect the subject lands from the Moroun Pumping Scheme by installing an earthen plug at the southwest corner of the property, located immediately east of the existing pump station and auxiliary gravity outlets.
- d. Once isolated, excavate and grade the subject lands to create a centrally deeper area with a sediment/refuge pool(s). All excess material extracted from the area shall be utilized to construct a new dyke/berm along the west side of the project area to protect the lands to the west.
- e. Following the full construction of the west dyke and the completion of the necessary grading, the existing dyke/berm at the south limit of the property (adjacent to the Cedar Beach Canal) shall be opened up to allow lake water to flood the subject lands.

### **Schedule 1, Section 7** – Descriptions of Any Consultations Undertaken Prior to Application

#### Environmental Scoping Meetings

- Held on April 19, 2023, and May 3, 2023 with ERCA, the Department of Fisheries and Oceans (DFO), the Ministry of Natural Resources (MNR), the Ministry of Environment, Conservation and Parks (MECP), along with Town of Kingsville Staff.

#### On-Site Meeting

- Held on July 12, 2023 with landowners in the watershed, representatives from ERCA, the County of Essex, and the Town of Kingsville.

#### Indigenous Consultation

- Held on May 22, 2024 with Caldwell First Nation and Aamjiwnaang First Nation.
- Held on June 18, 2024 with Aamjiwnaang First Nation Environmental Committee, to present the project. There were no objections or questions from the committee. DFO representative was present for this meeting.
- Plans and presentations were emailed to Walpole First Nation and many attempts for engagement via phone and email were made without any response.

### **Schedule 1, Section 11** - Description of Monitoring Measures to Assess Effectiveness of Measures and Standards

- In water works timing window
  - Observe timing windows in Southern Ontario (March 15<sup>th</sup> to July 15<sup>th</sup>).
- Dewatering (DFO Interim Code of Practice) End of pipe fish protection screen and discharge.
  - Daily inspection of intake screen to confirm securely in place.
  - Daily inspection to ensure pump water discharge remains over rip rap slope.
- Fish and mussel salvage during the dewatering of the project site (duration of four days)
  - Onsite biologists to continuously monitor receding water edge for any potential strandings and communication with pump operator.
  - Close monitoring of dissolved oxygen (DO) concentrations and temperature of fish transport tanks. Tank aerators will be used to ensure dissolved oxygen concentrations do not fall below 5 mg/L. Temperature difference between holding tank and receiving water not to exceed 1°C. A handheld YSI meter will be used to monitor the DO and temperature.

## **DFO Application for Issuance of an Authorization**

### Moroun Pumping Scheme Dyke Enhancements (D21-118) – Town of Kingsville

- Biologists will monitor safe (acclimated) release of all fish and mussels into Cedar Creek.
- A fish salvage report will be completed and provided to the DFO following project completion.
- Construction of a passive connection to Cedar Creek Canal to allow lake water to enter wetland.
  - Silt and fish exclusion screens installed south of the dyke on the canal side. Daily monitoring of screens to ensure they remain secure through out construction period.
  - Monitor and ensure all machinery and industrial equipment arrives onsite clean. All excavators and equipment will be monitored throughout construction period to ensure no fluid leaks and all refuelling occurs offsite.
  - All fill material will be monitored to ensure no runoff during precipitation events occurs and enters the adjacent Cedar Creek canal. Rock used should be clean and free of particulates. Onsite monitoring will include daily inspections.
- Fish Monitoring Plan
  - Passive Fish Survey
  - A fish survey of the wetland and constructed refuge pool is proposed one year post construction. The goal of the fish survey is to demonstrate that the restored wetland habitat and refuge pool is being successfully used by the Cedar Creek fish community.
  - A total of 25 baited minnow traps will be distributed throughout the wetland which includes the deeper refuge pool adjacent to the newly constructed entrance at the Cedar Creek canal (as described above). The proposed survey will occur either early spring or late fall to avoid excessive temperatures. Traps will be baited with sharp cheddar, secured in place and allowed to soak no longer than a 24-hour interval before checking. All fish will be removed, identified, counted and photographed. Fish handling and rapid release will be carried out by a qualified fish biologist. No voucher specimens are to be collected.
  - Success criteria (as suggested by DFO) will be two or more species over a 2-day sampling period. A monitoring report with all survey results will be issued to ERCA and DFO upon completion.
- Structural Performance Monitoring
  - Monitoring of the constructed passive entrance between the wetland and the Cedar Creek canal. A site visit to assess structural integrity and the depth of the connecting channel. This monitoring is proposed to occur once a year for three years post construction.
  - Monitoring will include a photo survey of the structure, and depth measurements of the connecting channel.
  - Success criteria will be no change in the structural integrity or changes in bank slope and channel depth from original construction.
  - A monitoring report will be issued upon completion each year and submitted to ERCA and DFO.

### **Schedule 1, Section 12** – Description of Contingency Measures

- In water works timing window.
  - If the in-water works will exceed timing windows, consultation and a request for a timing exemption from DFO will occur.

## **DFO Application for Issuance of an Authorization**

Moroun Pumping Scheme Dyke Enhancements (D21-118) – Town of Kingsville

- Dewatering site
  - End of pipe screen failure will result in work stoppage until repaired and inspected. Salvage will continue during this time until the receding water has stopped, and all fish and mussel have been successfully removed and relocated.
- Monitor and ensure all machinery and industrial equipment arrives onsite clean
  - Issue notice and or work stoppage if best practice standards are not followed.
  - Require a designated refuelling, lubrication cleaning area offsite.
  - Access to emergency spill kit
- Silt/fish exclusion screens and amour stone
  - All screens will be reinstalled and resecured immediately prior to any work continuing. Notice will be issued to the construction company of failed screen conditions.
  - If amour stone and other fill material as well as site garbage not stored according to best practices noticed will be issued to construction company and FA permit holder.
- Fish and mussel salvage
  - No fish or mussel deaths are anticipated. Any observed fish or mussel death or strandings will result in direct communication with the pump operator to cease pumping. The dewatering rate will be adjusted accordingly.
  - In case of low DO levels (either background concentrations or holding tanks) extra aeration will be provided. Holding tanks will be covered. Release and transport time will be decreased in case of any observed stressors to fish and mussels.
  - Any dead fish and mussels will be recorded and disposed of according to CCAC standards. All records will be included in the fish salvage report issued to FA permit holder and DFO.

### **Schedule 1, Section 13** – Description of the Death of Fish After Measures and Standards are Implemented

Following the mitigation measures proposed, no fish or mussel death is anticipated. A recent fish and mussel salvage in the project area in response to dyke breach (2023) showed very few fish and mussels had entered the area before the breach was repaired.

### **Schedule 1, Section 14** – Description of the Residual Harmful Alternation, Disruption or Destruction of Fish Habitat After Standards and Measures are Implemented

The dyke repair will result in the total loss of 151,786 m<sup>2</sup> of potential fish habitat. This property was once agricultural, and this restoration project will ultimately result in a net gain of 177,000 m<sup>2</sup> of fish and mussel habitat.

### **Schedule 1, Section 15** – Habitat Credits

Not applicable.

### **Schedule 1, Section 16** – Offsetting Plan

No offsetting is currently planned. The project footprint is approximately 12,000 m<sup>2</sup>. Completion of the project will result in a 177,000 m<sup>2</sup> net gain of fish and mussel habitat to the Cedar Creek watershed.

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## **APPENDIX A-3**

### Seed Mixes

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## Water's Edge Seed Mix @ \$150/kg - Species subject to availability

#	Code	Species Image	Item Name	Plant Form	Bloom Month	Bloom Colour
1	1SMWATEDGE		Water's Edge Seed Mix (kg)			
2	1SMWATEDGE-ELYRIPA		Riverbank Wild Rye - Elymus riparius	Grass	07-Jul, 08-Aug	Green
3	1SMWATEDGE-ELYVIRG		Virginia Wild Rye - Elymus virginicus	Grass	04-Apr, 05-May	Green
4	1SMWATEDGE-PANVIRG		Switch Grass - Panicum virgatum	Grass	07-Jul	Green
5	1SMWATEDGE-CARBEBB		Bebb's Sedge - Carex bebbii	Sedge	06-Jun	Green
6	1SMWATEDGE-CARVULP		Fox Sedge - Carex vulpinoidea	Sedge	06-Jun	Green
7	1SMWATEDGE-CARHYST		Porcupine Sedge - Carex hystericina	Sedge	06-Jun	Green
8	1SMWATEDGE-OENBIEN		Common Evening Primrose - Oenothera biennis	Forb	08-Aug	Yellow
9	1SMWATEDGE-HELHELI		Sweet Ox-Eye - Heliopsis helianthoides	Forb	08-Aug	Yellow
10	1SMWATEDGE-VERHAST		Blue Vervain - Verbena hastata	Forb	08-Aug	Violet
11	1SMWATEDGE-VERMISS		Missouri Ironweed - Vernonia missurica	Forb	09-Sep	Violet
12	1SMWATEDGE-EUPPERF		Common Boneset - Eupatorium perfoliatum	Forb	08-Aug, 09-Sep	White
13	1SMWATEDGE-PENDIGI		Foxglove Beard-Tongue - Penstemon digitalis	Forb	06-Jun	White
14	1SMWATEDGE-EUPMACU		Spotted Joe-Pye Weed - Eupatorium maculatum	Forb	08-Aug, 09-Sep	Pink
15	1SMWATEDGE-DOEUMBE		Flat-Topped Aster - Doellingeria umbellata	Forb	08-Aug, 09-Sep	White

#	Code	Species Image	Item Name	Plant Form	Bloom Month	Bloom Colour
16	1SMWATEDGE-ASCINCA		Swamp Milkweed - Asclepias incarnata	Forb	07-Jul	Pink
17	1SMWATEDGE-PHYVIRG		Obedient Plant;False Dragonhead - Physostegia ...	Forb	08-Aug, 09-Sep	Pink
18	1SMWATEDGE-RUDLACI		Greenheaded Coneflower;Cut-Leaved Coneflower - Rudbecki...	Forb	07-Jul, 08-Aug	Yellow
19	1SMWATEDGE-MONFIST		Wild Bergamot - Monarda fistulosa	Forb	07-Jul	Violet
20	1SMWATEDGE-CARSTIP		Awl-Fruited Sedge - Carex stipata	Sedge	06-Jun	Green
21	1SMWATEDGE-CARCRIN		Fringed Sedge - Carex crinita	Sedge	06-Jun	Green

**A note on this seed mix:**

The species included in this mix may differ slightly with each order. Seed availability changes year-to-year and season-to-season based on the species, harvest results, weather conditions, and more. We may update our mixes at any time in order to best support ecological restoration and biodiversity conservation.

If you need help or more information, please let us know at [sales@stwilliamsnursery.com](mailto:sales@stwilliamsnursery.com).



## Base Restoration Seed Mix @ \$120/kg - Species subject to availability

Code	Species Image	Item Name	Plant Form	Bloom Month	Bloom Colour
1SMBASREST		Base Restoration Seed Mix (kg)			
1SMBASREST-SORNUTA		Indian Grass - Sorghastrum nutans	Grass	09-Sep	Green
1SMBASREST-ELYRIPA		Riverbank Wild Rye - Elymus riparius	Grass	07-Jul, 08-Aug	Green
1SMBASREST-ELYVIRG		Virginia Wild Rye - Elymus virginicus	Grass	04-Apr, 05-May	Green
1SMBASREST-ELYTRAC		Slender Wheat Grass - Elymus trachycaulus	Grass	07-Jul	Green
1SMBASREST-PANVIRG		Switch Grass - Panicum virgatum	Grass	07-Jul	Green
1SMBASREST-SPOASPE		Tall Dropseed;Rough Dropseed - Sporobolus asper	Grass	09-Sep	Green
1SMBASREST-OENBIEN		Common Evening Primrose - Oenothera biennis	Forb	08-Aug	Yellow
1SMBASREST-RUDHIRT		Brown-Eyed Susan;Black-Eyed Susan - Rudbeckia hirta	Forb	07-Jul, 08-Aug, 09-Sep	Yellow
1SMBASREST-PYCVIRG		Virginia Mountain Mint - Pycnanthemum virginianum	Forb	07-Jul	White
1SMBASREST-SOLPTAR		Upland White Aster;Upland White Goldenrod - Solidago ...	Forb	08-Aug, 09-Sep	White
1SMBASREST-PENHIRS		Hairy Beard-Tongue - Penstemon hirsutus	Forb	06-Jun	Violet
1SMBASREST-PENDIGI		Foxglove Beard-Tongue - Penstemon digitalis	Forb	06-Jun	White
1SMBASREST-SYMLAEV		Smooth Aster - Symphyotrichum laeve	Forb	09-Sep	Violet
1SMBASREST-DOEUMBE		Flat-Topped Aster - Doellingeria umbellata	Forb	08-Aug, 09-Sep	White

Code	Species Image	Item Name	Plant Form	Bloom Month	Bloom Colour
1SMBASREST-CORTRIP		Tall Coreopsis - Coreopsis tripteris	Forb	07-Jul, 08-Aug, 09-Sep	Yellow
1SMBASREST-POTARGU		Tall Cinquefoil;Prairie Cinquefoil - Potentilla arguta	Forb		White
1SMBASREST-SOLNEMO		Gray Goldenrod - Solidago nemoralis	Forb	08-Aug	Yellow
1SMBASREST-ASCSYRI		Common Milkweed - Asclepias syriaca	Forb	07-Jul	Pink
1SMBASREST-SPOCRYP		Sand Dropseed - Sporobolus cryptandrus	Grass	08-Aug	Green

**A note on this seed mix:**

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If you need help or more information, please let us know at [sales@stwilliamsnursery.com](mailto:sales@stwilliamsnursery.com).



## **APPENDIX "B"**

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PLANS & DETAILS

# MOROUN PUMPING SCHEME IMPROVEMENTS

IN THE TOWN OF KINGSVILLE (Geographic Township of Gosfield South)  
IN THE COUNTY OF ESSEX • ONTARIO

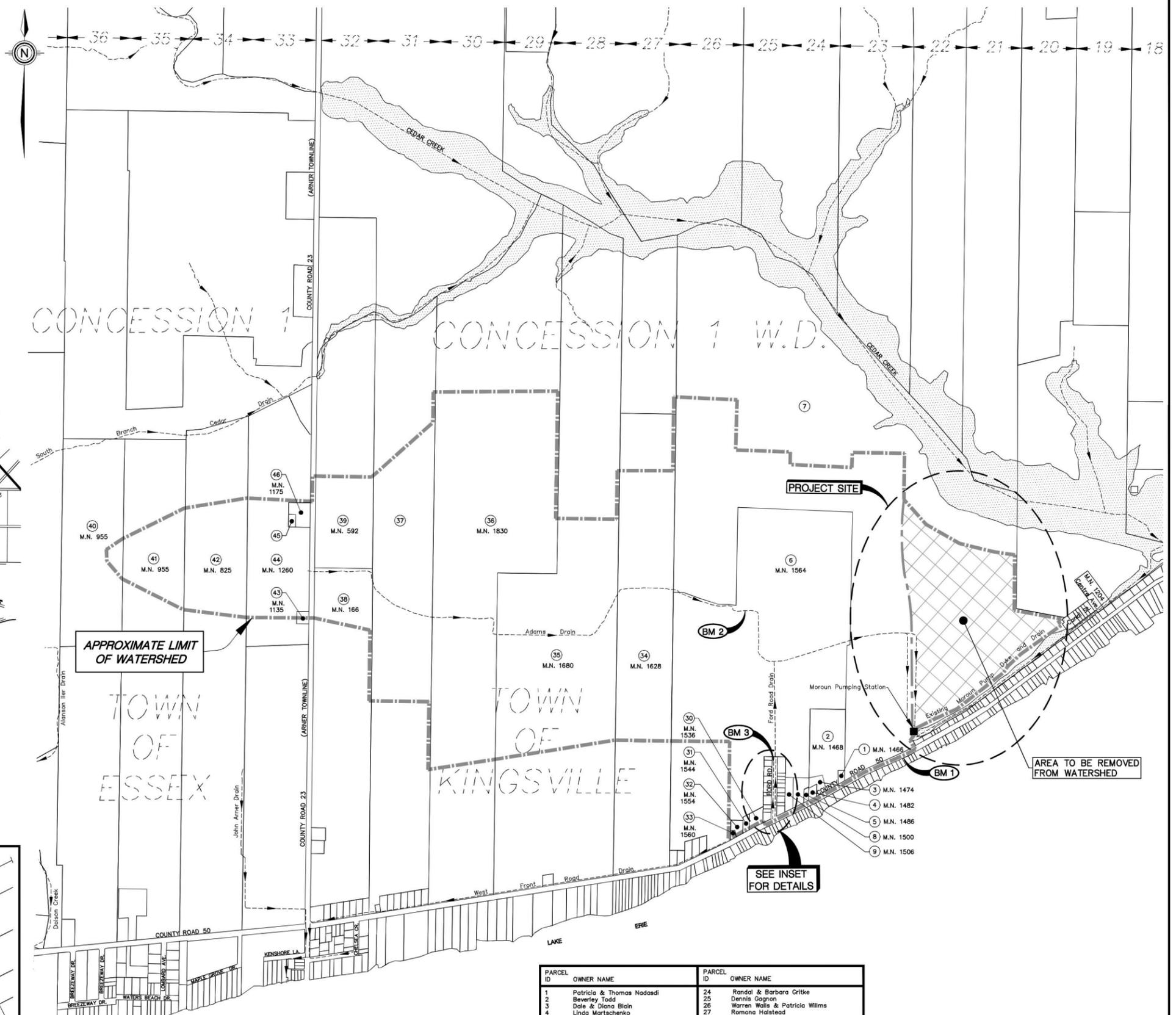
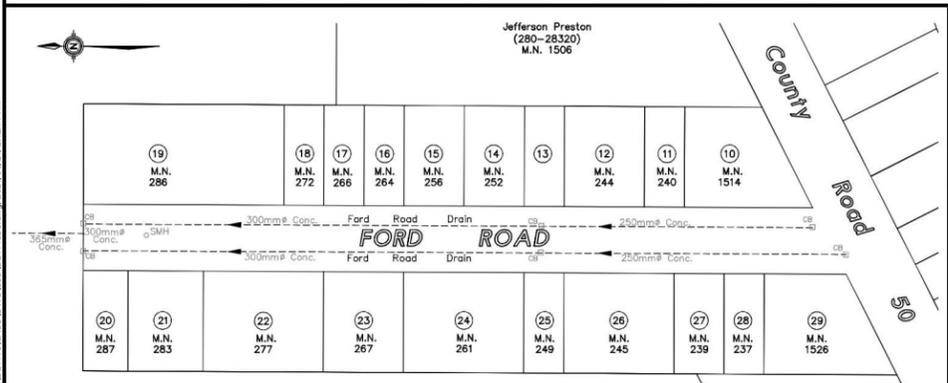
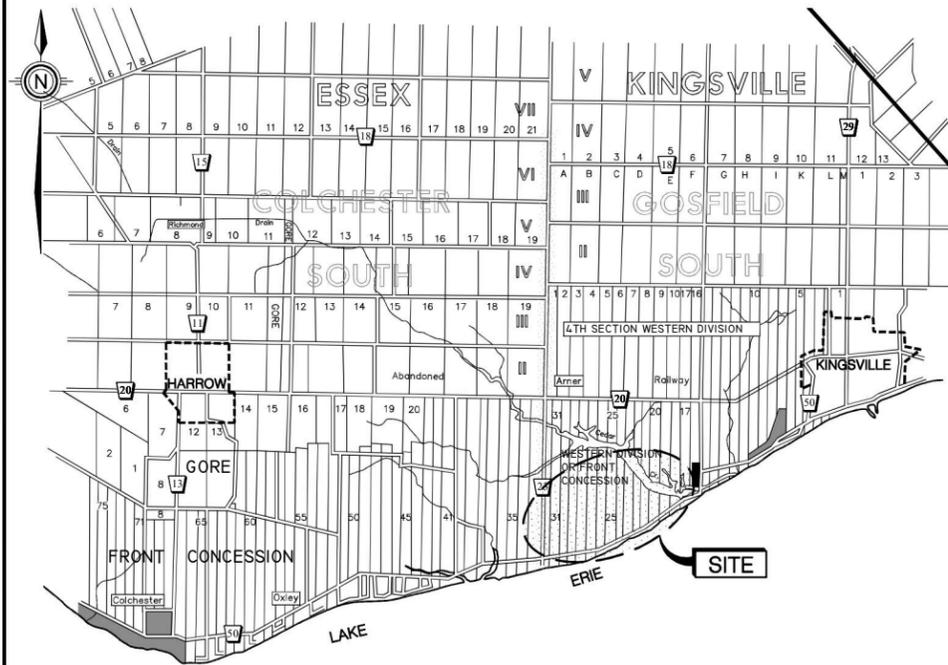
**TOWN OF KINGSVILLE**

MAYOR: DENNIS ROGERS  
CLERK: PAULA PARKER  
DRAINAGE SUPERINTENDENT: LU-ANN MARENTETTE

**BENCHMARKS:**

- 1) TOP NUT OF EXISTING FIRE HYDRANT LOCATED ON THE SOUTH SIDE OF COUNTY ROAD 50, JUST EAST OF M.N. 1381  
**ELEV. 176.896m**
- 2) TOP OF EAST END OF EXISTING 1600MM DIA. CSP PIPE LOCATED APPROXIMATELY 35m WEST OF THE FORD ROAD DRAIN OUTLET INTO THE ADAMS DRAIN  
**ELEV. 175.185m**
- 3) TOP OF CENTRE OF EXISTING SANITARY MANHOLE LID LOCATED AT THE NORTH END OF FORD ROAD, IN FRONT OF M.N. 287  
**ELEV. 176.747m**

100mm  
80mm  
60mm  
40mm  
20mm  
0



**LEGEND**  
 - - - - - DENOTES OVERALL WATERSHED LIMITS  
 (XXX) - DENOTES PARCEL ID# NUMBER

THESE DRAWINGS HAVE BEEN REDUCED IN SIZE AND THE SCALE THEREFORE VARIES. FULL SCALE DRAWINGS CAN BE VIEWED AT THE MUNICIPAL OFFICES IF REQUIRED.

PARCEL ID	OWNER NAME	PARCEL ID	OWNER NAME
1	Patricia & Thomas Nadasdi	24	Randal & Barbara Critke
2	Beverley Todd	25	Dennis Gagnon
3	Dale & Diana Blain	26	Warren Walls & Patricia Wilms
4	Linda Martschenko	27	Romana Halsehead
5	Justin & Sydney Fenao	28	Albert & Barbara Ricard
6	Jeo Family Holdings Utc	29	Marta Bueno & Christopher Clariccatoes
7	Essex Region Conservation Authority	30	Gonja Venus
8	Charles & Rachel Grover	31	Gary Laughheed
9	Jefferson Preston	32	Denise Stevenson
10	Michael & Amy Abbruzzese	33	Paul Trombley
11	Michael Sultana	34	Paul & Cheryl Lowes
12	David Liebrook	35	Cheryl Lowes
13	David Liebrook	36	Gordon Arner
14	Alan & Laura Gagne	37	Henry Wall Holdings Inc.
15	Matthew Renaud & Victoria Martin	38	Thomas Meleg
16	Jason & Amanda Dixon	39	Joseph Porto
17	Nicholas Friesen & Helen Unger	40	Gregory Iler & Elizabeth Kinnaird-Iler
18	Kevin Houf	41	Elizabeth Kinnaird-Iler
19	Pauline Collins	42	Iler Farms Incorporated
20	Coleen Hill	43	Michael & Stacey Mogyorady
21	Misty Colford	44	Arpad & Janet Szabo
22	Bradley & Amanda Noland	45	Barbara & Bruce Sovran
23	Frederick Fuller	46	Barbara Sovran

**A.B. PERALTA**  
100136683  
10-29-06-21  
PROVINCE OF ONTARIO

**Peralta Engineering**

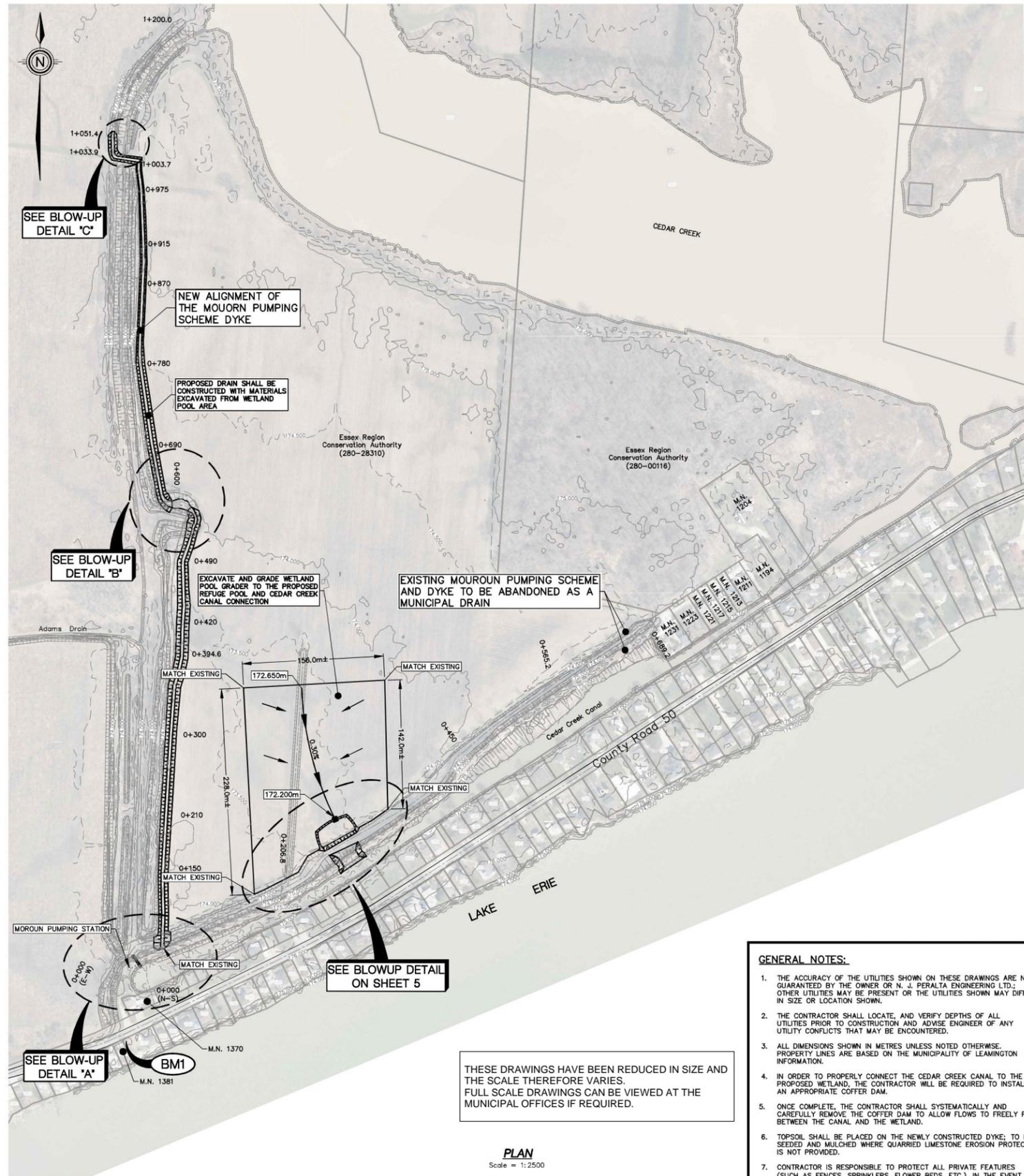
N.J. Peralta Engineering Ltd.  
Consulting Engineers

45 Division Street North P: 519-733-6587  
Kingsville, ON F: 519-733-6588  
N9Y 1E1, Canada peraltaengineering.com

DATE: June 21, 2024

DESIGNED BY: A.B.P.	DRAWN BY: N.D.H.	CHECKED BY: A.B.P.	PROJECT No.: D21-118	SHEET No.: 1 OF 5
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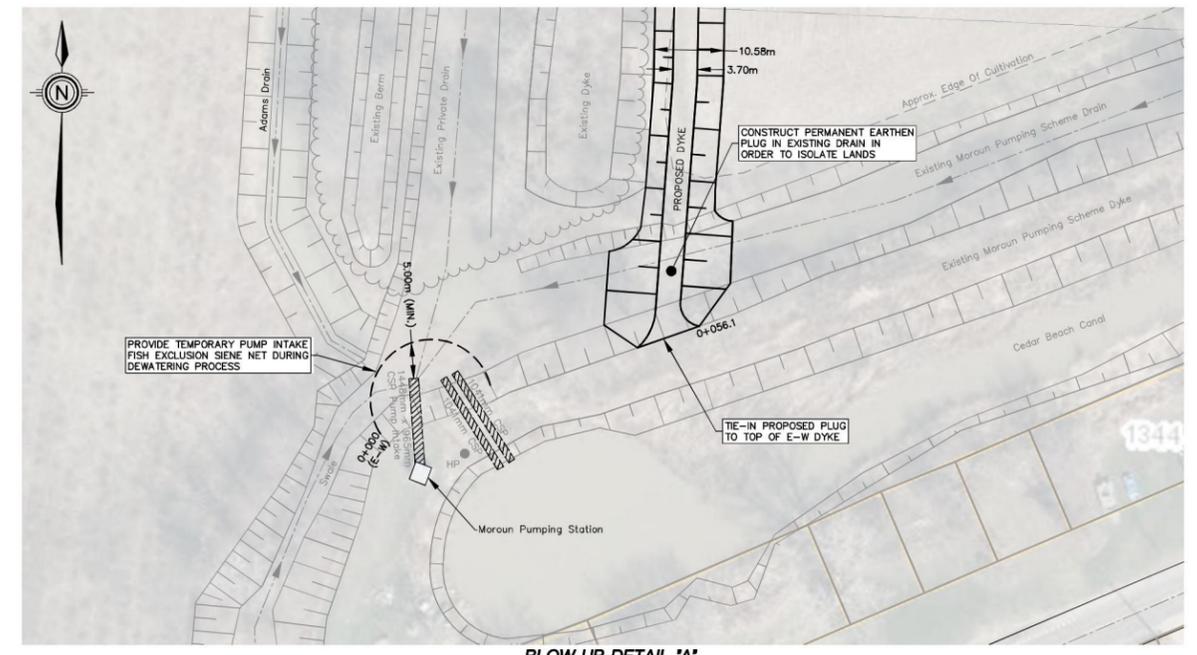


THESE DRAWINGS HAVE BEEN REDUCED IN SIZE AND THE SCALE THEREFORE VARIES. FULL SCALE DRAWINGS CAN BE VIEWED AT THE MUNICIPAL OFFICES IF REQUIRED.

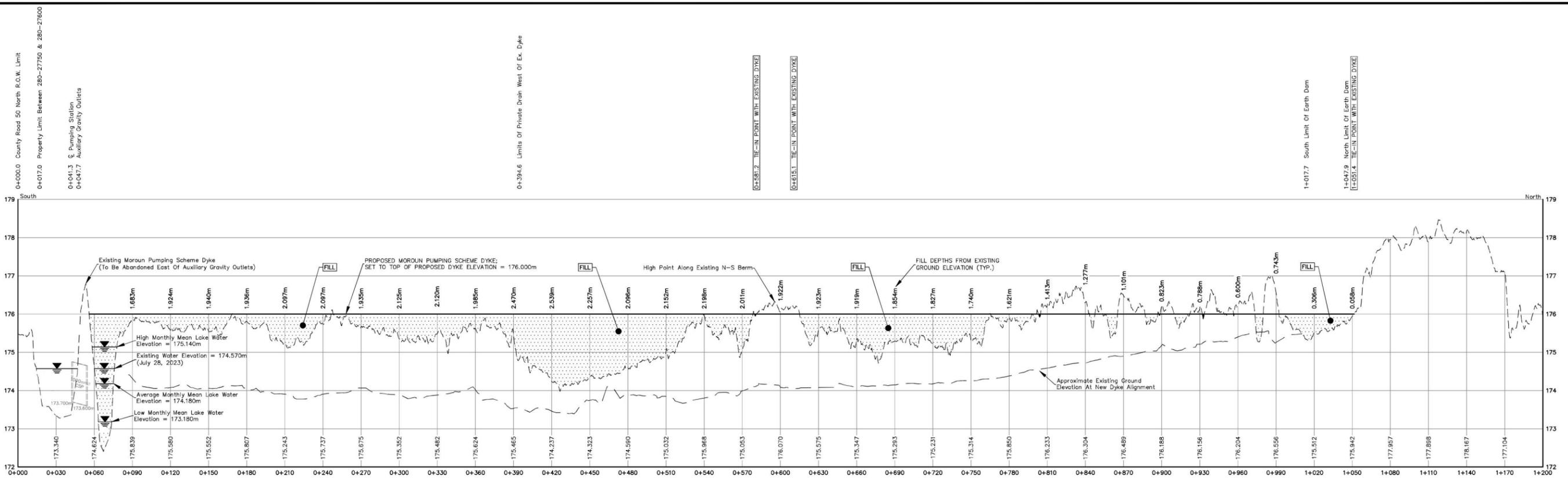
**PLAN**  
Scale = 1:2500

NOTE: DYKE ALIGNMENT SHALL BE POSITIONED AS CLOSE TO BRUSH AS POSSIBLE WITHOUT DISTURBING HEAVY VEGETATION

- GENERAL NOTES:**
1. THE ACCURACY OF THE UTILITIES SHOWN ON THESE DRAWINGS ARE NOT GUARANTEED BY THE OWNER OR N. J. PERALTA ENGINEERING LTD.; OTHER UTILITIES MAY BE PRESENT OR THE UTILITIES SHOWN MAY DIFFER IN SIZE OR LOCATION SHOWN.
  2. THE CONTRACTOR SHALL LOCATE, AND VERIFY DEPTHS OF ALL UTILITIES PRIOR TO CONSTRUCTION AND ADVISE ENGINEER OF ANY UTILITY CONFLICTS THAT MAY BE ENCOUNTERED.
  3. ALL DIMENSIONS SHOWN IN METRES UNLESS NOTED OTHERWISE. PROPERTY LINES ARE BASED ON THE MUNICIPALITY OF LEAMINGTON GIS INFORMATION.
  4. IN ORDER TO PROPERLY CONNECT THE CEDAR CREEK CANAL TO THE PROPOSED WETLAND, THE CONTRACTOR WILL BE REQUIRED TO INSTALL AN APPROPRIATE COFFER DAM.
  5. ONCE COMPLETE, THE CONTRACTOR SHALL SYSTEMATICALLY AND CAREFULLY REMOVE THE COFFER DAM TO ALLOW FLOWS TO FREELY PASS BETWEEN THE CANAL AND THE WETLAND.
  6. TOPSOIL SHALL BE PLACED ON THE NEWLY CONSTRUCTED DYKE, TO BE SEEDED AND MULCHED WHERE QUARRIED LIMESTONE EROSION PROTECTION IS NOT PROVIDED.
  7. CONTRACTOR IS RESPONSIBLE TO PROTECT ALL PRIVATE FEATURES (SUCH AS FENCES, SPRINKLERS, FLOWER BEDS, ETC.), IN THE EVENT THAT A PRIVATE FEATURE IS IN THE ALIGNMENT OF THE NEW COVERED DRAINAGE SYSTEM, THE CONTRACTOR SHALL CAREFULLY REMOVE AND RE-INSTALL THE PRIVATE FEATURE TO ITS ORIGINAL STATE, UNLESS OTHERWISE NOTED.

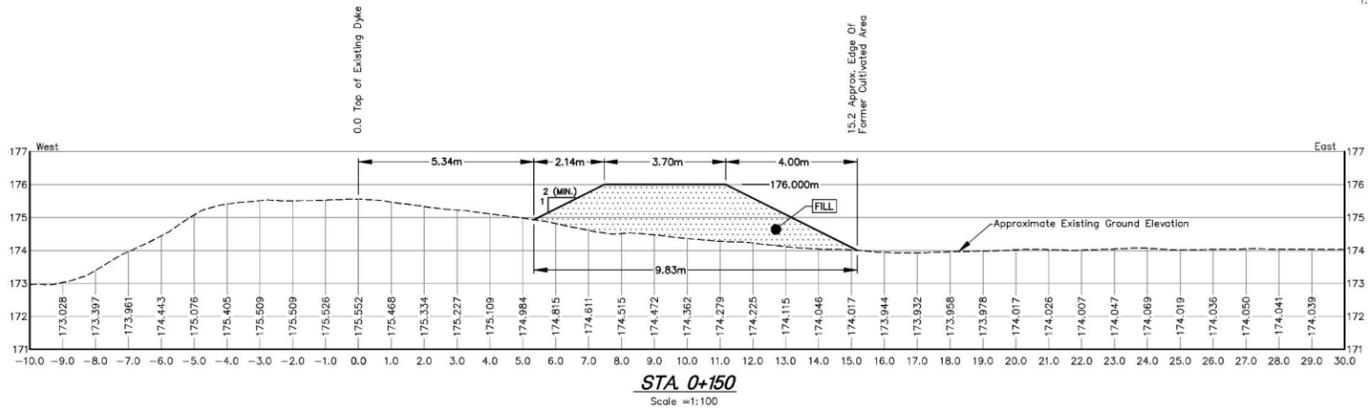


	<b>Peralta Engineering</b> N.J. Peralta Engineering Ltd. Consulting Engineers 45 Division Street North Kingsville, ON N9Y 1E1, Canada P: 519-733-6587 F: 519-733-6588 peraltaengineering.com	
	DATE: June 21, 2024 DESIGNED BY: A.B.P. DRAWN BY: N.D.H. CHECKED BY: A.B.P.	PROJECT No.: D21-118 SHEET No.: 2 OF 5



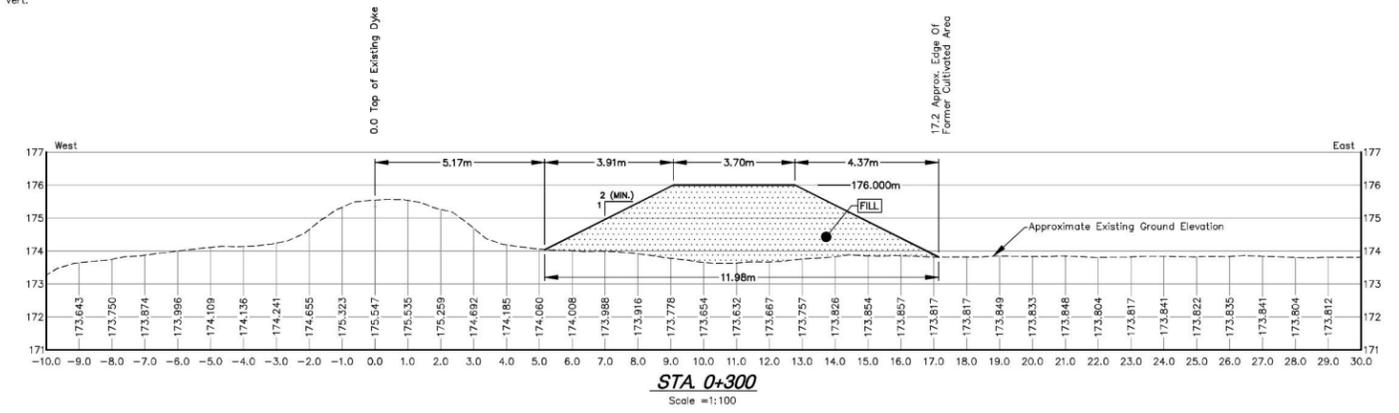
**NORTH-SOUTH DYKE PROFILE**

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1:50 Vert.



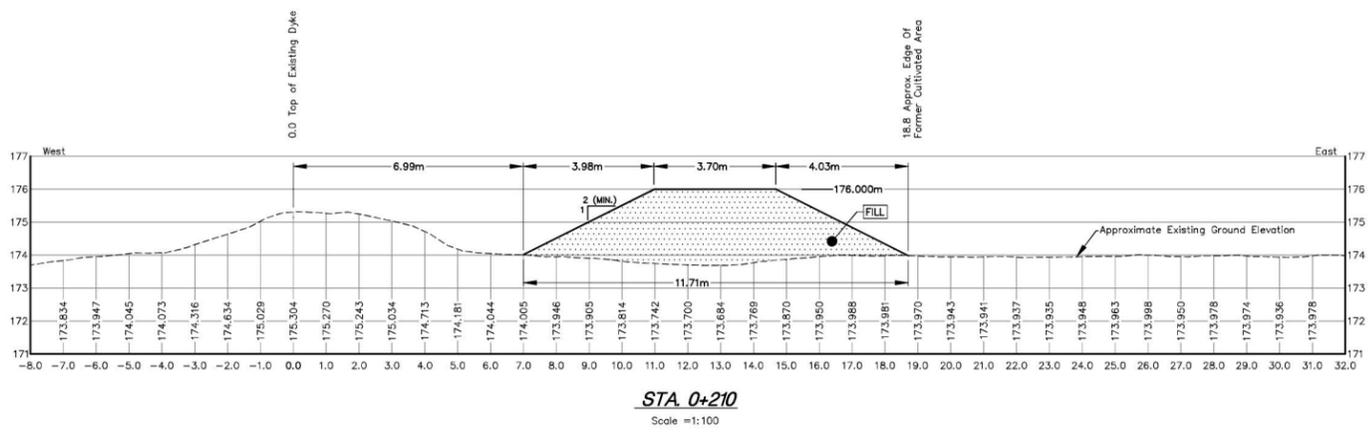
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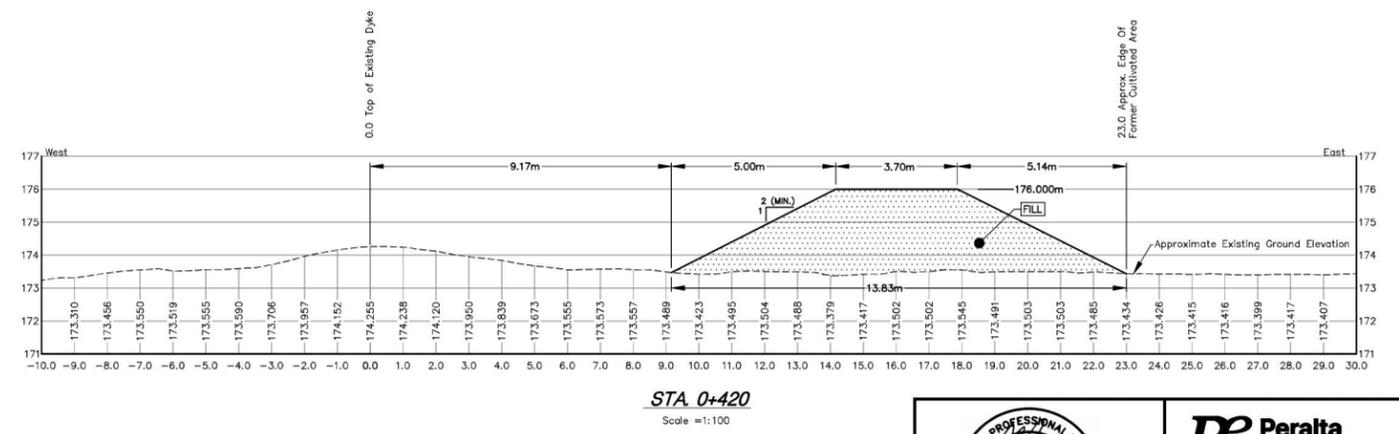
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**STA. 0+210**

Scale = 1:100



**STA. 0+420**

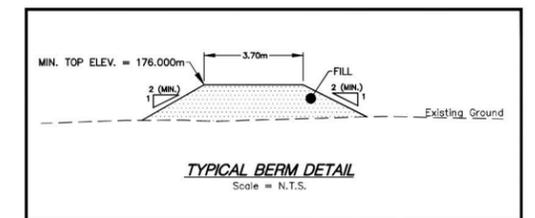
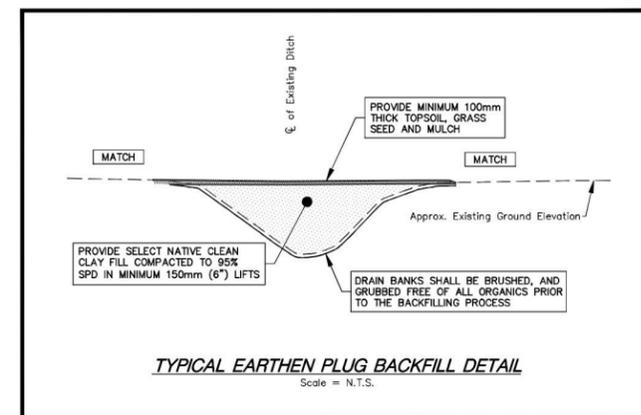
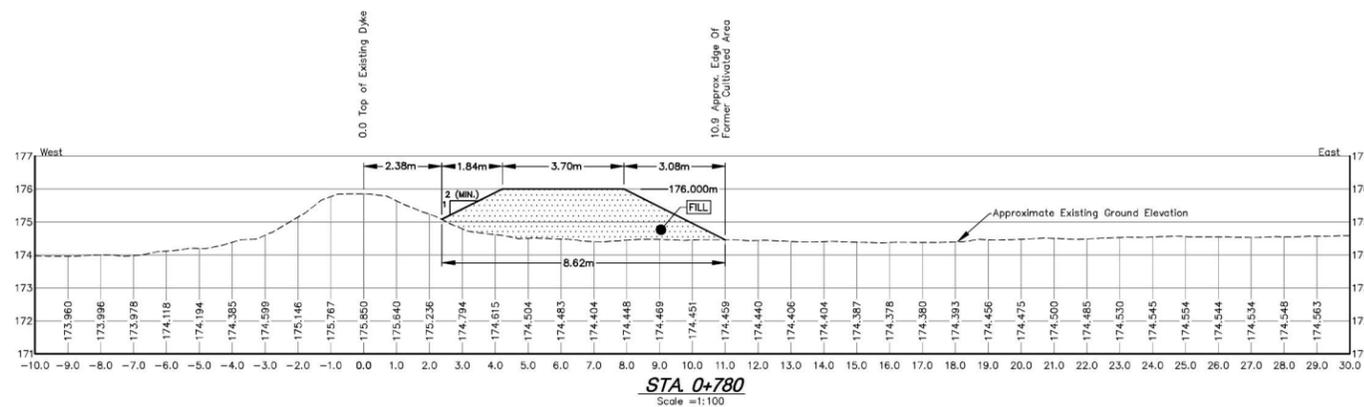
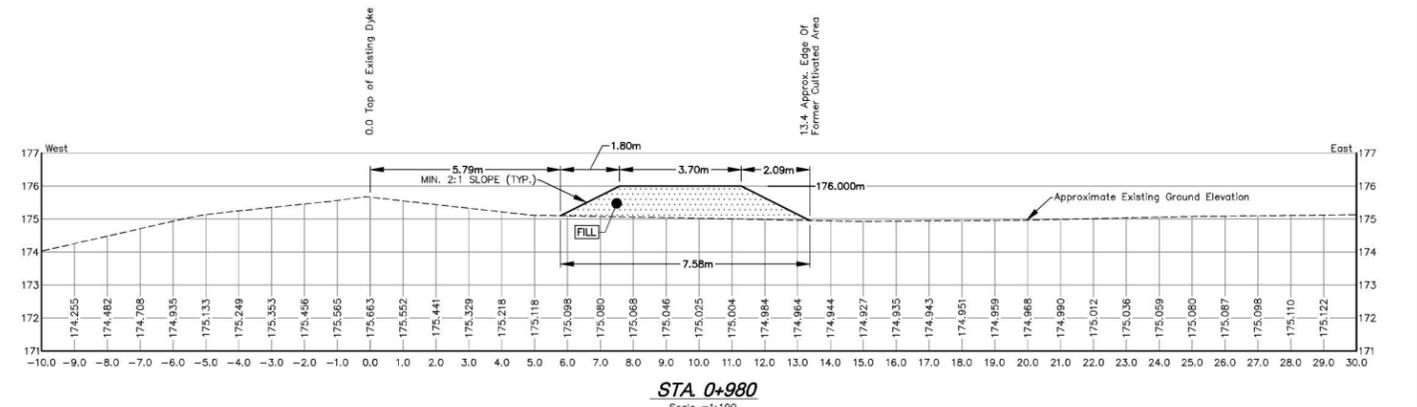
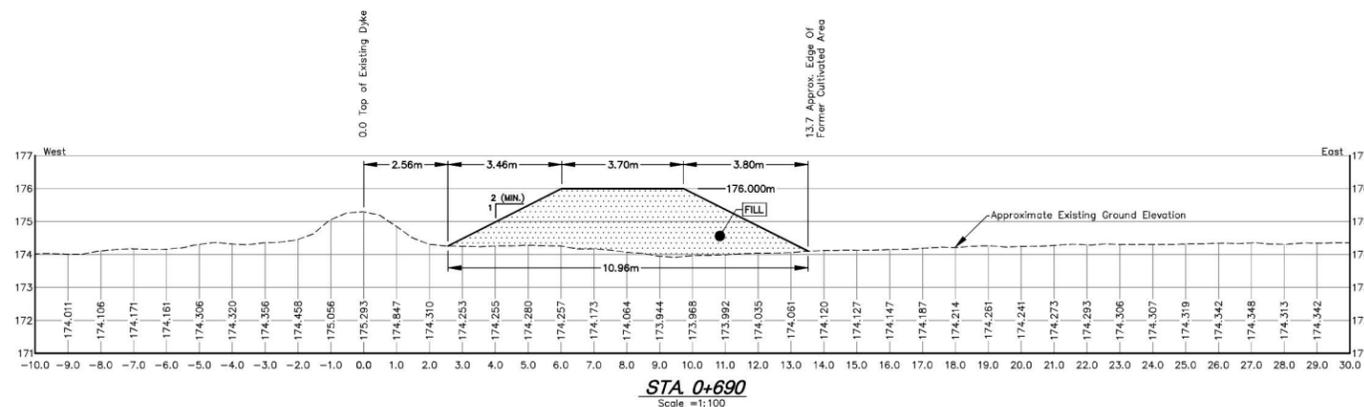
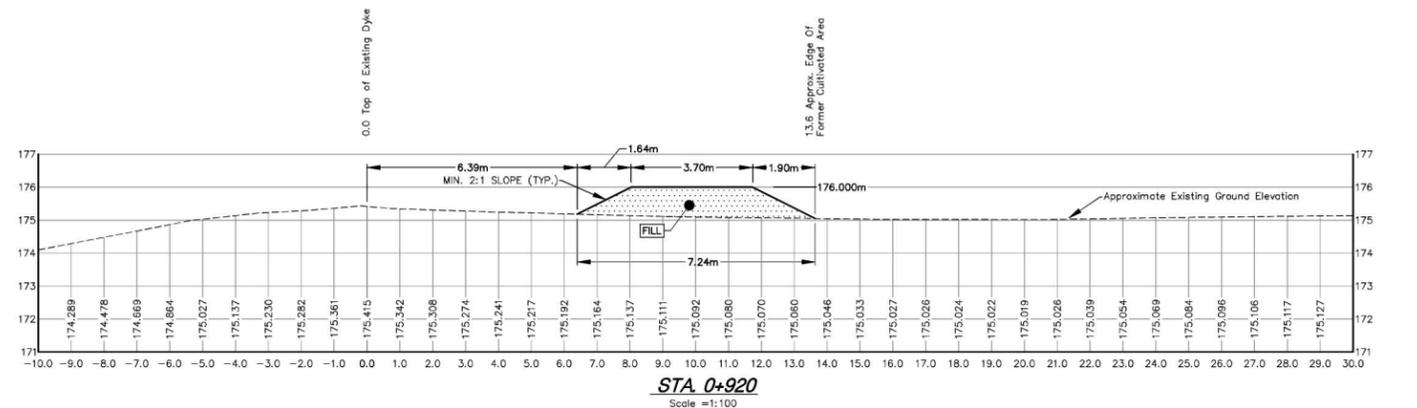
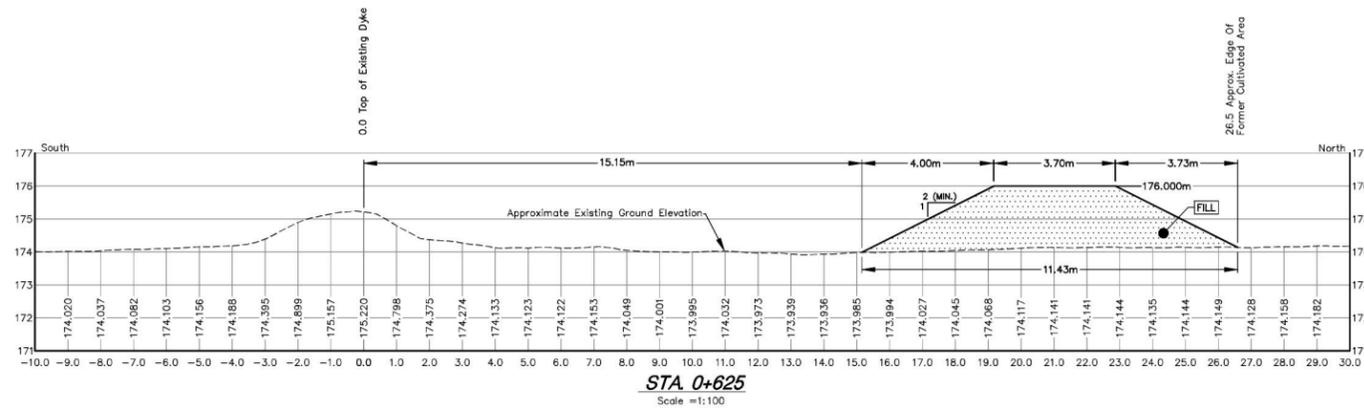
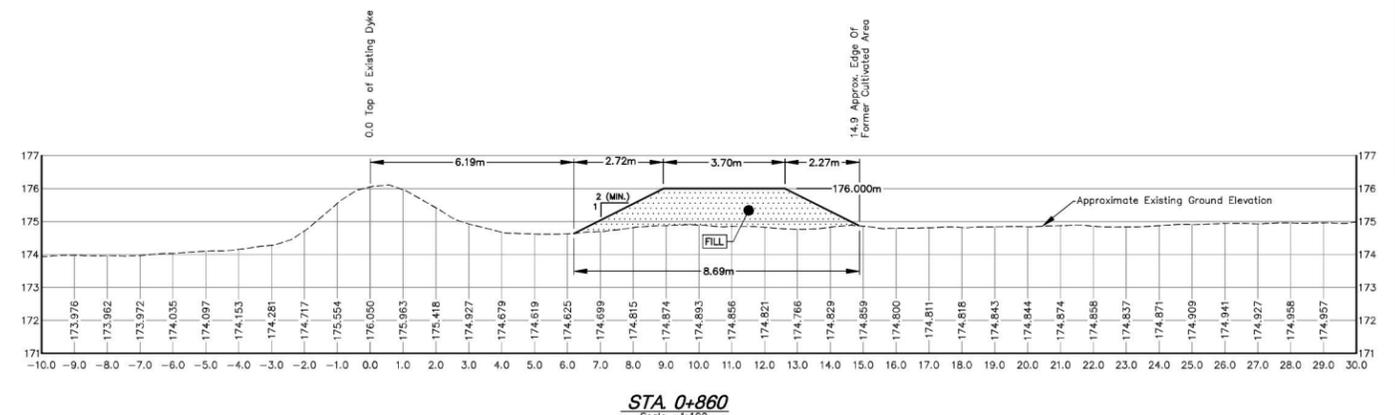
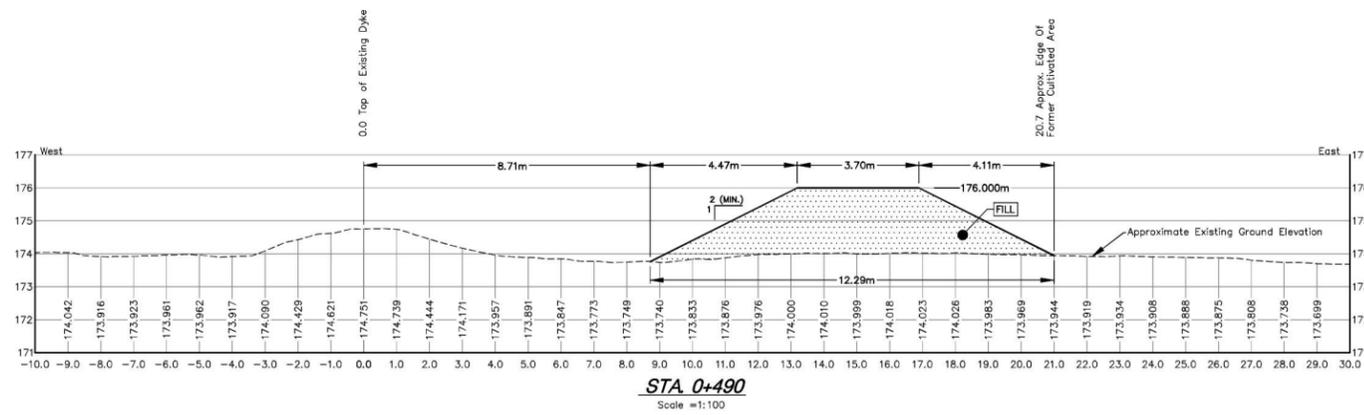
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THESE DRAWINGS HAVE BEEN REDUCED IN SIZE AND THE SCALE THEREFORE VARIES. FULL SCALE DRAWINGS CAN BE VIEWED AT THE MUNICIPAL OFFICES IF REQUIRED.



N.J. Peralta Engineering Ltd.  
Consulting Engineers  
45 Division Street North  
Kingsville, ON  
N9Y 1E1 Canada  
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peraltaengineering.com

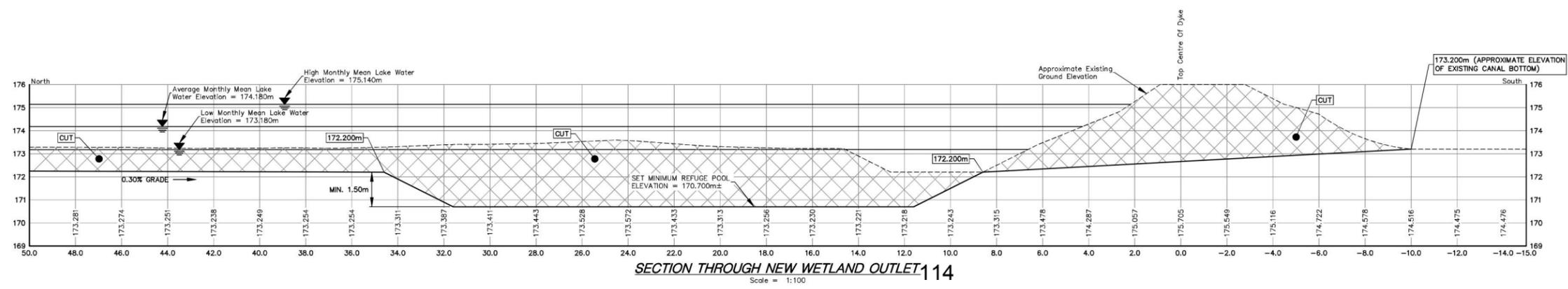
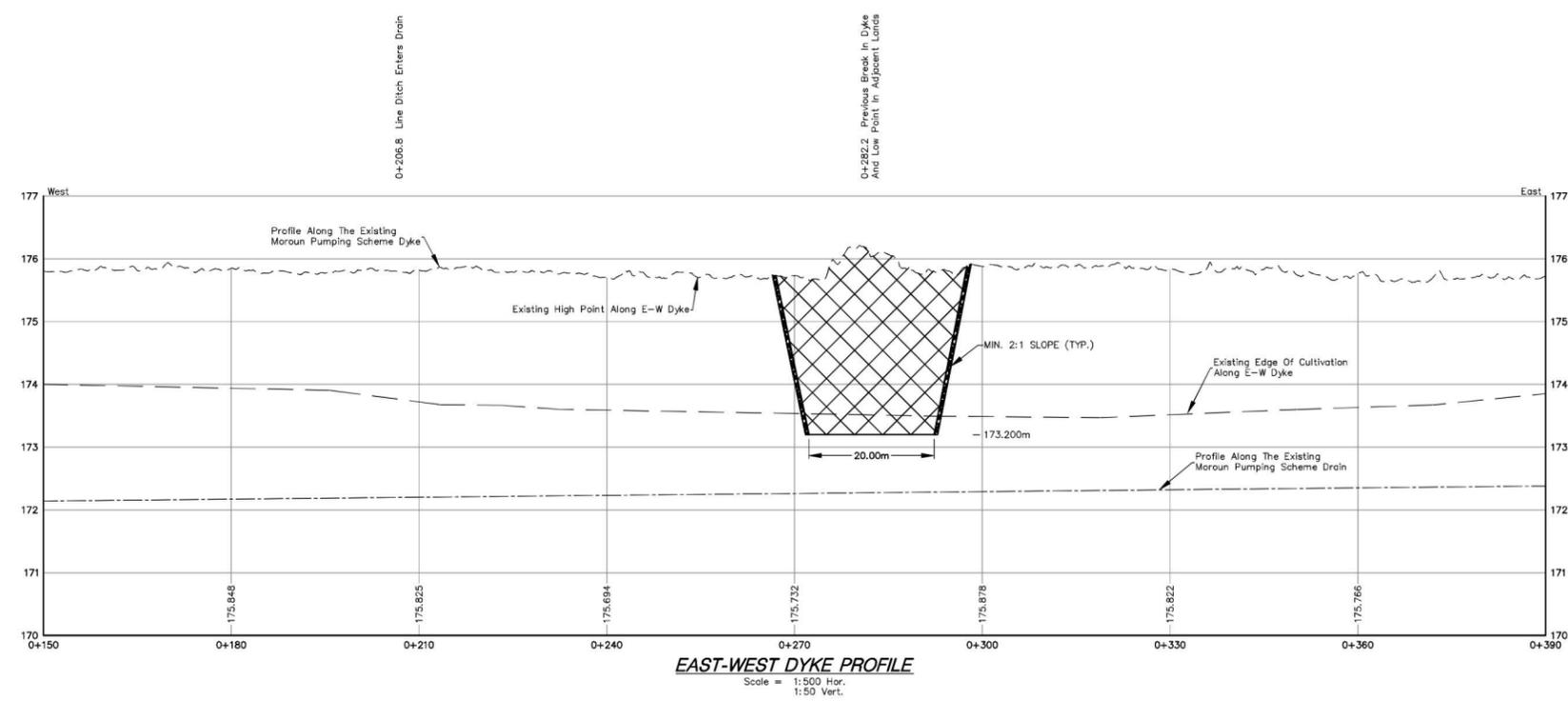
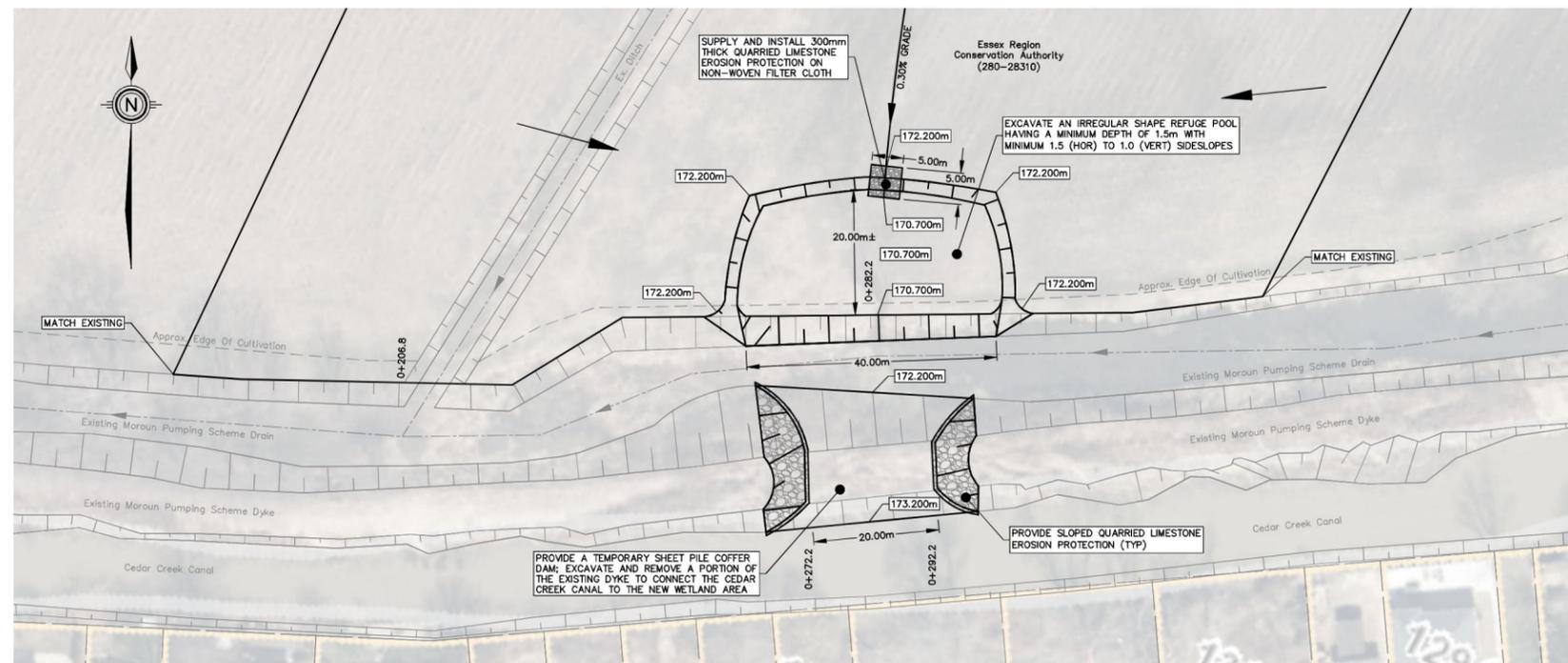
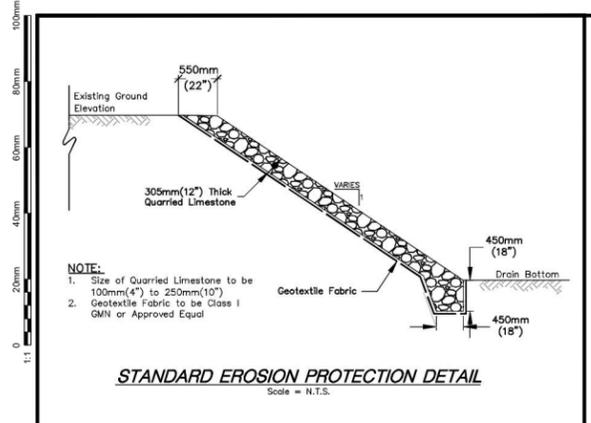
DATE: June 21, 2024	DESIGNED BY: A.B.P.	DRAWN BY: N.D.H.	CHECKED BY: A.B.P.	PROJECT No.: D21-118	SHEET No.: 3 OF 5
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THESE DRAWINGS HAVE BEEN REDUCED IN SIZE AND THE SCALE THEREFORE VARIES. FULL SCALE DRAWINGS CAN BE VIEWED AT THE MUNICIPAL OFFICES IF REQUIRED.

**Peralta Engineering**  
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Kingsville, ON  
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peraltaengineering.com

DATE: June 21, 2024  
DESIGNED BY: A.B.P.  
DRAWN BY: N.D.H.  
CHECKED BY: A.B.P.  
PROJECT No.: D21-118  
SHEET No.: 4 OF 5



THESE DRAWINGS HAVE BEEN REDUCED IN SIZE AND THE SCALE THEREFORE VARIES. FULL SCALE DRAWINGS CAN BE VIEWED AT THE MUNICIPAL OFFICES IF REQUIRED.



**Peralta Engineering**

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DATE: June 21, 2024	DESIGNED BY: A.B.P.	DRAWN BY: N.D.H.	CHECKED BY: A.B.P.	PROJECT No.: D21-118	SHEET No.: 5 OF 5
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# APPENDIX "C"

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## **APPENDIX C-1**

# Future Maintenance Schedule Pump Station and Auxiliary Gravity Outlets

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**FUTURE MAINTENANCE SCHEDULE OF ASSESSMENT**

Pump Station and Auxiliary Gravity Outlets

**TOWN OF KINGSVILLE**

**3. MUNICIPAL LANDS:**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
	County Road 23				1.27	0.514	County of Essex	\$ -	\$ 53.00	\$ 53.00
	County Road 50				1.54	0.623	County of Essex	\$ -	\$ 64.00	\$ 64.00
	Ford Road				1.12	0.453	Town of Kingsville	\$ -	\$ 46.00	\$ 46.00
<b>Total on Municipal Lands.....</b>								<b>\$ -</b>	<b>\$ 163.00</b>	<b>\$ 163.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
1	280-27900	1 WD	Pt. 24	0.26	0.26	0.106	Patricia & Thomas Nadasdi	\$ -	\$ 9.00	\$ 9.00
2	280-28000	1 WD	Pt. 24	8.83	8.83	3.573	Beverley Todd	\$ -	\$ 110.00	\$ 110.00
3	280-28002	1 WD	Pt. 24	0.66	0.66	0.268	Dale & Diana Blain	\$ -	\$ 16.00	\$ 16.00
4	280-28100	1 WD	Pt. 24	0.38	0.38	0.154	Linda Martschenko	\$ -	\$ 12.00	\$ 12.00
5	280-28200	1 WD	Pt. 24	0.25	0.25	0.101	Justyn & Sydney Fenos	\$ -	\$ 9.00	\$ 9.00
8	280-28315	1 WD	Pt. 24	1.21	1.21	0.490	Charles & Rachel Grover	\$ -	\$ 25.00	\$ 25.00
9	280-28320	1 WD	Pt. 24	0.90	0.90	0.364	Jefferson Preston	\$ -	\$ 20.00	\$ 20.00
10	280-28400	1408	77 to 78	0.23	0.23	0.093	Michael & Amy Abbruzzese	\$ -	\$ 8.00	\$ 8.00
11	280-28500	1408	79	0.09	0.09	0.037	Michael Sultana	\$ -	\$ 4.00	\$ 4.00
12	280-28600	1408	80 to 81	0.18	0.18	0.074	David Liebrock	\$ -	\$ 7.00	\$ 7.00
13	280-28700	1408	82	0.11	0.11	0.046	David Liebrock	\$ -	\$ 5.00	\$ 5.00
14	280-28801	1408	83 Pt. 84	0.14	0.14	0.056	Allan & Laura Gagne	\$ -	\$ 5.00	\$ 5.00
15	280-28802	1408	85 Pt. 84	0.14	0.14	0.056	Matthew Renaud & Victoria Martin	\$ -	\$ 5.00	\$ 5.00
16	280-28900	1408	86	0.09	0.09	0.037	Jason & Amanda Dixon	\$ -	\$ 4.00	\$ 4.00

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS: *Continued***

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
17	280-29000	1408	87	0.09	0.09	0.037	Nicholas Friesen & Helen Unger	\$ -	\$ 4.00	\$ 4.00
18	280-29100	1408	88	0.09	0.09	0.037	Kevin Houf	\$ -	\$ 4.00	\$ 4.00
19	280-29200	1408	89 to 93	0.46	0.46	0.186	Pauline Collins	\$ -	\$ 14.00	\$ 14.00
20	280-29300	1408	76 & Pt. 75	0.10	0.10	0.042	Coleen Will	\$ -	\$ 5.00	\$ 5.00
21	280-29400	1408	74 & Pt. 75	0.17	0.17	0.070	Misty Collard	\$ -	\$ 7.00	\$ 7.00
22	280-29500	1408	71 to 73	0.28	0.28	0.111	Bradley & Amanda Noland	\$ -	\$ 9.00	\$ 9.00
23	280-29600	1408	69 to 70	0.18	0.18	0.074	Frederick Fuller	\$ -	\$ 7.00	\$ 7.00
24	280-29700	1408	66 to 68	0.28	0.28	0.111	Randal & Barbara Gritke	\$ -	\$ 9.00	\$ 9.00
25	280-29800	1408	65	0.09	0.09	0.037	Dennis Gagnon	\$ -	\$ 4.00	\$ 4.00
26	280-29900	1408	Pt. 62 to 64	0.25	0.25	0.102	Warren Walls & Patricia Willms	\$ -	\$ 9.00	\$ 9.00
27	280-30000	1408	61 & Pt. 62	0.11	0.11	0.046	Romona Halstead	\$ -	\$ 5.00	\$ 5.00
28	280-30100	1408	60	0.09	0.09	0.037	Albert & Barbara Ricard	\$ -	\$ 4.00	\$ 4.00
29	280-30200	1408	58 to 59	0.25	0.25	0.101	Marta Bueno & Christopher Clarricoates	\$ -	\$ 9.00	\$ 9.00
30	280-30300	1 WD	Pt. 25	0.87	0.87	0.352	Gonja Venus	\$ -	\$ 23.00	\$ 23.00
31	280-30301	1 WD	Pt. 25	0.41	0.41	0.166	Gary Lougheed	\$ -	\$ 13.00	\$ 13.00
32	280-30400	1 WD	Pt. 25	0.55	0.55	0.223	Denise Stevenson	\$ -	\$ 15.00	\$ 15.00
33	280-30500	1 WD	Pt. 25	0.15	0.15	0.061	Paul Trombley	\$ -	\$ 6.00	\$ 6.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>								<b>\$ -</b>	<b>\$ 386.00</b>	<b>\$ 386.00</b>

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):**

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
6	280-28300	1 WD	23 to 26	151.74	126.72	51.283	Jeo Family Holdings Ulc	\$ 364.00	\$ 1,049.00	\$ 1,413.00
7	280-28310	1 WD	20 to 26	357.36	126.00	50.992	Essex Region Conservation Authority	\$ 3,636.00	\$ 1,048.00	\$ 4,684.00
34	280-31000	1 WD	Pt. 27	88.00	51.00	20.639	Paul & Cheryl Lowes	\$ -	\$ 422.00	\$ 422.00
35	280-31100	1 WD	28 & Pt. 29	193.80	84.00	33.994	Cheryl Lowes	\$ -	\$ 696.00	\$ 696.00
36	280-31400	1 WD	Pt. 29 & 30	217.43	120.00	48.563	Gordon Arner	\$ -	\$ 994.00	\$ 994.00
37	280-31500	1 WD	Pt. 31	119.14	50.00	20.235	Henry Wall Holdings Inc.	\$ -	\$ 414.00	\$ 414.00
38	280-31701	1 WD	Pt. 32	65.08	10.00	4.047	Thomas Meleg	\$ -	\$ 83.00	\$ 83.00

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable): *Continued***

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
39	280-31800	1 WD	Pt. 32	51.50	18.00	7.285	Joseph Porto	\$ -	\$ 149.00	\$ 149.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>								<b>\$ 4,000.00</b>	<b>\$ 4,855.00</b>	<b>\$ 8,855.00</b>
<b>TOTAL ASSESSMENT - Town of Kingsville</b>								<b>\$ 4,000.00</b>	<b>\$ 5,404.00</b>	<b>\$ 9,404.00</b>

**TOWN OF ESSEX**

**3. MUNICIPAL LANDS:**

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
	County Road 23				1.07	0.433	County of Essex	\$ -	\$ 44.00	\$ 44.00
<b>Total on Municipal Lands.....</b>								<b>\$ -</b>	<b>\$ 44.00</b>	<b>\$ 44.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
43	610-11750	1	Pt Lot 33	0.60	0.23	0.093	Michael & Stacey Mogyorody	\$ -	\$ 8.00	\$ 8.00
45	610-11802	1	Pt Lot 33	0.30	0.30	0.122	Barbara & Bruce Sovran	\$ -	\$ 10.00	\$ 10.00
46	610-11805	1	Pt Lot 33	1.52	1.52	0.616	Barbara Sovran	\$ -	\$ 33.00	\$ 33.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>								<b>\$ -</b>	<b>\$ 51.00</b>	<b>\$ 51.00</b>

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
40	610-11401	1	Pt Lot 36	45.69	1.24	0.502	Gregory Iler & Elizabeth Kinnaird-Iler	\$ -	\$ 10.00	\$ 10.00
41	610-11500	1	Pt Lot 35	102.34	11.37	4.601	Elizabeth Kinnaird-Iler	\$ -	\$ 94.00	\$ 94.00
42	610-11600	1	Pt Lot 34	109.48	25.00	10.117	Iler Farms Incorporated	\$ -	\$ 207.00	\$ 207.00
44	610-11800	1	Pt Lot 33	48.33	22.96	9.292	Arpad & Janet Szabo	\$ -	\$ 190.00	\$ 190.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>								<b>\$ -</b>	<b>\$ 501.00</b>	<b>\$ 501.00</b>
<b>TOTAL ASSESSMENT - Town of Essex</b>								<b>\$ -</b>	<b>\$ 596.00</b>	<b>\$ 596.00</b>
<b>TOTAL ASSESSMENT - Town of Kingsville (brought forward)</b>								<b>\$ 4,000.00</b>	<b>\$ 5,404.00</b>	<b>\$ 9,404.00</b>
<b>TOTAL ASSESSMENT</b>					<b>671.26</b>	<b>271.66</b>		<b>\$ 4,000.00</b>	<b>\$ 6,000.00</b>	<b>\$ 10,000.00</b>

## **APPENDIX C-2**

### Future Maintenance Schedule Flood Protection Dyke

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**FUTURE MAINTENANCE SCHEDULE OF ASSESSMENT**

Flood Protection Dyke

**TOWN OF KINGSVILLE**

**3. MUNICIPAL LANDS:**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
	County Road 23				1.27	0.514	County of Essex	\$ -	\$ 18.00	\$ 18.00
	County Road 50				1.54	0.623	County of Essex	\$ -	\$ 21.00	\$ 21.00
	Ford Road				1.12	0.453	Town of Kingsville	\$ -	\$ 15.00	\$ 15.00
<b>Total on Municipal Lands.....</b>								<b>\$ -</b>	<b>\$ 54.00</b>	<b>\$ 54.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
1	280-27900	1 WD	Pt. 24	0.26	0.26	0.106	Patricia & Thomas Nadasdi	\$ -	\$ 3.00	\$ 3.00
2	280-28000	1 WD	Pt. 24	8.83	8.83	3.573	Beverley Todd	\$ -	\$ 37.00	\$ 37.00
3	280-28002	1 WD	Pt. 24	0.66	0.66	0.268	Dale & Diana Blain	\$ -	\$ 5.00	\$ 5.00
4	280-28100	1 WD	Pt. 24	0.38	0.38	0.154	Linda Martschenko	\$ -	\$ 4.00	\$ 4.00
5	280-28200	1 WD	Pt. 24	0.25	0.25	0.101	Justyn & Sydney Fenos	\$ -	\$ 3.00	\$ 3.00
8	280-28315	1 WD	Pt. 24	1.21	1.21	0.490	Charles & Rachel Grover	\$ -	\$ 8.00	\$ 8.00
9	280-28320	1 WD	Pt. 24	0.90	0.90	0.364	Jefferson Preston	\$ -	\$ 7.00	\$ 7.00
10	280-28400	1408	77 to 78	0.23	0.23	0.093	Michael & Amy Abbruzzese	\$ -	\$ 3.00	\$ 3.00
11	280-28500	1408	79	0.09	0.09	0.037	Michael Sultana	\$ -	\$ 1.00	\$ 1.00
12	280-28600	1408	80 to 81	0.18	0.18	0.074	David Liebrock	\$ -	\$ 2.00	\$ 2.00
13	280-28700	1408	82	0.11	0.11	0.046	David Liebrock	\$ -	\$ 2.00	\$ 2.00
14	280-28801	1408	83 Pt. 84	0.14	0.14	0.056	Allan & Laura Gagne	\$ -	\$ 2.00	\$ 2.00
15	280-28802	1408	85 Pt. 84	0.14	0.14	0.056	Matthew Renaud & Victoria Martin	\$ -	\$ 2.00	\$ 2.00
16	280-28900	1408	86	0.09	0.09	0.037	Jason & Amanda Dixon	\$ -	\$ 1.00	\$ 1.00

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS: *Continued***

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
17	280-29000	1408	87	0.09	0.09	0.037	Nicholas Friesen & Helen Unger	\$ -	\$ 1.00	\$ 1.00
18	280-29100	1408	88	0.09	0.09	0.037	Kevin Houf	\$ -	\$ 1.00	\$ 1.00
19	280-29200	1408	89 to 93	0.46	0.46	0.186	Pauline Collins	\$ -	\$ 5.00	\$ 5.00
20	280-29300	1408	76 & Pt. 75	0.10	0.10	0.042	Coleen Will	\$ -	\$ 2.00	\$ 2.00
21	280-29400	1408	74 & Pt. 75	0.17	0.17	0.070	Misty Collard	\$ -	\$ 2.00	\$ 2.00
22	280-29500	1408	71 to 73	0.28	0.28	0.111	Bradley & Amanda Noland	\$ -	\$ 3.00	\$ 3.00
23	280-29600	1408	69 to 70	0.18	0.18	0.074	Frederick Fuller	\$ -	\$ 2.00	\$ 2.00
24	280-29700	1408	66 to 68	0.28	0.28	0.111	Randal & Barbara Gritke	\$ -	\$ 3.00	\$ 3.00
25	280-29800	1408	65	0.09	0.09	0.037	Dennis Gagnon	\$ -	\$ 1.00	\$ 1.00
26	280-29900	1408	Pt. 62 to 64	0.25	0.25	0.102	Warren Walls & Patricia Willms	\$ -	\$ 3.00	\$ 3.00
27	280-30000	1408	61 & Pt. 62	0.11	0.11	0.046	Romona Halstead	\$ -	\$ 2.00	\$ 2.00
28	280-30100	1408	60	0.09	0.09	0.037	Albert & Barbara Ricard	\$ -	\$ 1.00	\$ 1.00
29	280-30200	1408	58 to 59	0.25	0.25	0.101	Marta Bueno & Christopher Clarricoates	\$ -	\$ 3.00	\$ 3.00
30	280-30300	1 WD	Pt. 25	0.87	0.87	0.352	Gonja Venus	\$ -	\$ 8.00	\$ 8.00
31	280-30301	1 WD	Pt. 25	0.41	0.41	0.166	Gary Lougheed	\$ -	\$ 4.00	\$ 4.00
32	280-30400	1 WD	Pt. 25	0.55	0.55	0.223	Denise Stevenson	\$ -	\$ 5.00	\$ 5.00
33	280-30500	1 WD	Pt. 25	0.15	0.15	0.061	Paul Trombley	\$ -	\$ 2.00	\$ 2.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>								<b>\$ -</b>	<b>\$ 128.00</b>	<b>\$ 128.00</b>

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
6	280-28300	1 WD	23 to 26	151.74	126.72	51.283	Jeo Family Holdings Ulc	\$ 727.00	\$ 350.00	\$ 1,077.00
7	280-28310	1 WD	20 to 26	357.36	126.00	50.992	Essex Region Conservation Authority	\$ 7,273.00	\$ 350.00	\$ 7,623.00
34	280-31000	1 WD	Pt. 27	88.00	51.00	20.639	Paul & Cheryl Lowes	\$ -	\$ 141.00	\$ 141.00
35	280-31100	1 WD	28 & Pt. 29	193.80	84.00	33.994	Cheryl Lowes	\$ -	\$ 232.00	\$ 232.00
36	280-31400	1 WD	Pt. 29 & 30	217.43	120.00	48.563	Gordon Arner	\$ -	\$ 331.00	\$ 331.00
37	280-31500	1 WD	Pt. 31	119.14	50.00	20.235	Henry Wall Holdings Inc.	\$ -	\$ 138.00	\$ 138.00
38	280-31701	1 WD	Pt. 32	65.08	10.00	4.047	Thomas Meleg	\$ -	\$ 28.00	\$ 28.00

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable): *Continued***

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
39	280-31800	1 WD	Pt. 32	51.50	18.00	7.285	Joseph Porto	\$ -	\$ 50.00	\$ 50.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>								<b>\$ 8,000.00</b>	<b>\$ 1,620.00</b>	<b>\$ 9,620.00</b>
<b>TOTAL ASSESSMENT - Town of Kingsville</b>								<b>\$ 8,000.00</b>	<b>\$ 1,802.00</b>	<b>\$ 9,802.00</b>

**TOWN OF ESSEX**

**3. MUNICIPAL LANDS:**

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
	County Road 23				1.07	0.433	County of Essex	\$ -	\$ 15.00	\$ 15.00
<b>Total on Municipal Lands.....</b>								<b>\$ -</b>	<b>\$ 15.00</b>	<b>\$ 15.00</b>

**4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:**

Parcel ID Number	Tax Roll Number	Con. or Plan Number	Lot or Part of Lot	Acres Owned	Acres Affected	Hectares Affected	Owner's Name	Value of Benefit	Value of Outlet	TOTAL VALUE
43	610-11750	1	Pt Lot 33	0.60	0.23	0.093	Michael & Stacey Mogyorody	\$ -	\$ 3.00	\$ 3.00
45	610-11802	1	Pt Lot 33	0.30	0.30	0.122	Barbara & Bruce Sovran	\$ -	\$ 3.00	\$ 3.00
46	610-11805	1	Pt Lot 33	1.52	1.52	0.616	Barbara Sovran	\$ -	\$ 11.00	\$ 11.00
<b>Total on Privately Owned - Non-Agricultural Lands.....</b>								<b>\$ -</b>	<b>\$ 17.00</b>	<b>\$ 17.00</b>

**5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):**

<u>Parcel ID Number</u>	<u>Tax Roll Number</u>	<u>Con. or Plan Number</u>	<u>Lot or Part of Lot</u>	<u>Acres Owned</u>	<u>Acres Affected</u>	<u>Hectares Affected</u>	<u>Owner's Name</u>	<u>Value of Benefit</u>	<u>Value of Outlet</u>	<u>TOTAL VALUE</u>
40	610-11401	1	Pt Lot 36	45.69	1.24	0.502	Gregory Iler & Elizabeth Kinnaid-Iler	\$ -	\$ 3.00	\$ 3.00
41	610-11500	1	Pt Lot 35	102.34	11.37	4.601	Elizabeth Kinnaid-Iler	\$ -	\$ 31.00	\$ 31.00
42	610-11600	1	Pt Lot 34	109.48	25.00	10.117	Iler Farms Incorporated	\$ -	\$ 69.00	\$ 69.00
44	610-11800	1	Pt Lot 33	48.33	22.96	9.292	Arpad & Janet Szabo	\$ -	\$ 63.00	\$ 63.00
<b>Total on Privately Owned - Agricultural Lands (grantable).....</b>								<b>\$ -</b>	<b>\$ 166.00</b>	<b>\$ 166.00</b>
<b>TOTAL ASSESSMENT - Town of Essex</b>								<b>\$ -</b>	<b>\$ 198.00</b>	<b>\$ 198.00</b>
<b>TOTAL ASSESSMENT - Town of Kingsville (brought forward)</b>								<b>\$ 8,000.00</b>	<b>\$ 1,802.00</b>	<b>\$ 9,802.00</b>
<b>TOTAL ASSESSMENT</b>					<b>671.26</b>	<b>271.66</b>		<b>\$ 8,000.00</b>	<b>\$ 2,000.00</b>	<b>\$ 10,000.00</b>



**Date:** July 8, 2024  
**To:** Mayor and Council  
**Author:** Lu-Ann Marentette – Drainage Superintendent  
**RE:** 8th Concession Drain – MTO Highway Widening Project

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### **RECOMMENDED ACTION**

That the Report provided by Dillon Consulting, dated June 10, 2024, on the 8<sup>th</sup> Concession Drain for improvements on the drain for the MTO Highway Widening Project, under a Report of an Engineer pursuant to Section 78 of the Drainage Act **BE ADOPTED.**

### **BACKGROUND**

On July 10, 2023, staff received a request from the Ministry of Transportation to request drain improvements for the new intersection of County Road 27 and Highway 3.

### **DISCUSSION**

The Engineer has provided his report dated June 10, 2024, to extend the Highway 3 culvert, and to remove the 8th Concession Road bridge, and to realign the upper portion of the drain along the west side of County Road 27 including two new culverts for the new South Talbot Road relocation to the north and a clean out of the drain from 8th Concession Road at Highway 3 upstream to top end of drain to facilitate the new culvert works for South Talbot Road.

Landowners within the watershed have been invited and have received a copy of the Engineer's report. The upstream watershed for the drain has changed and therefore a future maintenance schedule has been prepared for the drain to supersede the 1960 report for the Upper portion of 8th Concession Drain.

### **FINANCIAL CONSIDERATIONS**

Some landowners receive allowances for land and damages.

Assessment of costs 100% to MTO. The total cost of the project is \$1,828,000.

## ENVIRONMENTAL CONSIDERATIONS

Report sent to ERCA for review and comments. A permit application and fee may be required.

Department of Fisheries and Oceans self-screening report completed.

## CONSULTATIONS

PREPARED BY:



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Lu-Ann Marentette  
Drainage Superintendent

REVIEWED BY:



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Tim Del Greco P.Eng.  
Senior Manager, Capital Projects and Engineering



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Richard J.H. Wyma CSLA  
Director of Planning and Development



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John Norton  
CAO

**DRAINAGE REPORT  
FOR THE**

**8TH CONCESSION DRAIN**

**FORMER TOWNSHIP OF GOSFIELD NORTH  
TOWN OF KINGSVILLE**



**FINAL REPORT  
10 JUNE 2024  
TIM R. OLIVER, P. ENG.  
FILE No. 21-3142**



File No. 21-3142

Mayor and Members of Council  
Town of Kingsville  
2021 Division Road North  
Kingsville, Ontario  
N9Y 2Y9

**Drainage Report for the  
8TH CONCESSION DRAIN  
Former Township of Gosfield North  
Now In the Town of Kingsville**

Mayor and Members of Council:

**Instructions**

The Municipality received a request on 10 July 2023 from the Ministry of Transportation Ontario, for the realignment of the upper portion of the 8th Concession Drain, new culvert for the realigned South Talbot Road and the extension of the King's Highway No. 3 culvert. The proposed drainage works are required to facilitate the highway widening. Council accepted the request under Section 78(1) of the Drainage Act for major improvements to a drainage works and on 14 August, 2023 appointed Dillon Consulting Limited to prepare a report.

**Watershed Description**

The 8th Concession Drain consists of an open channel commencing near the middle of the of Lot 270, Concession ST.R. It flows southerly for a distance of approximately 650 metres, then turns westerly and following the north side of South Talbot Road for a distance of 1250 metres before turning south and crossing King's Highway No. 3. The 8<sup>th</sup> Concession Drain then continues for approximately 325 metres westerly following the south side of Kings Highway No. 3 to Road 8 West. Joined by the Sedgewick Drain, the 8th Concession Drain flows south westerly for a length of 3775 metres to County Road No. 23 where it turns south for a distance of 950 metres before turning west and crossing County Road No. 23 to its outlet into the 10<sup>th</sup> Concession Drain with the Town of Essex. The upstream drainage area for the upper portion of the 8<sup>th</sup> Concession Drain along the west side of County Road No. 27 is approximately 25.9 hectares (63.7 acres).

Roadside drainage along the east side of County Road No. 27, between South Talbot Road and County Road No. 34, will be redirected to the 8<sup>th</sup> Concession Drain as part of the future roadworks associated with the Highway 3 improvements. Historically, the watersheds for the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain and the 8<sup>th</sup> Concession Drain have been interconnected across County Road No. 27 at South Talbot Road via an existing 1390 mm x 910 mm corrugated steel pipe culvert. The surficial soils are predominately Brookston Clay which is defined as having poor natural drainage, with the upper part of the watershed within the village of Cottam consisting of Burford Loam having a moderate infiltration rate.

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Chatham, Ontario  
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519.354.2050



## Drain History

The recent history of Engineers' reports for the 8th Concession Drain follows:

- **12 January 1982 By William J. Settington, P.Eng.:** The report was prepared to recommend the cleaning of sediment in part of the 8<sup>th</sup> Concession Drain upstream of King's Highway No. 3 along the South Talbot Road to County Road No. 27.
- **21 May 1981 by William J. Settington, P.Eng.:** The report was prepared to recommend for the realignment of the 8th Concession Drain within the King's Highway No. 3 (Bypass) right-of-way and on to private lands to facilitate the construction of the highway. The report recommends the new alignment of an open drain and filling in the existing open drain portion.
- **12 October 1960 by William D. Colby, P.Eng.:** The report was prepared to recommend the repair of the upper portion of the 8<sup>th</sup> Concession Drain along the west side of County Road No. 27 by widening and a realignment to move the drain off the road allowance.

## On-site Meeting

An on-site meeting was held on February 23, 2024 to discuss the proposed improvements to the 8<sup>th</sup> Concession Drain including the realignment of the upper portion of drain further west of its existing location to facilitate the widening of County Road No. 27. Other works include new culverts for the new South Talbot Road realignment to the north and the extension of the King's Highway No. 3 culvert for the highway widening. A summary of the on-site meeting is provided within Schedule 'A' herein.

## Survey

Our survey and examination of the 8th Concession Drain was carried out in June 2023. The survey comprised the recording of topographic data and examining the channel for available depth necessary to provide sufficient drainage.

## Design Considerations

### (Drain Cleanout and Culvert Works)

To provide sufficient depth and improved design capacity to better serve the upstream lands and associated new drain crossings required for the King's Highway No. 3 widening and the proposed new northerly alignment of South Talbot Road, a drain realignment, clean out and deepening of the upper drain portion is required. The improvements start at the 8<sup>th</sup> Concession Drain crossing of Road 8 West on the south side of Highway 3 and continue upstream to the upper end of the drain. The drain spoils removed as part of the drain cleanout work from Station 0+320 to Station 1+560 shall be cast upon the adjacent lands to the north; and from Station 1+750 to Station 2+055 on the west side of the drain. For the other drain segments between Station 0+000 and Station 0+320, between Station 1+560 and Station 1+750 and between Station 2+055 and Station 2+220, drain excavation materials shall be trucked off site. To attain the full capacity of these new culverts it is further recommended the 8<sup>th</sup> Concession Drain be cleaned both upstream and downstream for the full extent of the works from Station 0+000 to Station 2+220.

For Culvert No. 1, serving as the Highway No. 3 crossing, the existing 28.65 m long, 3046 mm span x 1830 mm rise concrete culvert shall be extended to facilitate highway widening. The proposed downstream extension is a 27.6 m long, 3046 mm x 2279 mm concrete box culvert embedded 400 mm for fish habitat considerations and connected to the existing 3046 mm x



1830 mm concrete culvert on a skewed alignment. The new end of the culvert shall consist of cast-in-place concrete headwalls. The disturbed drain channel beyond the culvert ends shall be fully lined with R-50 riprap, minimum 500 mm thickness and extending 9 metres in length.

The MTO design criteria for rural arterial road bridges is to convey a 1 in 25 year event such that approximately 1 metre of freeboard is provided from the high water level to the edge of the travelled lane. This criterion was used to assess the affects the culvert extensions may have on the upstream high water level. The highway culvert is located within the upper half of the 8th Concession Drain and upstream of South Talbot Road, the said portion of drain has less than a 1 in 25 year storm capacity.

A Drainage, Hydrology/Hydraulics and Stormwater Management Report was completed by Dillon Consulting Limited (August 2023) to document the expected high water levels in the drain upstream in both an existing and proposed condition. The report identified that the existing culvert currently does meet the MTO freeboard design criteria, despite the limited capacity of the downstream 8th Concession Drain being less than the flows expected during a 1 in 25 year storm event. The extension of the culvert recommended would have a negligible increase in the 25 year storm water elevation and therefore no adverse impacts to the upstream lands served by the 8th Concession Drain.

For Culvert No. 2, serving as the South Talbot Road crossing, the existing 15 m long, 3050 mm span x 1830 mm rise concrete culvert shall be cleaned to remove accumulated sediment. The existing culvert has adequate capacity for a 1 in 25 year storm event.

For Culvert No. 3, serving as an existing farm access, the existing 5 m long, 4000 mm span x 1500 mm rise concrete culvert shall be cleaned to remove accumulated sediment. The existing culvert has adequate capacity for a 1 in 25 year storm event.

For Culvert No. 4, involving a new roadway crossing for the South Talbot Road realignment, the culvert is designed to convey storm flows from a 1 in 10 year event. The proposed structure is a 90.0 m long, 2130 mm span x 910 mm rise concrete box culvert. Both ends of the culvert shall consist of sloping stone erosion protection, R-50 riprap, minimum 350 mm thickness.

For Culvert No. 5, involving a new roadway crossing for the South Talbot Road realignment, the culvert is designed to convey storm flows from a 1 in 10 year event. The proposed structure is a 40.0 m long 900 mm diameter HDPE pipe culvert. Both ends of the culvert shall consist of sloping stone erosion protection, R-50 riprap, minimum 350 mm thickness.

#### (Drain Realignment Station 1+555 to Station 1+708)

For the upper portion of the 8<sup>th</sup> Concession Drain situated along the west side of County Road No. 27 from the proposed northerly South Talbot Road realignment southward, we recommend the drain be realigned to accommodate the road improvements involving regrading and widening for the addition of a turning lane. The new channel bank slopes shall be constructed at 4:1 fore slope (east bank) and 2:1 back slope (west bank). With the proposed raising of the road platform for County Road No. 27, as it approaches the intersection with King's Highway No. 3, there is a significant infilling that will be overlapped by the new broader drain channel. To prevent future erosion to the new channel's easterly bank, a 4.0 m wide portion of the upper channel section shall be lined with R-10 rip rap that shall be encapsulated within a wire mesh gabion mattress, having a minimum 300 mm thickness. The erosion protection shall extend from Station 1+575 to Station 1+650. For the realigned drain bend from Station 1+555 to Station 1+575 the drain channel shall be fully lined with R-50 riprap, minimum 350 mm thickness.

#### **Allowances**

In accordance with Section 29 of the Drainage Act, we have determined that the landowner on

the west side of the drain receive compensation for additional lands required to establish a new 9.0 m wide working corridor along side the drain from Station 1+555 to Station 1+708 as well as compensate the said property owner (Roll No. 570-10700) for additional lands used that will be occupied by the drain channel beyond the previously widened right-of-way. For this segment of drain, future maintenance is more accessible and safer from the west side given the close proximity of the road to the drain.

The said corridor lands had not been previously established as part of the 1960 report beyond that of the lands taken for the drain channel when it was previously moved westerly to improve road safety at that time. Schedule 'B' herein, shows the distribution of these allowances for land used in the total amount of \$9,300.00 for the 8<sup>th</sup> Concession Drain realigned portion.

In accordance with Section 30 of the Drainage Act, we determined the compensation to landowners for damages for the spreading and levelling of drain spoils with the designated working corridor between Station 1+748 and Station 2+055. Schedule 'B' herein, shows the distribution of these allowances for damages in the total amount of \$1,200.00 for the 8<sup>th</sup> Concession Drain cleanout between Station 1+748 and Station 2+055.

### **Recommendations and Cost Estimate**

Based on our review of the history, the information obtained from our examination and analysis of the survey data, we recommend that the drainage works be repaired and improved as described below:

<b>Item</b>	<b>Description</b>	<b>Amount</b>
	<b><u>8<sup>TH</sup> CONCESSION DRAIN</u></b>	
1.	Brushing of the drain from Station 0+000 to Station 2+220 including removal off-site with trimming and/or removal of existing trees within the drain as required to accommodate the drainage works. The work shall include disposal of brush by means of stockpiling and burning where permitted or alternatively to be trucked off-site. Working corridor confined to the County Road No. 27 right-of-way between Station 2+055 and Station 2+220.	\$30,000.00
2.	Bridge removal Road 8 West, as follows;	
	a) Demolition, removal and disposal offsite of existing 3660 mm x 1830 mm concrete bridge 13.0 m long complete with concrete head walls and footings. The work also includes the reinstatement of the open channel with the supply and placement of rip-rap R-50 erosion protection, minimum 350 mm thickness to fully line the drain channel (approx. 150 m <sup>2</sup> )	\$40,000.00
3.	Excavation and levelling of excavated material, as follows:	
	a) Station 0+120 to Station 0+210, totalling approximately 90 lineal metres of drain and approximately 10 m <sup>3</sup> of material.	\$3,000.00
	b) Station 0+320 to Station 1+560, totalling approximately 1,240 lineal metres of drain and approximately 330 m <sup>3</sup> of material.	\$28,000.00

Item	Description	Amount
	c) Station 1+748 to Station 2+055, totalling approximately 307 lineal metres of drain and approximately 230 m <sup>3</sup> of material.	\$8,500.00
4.	Excavation and trucking of excavated material, as follows:	
	a) Station 0+000 to Station 0+120 totalling approximately 120 lineal metres of drain and approximately 15 m <sup>3</sup> .	\$5,000.00
	b) Station 0+210 to Station 0+305 totalling approximately 95 lineal metres of drain and approximately 5 m <sup>3</sup> .	\$2,000.00
	c) Station 2+055 to Station 2+220 totalling approximately 165 lineal metres of drain and approximately 200 m <sup>3</sup> .	\$27,500.00
5.	Excavate new open channel along proposed realignment, approximately 153 lineal metres, Station 1+555 to Station 1+703. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the Contractor for the highway improvements.	\$32,000.00
6.	Strip and remove vegetation and topsoil from the existing channel from Station 1+555 to Station 1+703 and fill up to existing grade with clean native backfill including compaction in maximum 300 mm lifts.	\$20,000.00
7.	Placement of salvaged or imported topsoil complete with fine grading over the following areas between Station 1+560 and Station 1+703.	
	a) On top of the filled drain portion at 100 mm depth.	\$3,500.00
	b) On the new drain banks at 50 mm depth.	\$4,000.00
8.	Supply and placement of fibre reinforced matrix hydraulic mulch seed on new drain banks from Station 1+575 to Station 1+703.	\$14,000.00
9.	Stone erosion protection work, as follows:	
	a) Supply and placement of stone erosion protection (R-50 riprap) on upstream end of Culvert No. 1 (Station 0+284 to Station 0+293) minimum 500 mm thickness, complete with filter fabric underlay, (approx. 80 m <sup>2</sup> ).	\$10,000.00
	b) Supply and placement of stone erosion protection consisting of a wire mesh gabion mat (R-10 riprap) on drain banks (Station 1+575 to Station 1+650) 4.0 m wide, minimum 300 mm thickness, complete with filter fabric underlay, (approx. 300 m <sup>2</sup> ).	\$55,000.00
	c) Supply and placement of stone erosion protection (R-50 riprap) on drain bend (Station 1+555 to Station 1+575) minimum 350 mm thickness, complete with filter fabric underlay, (approx. 270 m <sup>2</sup> ).	\$27,000.00

Item	Description	Amount
10.	Road Culvert Work, as follows:	
	a) <u>Culvert No. 1 D/S Extension (King's Highway No. 3)</u> – Supply and installation of a new 27.6 m long culvert 3046 mm x 2279 mm precast concrete box culvert connected to the existing culvert with flush end, complete with skewed outlet end, waterproofing membrane and protection board, compacted Granular 'A' bedding (min. 300 mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade, cast-in-place concrete headwalls and stone erosion protection (R50 riprap) within the drain channel fully lined beyond the culvert for a minimum 9 m distance and minimum 500 mm thickness (approx.. 80 m <sup>2</sup> ). Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also include drain bottom cleanout and the flushing and cleaning of the existing 28.65 m long culvert and the removal off-site of excess materials not suitable for culvert backfill.	\$535,000.00
	b) <u>Culvert No. 4 – Station 1+203 (South Talbot Road)</u> – Supply and installation of a new 90.0 m long culvert 2130 mm x 910 mm concrete box culvert, complete with flush outlet end, waterproofing membrane and protection board, compacted Granular 'A' bedding (min. 300 mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade, sloping stone end treatment at both ends with a minimum 350 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas and the removal off-site of excess materials not suitable for culvert backfill.	\$750,000.00
	c) <u>Culvert No. 5 – Station 1+728 (South Talbot Road)</u> – Supply and installation of a new 40.0 m long, 900 mm diameter High-density polyethylene (HDPE), clear stone bedding (min. 150 mm thickness, compacted full Granular 'A' backfill up to road subgrade. Sloping stone R-50 riprap end treatment. Work to include fine grading, seeding and restoration of all disturbed areas and the removal off-site of excess materials not suitable for culvert backfill.	\$45,000.00
11.	Culvert Cleaning Work, as follows:	
	a) <u>Culvert No. 2 – (South Talbot Road)</u> – Remove sediment build up from within the existing 15.0 m long 3046 mm x 1830 mm concrete culvert, complete with disposal off-site.	\$10,000.00

Item	Description	Amount
	b) <u>Culvert No. 3 – (Roll No. 570-00100)</u> – Remove sediment build up from within the existing 5.0 m long 4000 mm x 1500 mm concrete culvert, complete with disposal off-site.	\$10,000.00
12.	Temporary silt control measures during construction.	\$5,000.00
	<b>SUB-TOTAL</b>	<b>\$1,664,500.00</b>
13.	Allowances as per Section 29 of the Drainage Act	\$9,300.00
14.	Allowances as per Section 30 of the Drainage Act	\$4,200.00
15.	Report, Assessments and Final Inspection.	\$39,000.00
16.	Expenses and Incidentals.	<u>\$1,000.00</u>
	<b>TOTAL ESTIMATE – 8TH CONCESSION DRAIN</b>	<b>\$1,718,000.00</b>

The estimate provided in this report was prepared according to current materials and installation prices as of the date of this report. In the event of delays from the time of filing of the report by the Engineer to the time of tendering the work, it is understood that the estimate of cost is subject to inflation. The rate of inflation shall be calculated using the Consumer Price Index applied to the cost of construction from the date of the report to the date of tendering.

#### **Assessment of Costs**

The individual assessments are comprised of three (3) assessment components:

- i. Benefit (*advantages relating to the betterment of lands, roads, buildings, or other structures resulting from the improvement to the drain*).
- ii. Outlet Liability (*part of cost required to provide outlet for lands and roads*).
- iii. Special Benefit (*additional work or feature that may not affect function of the drain*).

We have assessed the estimated costs against the affected roads as listed in Schedule 'C' under "Special Benefit." Details of the Special Benefit assessment listed are provided in the Assessment Rationale below.

#### **Assessment Rationale**

Special Benefit assessment shown in Schedule 'C' was derived as follows:

1. As the drain realignment and deepening of the upper portion of drain, new culvert works and associated drain cleanout are only required for the proposed highway widening, we have assessed 100% of the costs to the Ministry of Transportation Ontario in accordance with Section 26 of the Drainage Act as a non-proratable assessment. Since there are no special benefit assessments to other landowners, Schedule 'D' for the purposes of Special Benefit details has been omitted from this report.

#### **Future Maintenance (Open Drain Sta. 0+000 to Sta. 0+300)**

For the portion of open drain that resides on Ministry of Transportation lands from Road 8 West upstream to the north limit of King's Highway No. 3, including the culvert across the highway, the future maintenance costs for the open drain shall be assessed 100% to the Ministry of Transportation. The Ministry may elect to undertake the future maintenance costs as per Section



69 of the Drainage Act or defer the maintenance to the Town of Kingsville.

**Future Maintenance (Open Drain Sta. 0+300 to Sta. 1+560)**

For the portion of open drain that resides along the north side of South Talbot Road extending easterly to County Road No. 27, the future maintenance costs for the open drain shall be assessed in accordance with the previous report dated 12 January 1982 until otherwise varied as per the Drainage Act.

**Future Maintenance (Open Drain Sta. 1+560 to Sta. 2+220)**

For the portion of open drain that resides along the west side of County Road No. 27 extending northerly to the upper end where the Cottam Sideroad Road Drain enters, the future maintenance costs for the open drain shall be assessed in the same relative proportions as outlined within Schedule 'E-1' appended hereto.

**Future Maintenance (Road Culvert Crossings of South Talbot Road)**

For the road culverts across South Talbot Road, denoted herein as Culvert No 2, No. 4 and No. 5, the future maintenance costs shall be assessed 100% to the Town of Kingsville, in accordance with Section 26 of the Drainage Act.

**Drawings and Specifications**

Attached to this report is Schedule 'F', which are Specifications setting out the details of the recommended works and Schedule 'G' which represent the drawings that are attached to this report.

- Page 1 of 8 – Overall Plan**
- Page 2 of 8 – Enlargement Plan 'A'**
- Page 3 of 8 – Culvert No. 1 Details**
- Page 4 of 8 – Culvert No. 4 Details**
- Page 5 of 8 – Drain Realignment Details**
- Page 6 of 8 – Profile No. 1 & Cross Sections**
- Page 7 of 8 – Profile No. 2 & Cross Sections**
- Page 8 of 8 – Profile No. 3 & Cross Sections**

**Construction Drawings and Specifications**

The work included in this report will be performed under the provincial contract for the Widening of King's Highway No. 3 starting from 0.8 km west of Cameron Sideroad and continuing easterly to 1.8 km west of County Road No. 31. Culvert drawings have been prepared for the construction complete with associated specifications which shall adhere to the elevations, alignment, sizes, materials and location and be generally in compliance with this report.

**Approvals**

The construction and/or improvement to a drainage works, including repair and maintenance activities, and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced by the proposed works. Prior to any construction or maintenance works, the Municipality or proponent designated on the Municipality's behalf shall obtain all required approvals/permits and confirm any construction limitations including timing windows, mitigation/off-setting measures, standard practices or any other limitations related to in-stream works.

## Agency Reviews

The Essex Region Conservation Authority (ERCA) has been previously notified and provided the opportunity to review the proposed drainage works outlined within this report. An application for permit and associated fee payment is not required for provincial undertakings. The Town of Kingsville will subsequently give notice to ERCA and other prescribed persons of an upcoming meeting of Council that will consider and adopt the final report, at which time this meeting is an opportunity to provide input.

In 2021, a Fish and Fish Habitat Impact assessment was undertaken to identify the impacts of the approved improvements to fish and fish habitat within the Highway 3 Study Area. The assessment was completed in accordance with the requirements of the Interim 2020 MTO/DFO/NDMNRF Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings, Version 4 (Fisheries Protocol) and the guidance provided in MTO's (2020) Interim Environmental Guide for Fish and Fish Habitat (Fish Guide).

As per the direction received from Mr. Chris Evans, Environmental Planner MTO, all documentation (i.e., forms and templates) has been prepared so as to be compliance with the Interim Fish Guide (April 2020). The Fish and Fish Habitat Existing Conditions and Impact Assessment Report, Highway 3 Widening and Safety Enhancement Study (GHD, July 2021) provides the impact analysis.

The 8th Concession Drain was identified to support direct fish habitat and the culvert replacements and extensions are not likely to result in the death of fish or harmful alteration, disruption or destruction (HADD) of fish habitat.

Respectfully submitted,

## **DILLON CONSULTING LIMITED**

Tim R. Oliver, P.Eng.  
TRO:sjc



**SCHEDULE ‘A’**  
**SUMMARY OF ON-SITE MEETING**  
**February 23, 2024 @ 9:00 a.m.**

**Present:**

Jeff Kettlewel  
Orion Raes  
Mark Fishleigh  
Lu-Ann Marentette  
Clare Janisse  
Clarke Campbell  
Tim Oliver

Ministry of Transportation Ontario  
Green Infrastructure Partners Inc.  
County of Essex Roads Dept.  
Town of Kingsville  
Town of Kingsville  
Dillon Consulting Limited  
Dillon Consulting Limited

**Tim Oliver** provided an overview of relevant drainage history of the 8<sup>th</sup> Concession Drain referring to the last improvements made to the upper portion of the drain along the west side of County Road No. 27 as part of a 1960 engineer’s report and by-law under the Drainage Act. The recommendation would be for this upper portion of drain to be relocated further west so as to allow for the widening of County Road No. 27 which includes two new road culvert crossings for the proposed realignment of South Talbot Road.

The upstream drainage area includes a portion of the Village of Cottam that has its drainage outlet through the Cottam Sideroad Drain that drains into the 8<sup>th</sup> Concession Drain. Notice of this site meeting was provided to the landowners within this upstream drainage area so as to make them aware of the proposed changes to the upper portion of the 8<sup>th</sup> Concession Drain.

Other works include the extension of the Highway No. 3 culvert, both upstream and downstream ends of the existing culvert, in order to facilitate the roadway widening. The portion of the 8<sup>th</sup> Concession Drain starting from Road 8 West and proceeding upstream across Highway No. 3 and easterly to County Road No. 27 and then northerly to the upper end of the drain shall require cleaning such that the new culverts provide the necessary capacity and can accommodate the revised grading and deepening of the drain required to suit the new culvert crossings of South Talbot Road. All the costs of the drain improvements shall be assessed to the Ministry of Transportation.

**Tim Oliver** stated that the drainage report would be completed within the next 3 months to accommodate construction schedule starting this Summer 2024.

*Meeting summary prepared by Tim Oliver, P. Eng.*

**"SCHEDULE B"**  
**SCHEDULE OF ALLOWANCES**

**8TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

Roll No.	Con.	Description	Owner	Section 30 Damages	Section 29 Land	Total Allowances
490-01600	7	LOT 8	Susan B. Loosemore	\$400.00	\$0.00	\$400.00
570-00100	S.T.R.	PT LOTS 271 & 272	Peter M. & Liliana Steckle	\$1,350.00	\$0.00	\$1,350.00
570-06205	S.T.R.	PT LOT 271	Steckle Farms Limited	\$1,250.00	\$0.00	\$1,250.00
570-10700	S.T.R.	PT LOT 270	2204157 Ontario Ltd.	\$1,200.00	\$9,300.00	\$10,500.00
<b>TOTAL ALLOWANCES</b> .....				<b>\$4,200.00</b>	<b>\$9,300.00</b>	<b>\$13,500.00</b>

**SCHEDULE C  
SCHEDULE OF ASSESSMENT  
8TH CONCESSION DRAIN  
TOWN OF KINGSVILLE**

**ONTARIO LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
King's Highway No. 3	0.00	0.00	Ministry of Transportation	\$1,718,000.00	\$0.00	\$0.00	\$1,718,000.00
<b>Total on Ontario Lands</b> .....				<b>\$1,718,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,718,000.00</b>
<b>TOTAL ASSESSMENT</b> .....				<b>\$1,718,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,718,000.00</b>

**"SCHEDULE E"**  
**SCHEDULE OF ASSESSMENT FOR FUTURE MAINTENANCE**  
**8TH CONCESSION DRAIN (STA. 1+560 TO STA. 2+220)**  
**TOWN OF KINGSVILLE**

**MUNICIPAL LANDS:**

Description/Roll No.	Area Affected		Owner	Special	Benefit	Outlet	Total
	(Acres)	(Ha.)		Benefit			
County Road No. 27	6.70	2.71	County of Essex	\$0.00	\$1,126.00	\$1,607.00	\$2,733.00
County Road No. 34	0.82	0.33	County of Essex	\$0.00	\$45.00	\$196.00	\$241.00
Vienna Blvd.	0.19	0.08	Town of Kingsville	\$0.00	\$11.00	\$47.00	\$58.00
William Street	0.23	0.09	Town of Kingsville	\$0.00	\$12.00	\$53.00	\$65.00
South Talbot Road	0.98	0.40	Town of Kingsville	\$0.00	\$116.00	\$148.00	\$264.00
570-08801	0.18	0.07	Town of Kingsville	\$0.00	\$10.00	\$41.00	\$51.00
Total on Municipal Lands				\$0.00	\$1,320.00	\$2,092.00	\$3,412.00

**PRIVATELY-OWNED - NON-AGRICULTURAL LANDS:**

Roll No.	Con.	Description	Area Affected		Owner	Special	Benefit	Outlet	Total
			(Acres)	(Ha.)		Benefit			
570-10600	S.T.R.	Pt. Lot 270	1.48	0.60	Kevin M. & Judith I. Hamm	\$0.00	\$25.00	\$108.00	\$133.00
570-10540	S.T.R.	Pt. Lot 270	1.14	0.46	Jeffery V. & Chelsea J. Bas	\$0.00	\$24.00	\$102.00	\$126.00
570-10530	S.T.R.	Pt. Lot 270	1.14	0.46	Edward F. & Kimberlie M. Fuerth	\$0.00	\$24.00	\$102.00	\$126.00
570-10520	S.T.R.	Pt. Lot 270	1.14	0.46	Guy R. & Angela F. Wigle	\$0.00	\$24.00	\$102.00	\$126.00
570-10510	S.T.R.	Pt. Lot 270	1.15	0.47	Gary W. & Elaine K. Thorton	\$0.00	\$24.00	\$103.00	\$127.00
570-10500	S.T.R.	Pt. Lot 270	1.58	0.64	Leonard H. Toner	\$0.00	\$26.00	\$111.00	\$137.00
570-10400	S.T.R.	Pt. Lot 270	0.88	0.36	Abram Neufeld & Anna Heinrichs	\$0.00	\$22.00	\$94.00	\$116.00
570-10300	S.T.R.	Pt. Lot 270	1.14	0.46	Trudy Unger & Abram Knelson	\$0.00	\$24.00	\$102.00	\$126.00
570-10200	S.T.R.	Pt. Lot 270	0.53	0.21	Nathan W. Bennett	\$0.00	\$17.00	\$73.00	\$90.00
570-10150	S.T.R.	Pt. Lot 270	0.25	0.10	Michael J. Etzel	\$0.00	\$8.00	\$36.00	\$44.00
570-10100	S.T.R.	Pt. Lot 270	0.36	0.15	Kandus L. Flood	\$0.00	\$12.00	\$53.00	\$65.00
570-10001	S.T.R.	Pt. Lot 270	0.56	0.23	James A. Carter	\$0.00	\$18.00	\$78.00	\$96.00
570-09910	S.T.R.	Pt. Lot 270	0.27	0.11	Agris Co-operative Ltd.	\$0.00	\$15.00	\$65.00	\$80.00
570-09900	S.T.R.	Pt. Lot 270	0.54	0.22	Daniel MCarthy & Hans Kluymans	\$0.00	\$18.00	\$76.00	\$94.00
570-09800	S.T.R.	Pt. Lot 270	0.20	0.08	Kristopher Ennis	\$0.00	\$7.00	\$28.00	\$35.00
570-09700	S.T.R.	Pt. Lot 270	0.37	0.15	Kingsville Roofing Ltd.	\$0.00	\$21.00	\$89.00	\$110.00
570-09600	S.T.R.	Pt. Lot 270	0.15	0.06	813816 Ontario Limited	\$0.00	\$5.00	\$21.00	\$26.00
570-09400	S.T.R.	Pt. Lot 270	0.18	0.07	Timothy & Teresa Lindsay	\$0.00	\$0.00	\$21.00	\$21.00
570-09300	S.T.R.	Pt. Lot 270	0.15	0.12	1882102 Ontario Inc.	\$0.00	\$0.00	\$21.00	\$21.00
570-09200	S.T.R.	Pt. Lot 270	0.19	0.08	Micheal & Tracy Smith	\$0.00	\$0.00	\$14.00	\$14.00
570-09100	S.T.R.	Pt. Lot 270	0.19	0.08	Louis B. Couvillion & Elizabeth A. Sampogna	\$0.00	\$0.00	\$14.00	\$14.00
570-09000	S.T.R.	Pt. Lot 270	0.41	0.17	John W. Boer	\$0.00	\$0.00	\$30.00	\$30.00
570-08901	S.T.R.	Pt. Lot 270	0.05	0.02	13246566 Canada Inc.	\$0.00	\$0.00	\$4.00	\$4.00
570-08900	S.T.R.	Pt. Lot 270	0.07	0.03	Pan West Pharma Inc.	\$0.00	\$0.00	\$5.00	\$5.00
570-08705	S.T.R.	Pt. Lot 270	0.10	0.04	1670057 Ontario Limited	\$0.00	\$0.00	\$12.00	\$12.00
570-08700	S.T.R.	Pt. Lot 270	0.16	0.06	William P. Hodgkins	\$0.00	\$0.00	\$11.00	\$11.00
570-00101	S.T.R.	Pt. Lot 270	6.69	2.71	Agris Co-operative Ltd.	\$0.00	\$373.00	\$1,606.00	\$1,979.00
560-01100	S.T.R.	Pt Lot 269	0.68	0.28	Patrick J. & Theresa A. Diemer	\$0.00	\$0.00	\$52.00	\$52.00
560-01110	S.T.R.	Pt Lot 269	0.68	0.28	Bryan J. & Jacyn R. Jacques	\$0.00	\$0.00	\$52.00	\$52.00
560-01106	S.T.R.	Pt Lot 269	0.18	0.07	Micheal Bosse & Danielle Soulliere	\$0.00	\$0.00	\$15.00	\$15.00
560-01108	S.T.R.	Pt Lot 269	0.17	0.07	Brycon D. Sweet & Kendall L. Penner	\$0.00	\$0.00	\$15.00	\$15.00
560-01111	S.T.R.	Pt Lot 269	0.17	0.07	Rejean R. & Nicole T. Fillion	\$0.00	\$0.00	\$15.00	\$15.00
560-01112	S.T.R.	Pt Lot 269	0.17	0.07	Leonard K. & Corinne Johnson	\$0.00	\$0.00	\$15.00	\$15.00
560-01114	S.T.R.	Pt Lot 269	0.17	0.07	Kaitlyn J. Nadin & Bradley Carroll	\$0.00	\$0.00	\$15.00	\$15.00
560-01116	S.T.R.	Pt Lot 269	0.20	0.08	Brent A. & Kathryn M. Brinacombe	\$0.00	\$0.00	\$17.00	\$17.00
560-01188	S.T.R.	Pt Lot 269	0.18	0.07	Joseph M. & Lindsay L. latonna	\$0.00	\$0.00	\$15.00	\$15.00
560-01190	S.T.R.	Pt Lot 269	0.18	0.07	Gerald A. & Patricia R. Crisford	\$0.00	\$0.00	\$15.00	\$15.00
560-01192	S.T.R.	Pt Lot 269	0.17	0.07	Martin J. & Melinda S. Janzen	\$0.00	\$0.00	\$15.00	\$15.00

Roll No.	Con.	Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
			(Acres)	(Ha.)					
560-01194	S.T.R.	Pt Lot 269	0.17	0.07	Mark & Nanjette Radigan	\$0.00	\$0.00	\$15.00	\$15.00
560-01196	S.T.R.	Pt Lot 269	0.17	0.07	Gerald A. & Diane E. Soulliere	\$0.00	\$0.00	\$15.00	\$15.00
560-01198	S.T.R.	Pt Lot 269	0.17	0.07	Jennifer L. Wilkinson	\$0.00	\$0.00	\$15.00	\$15.00
560-02415	S.T.R.	Pt Lot 269	0.34	0.14	Phillip & Elizabeth Blais	\$0.00	\$0.00	\$30.00	\$30.00
560-02414	S.T.R.	Pt Lot 269	0.34	0.14	Louis S. & Carol A. Helmer	\$0.00	\$0.00	\$30.00	\$30.00
560-01201	S.T.R.	Pt Lot 269	0.37	0.15	Kevin M. & Dale C. Ross	\$0.00	\$0.00	\$32.00	\$32.00
560-01202	S.T.R.	Pt Lot 269	0.31	0.13	Erwin & Jacqueline M. Etzel	\$0.00	\$0.00	\$28.00	\$28.00
560-01300	S.T.R.	Pt Lot 269	0.58	0.23	Eric Amlin	\$0.00	\$18.00	\$78.00	\$96.00
560-01400	S.T.R.	Pt Lot 269	0.38	0.15	Marimus H. & Elizabeth A. Reitsma	\$0.00	\$12.00	\$53.00	\$65.00
560-01475	S.T.R.	Pt Lot 269	0.24	0.10	Derek S. & Susan J. Tomkins	\$0.00	\$8.00	\$36.00	\$44.00
560-01500	S.T.R.	Pt Lot 269	0.28	0.11	No Tan Lines Tanning Salon Inc.	\$0.00	\$9.00	\$39.00	\$48.00
560-01600	S.T.R.	Pt Lot 269	0.19	0.08	Timothy D. Bezanson	\$0.00	\$7.00	\$28.00	\$35.00
560-01700	S.T.R.	Pt Lot 269	0.13	0.05	Tammy L. Mcdermott	\$0.00	\$4.00	\$18.00	\$22.00
560-01701	S.T.R.	Pt Lot 269	0.13	0.05	813816 Ontario Limited	\$0.00	\$4.00	\$18.00	\$22.00
560-01800	S.T.R.	Pt Lot 269	0.36	0.15	Kingsville Roofing Ltd.	\$0.00	\$12.00	\$53.00	\$65.00
560-01900	S.T.R.	Pt Lot 269	0.39	0.16	11337840 Canada Inc.	\$0.00	\$13.00	\$57.00	\$70.00
560-02000	S.T.R.	Pt Lot 269	0.15	0.06	Kugan Merugesu	\$0.00	\$0.00	\$11.00	\$11.00
560-02100	S.T.R.	Pt Lot 269	0.93	0.38	Brian D. & Malana A. Candido	\$0.00	\$0.00	\$47.00	\$47.00
560-02200	S.T.R.	Pt Lot 269	0.74	0.30	Bernard C. & Kathryn J. Cormier	\$0.00	\$0.00	\$44.00	\$44.00
560-02300	S.T.R.	Pt Lot 269	0.76	0.31	Robert Laman	\$0.00	\$0.00	\$45.00	\$45.00
560-02301	S.T.R.	Pt Lot 269	0.35	0.14	Barbara E. Sisley	\$0.00	\$0.00	\$25.00	\$25.00
Total on Privately-Owned - Non-Agricultural Lands.....						\$0.00	\$774.00	\$4,039.00	\$4,813.00
<b>PRIVATELY-OWNED - AGRICULTURAL LANDS</b>									
Roll No.	Con.	Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
			(Acres)	(Ha.)					
570-10601	S.T.R.	Pt Lot 270	7.00	2.83	2204157 Ontario Ltd.	\$0.00	\$250.00	\$168.00	\$418.00
570-10700	S.T.R.	Pt Lot 270	11.30	4.57	2204157 Ontario Ltd.	\$0.00	\$603.00	\$471.00	\$1,074.00
570-10102	S.T.R.	Pt Lot 270	4.79	1.94	Rajac Group Inc.	\$0.00	\$53.00	\$230.00	\$283.00
Total on Privately-Owned - Agricultural Lands .....						\$0.00	\$906.00	\$869.00	\$1,775.00
<b>TOTAL ASSESSMENT .....</b>						<b>\$0.00</b>	<b>\$3,000.00</b>	<b>\$7,000.00</b>	<b>\$10,000.00</b>
			(Acres)	(Ha.)					
<b>Total Area:</b>			<b>63.69</b>	<b>25.86</b>					

“SCHEDULE F”  
DRAINAGE REPORT FOR THE  
**8TH CONCESSION DRAIN**  
TOWN OF KINGSVILLE

**SPECIAL PROVISIONS - GENERAL**

**1.0 GENERAL SPECIFICATIONS**

The General Specifications attached hereto is part of “Schedule F.” It also forms part of this specification and is to be read with it, but where there is a difference between the requirements of the General Specifications and those of the Special Provisions which follow, the Special Provisions will take precedence.

**2.0 DESCRIPTION OF WORK**

The work to be carried out under this Contract includes, but is not limited to, the supply of all **labour, equipment and materials** to complete the following items:

- Excavation and trucking of excavated material, as follows:
  - Brushing of the drain from Station 0+000 to Station 2+220 including removal off-site with trimming and/or removal of existing trees within the drain as required to accommodate the drainage works. The work shall include disposal of brush by means of stockpiling and burning where permitted or alternatively trucked off-site. Working corridor confined to the County Road No. 27 right-of-way between Station 2+055 and Station 2+220.
- Bridge removal Road 8 West, as follows;
  - Demolition, removal and disposal offsite of existing 3660 mm x 1830 mm concrete bridge 13.0 m long complete with concrete head walls and footings. The work also includes the reinstatement of the open channel with the supply and placement of rip-rap R-50 erosion protection, minimum 350 mm thickness to fully line the drain channel (approx. 150 m<sup>2</sup>)
- Excavation of the drain bottom and levelling of drain spoils, as follows:
  - Station 0+120 to Station 0+210, totalling approximately 90 lineal metres of drain and approximately 10 m<sup>3</sup> of material.
  - Station 0+320 to Station 1+560, totalling approximately 1,240 lineal metres of drain and approximately 330 m<sup>3</sup> of material.
  - Station 1+748 to Station 2+055, totalling approximately 307 lineal metres of drain and approximately 230 m<sup>3</sup> of material.
- Excavation and trucking of excavated material, as follows:
  - Station 0+000 to Station 0+120 totalling approximately 120 lineal metres of drain and approximately 15 m<sup>3</sup>.
  - Station 0+210 to Station 0+305 totalling approximately 95 lineal metres of drain and approximately 5 m<sup>3</sup>.
  - Station 2+055 to Station 2+220 totalling approximately 165 lineal metres of drain and approximately 200 m<sup>3</sup>.

- Excavate new open channel along proposed alignment, approximately 153 lineal metres, Station 1+555 to Station 1+703. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the Contractor for the highway improvements.
- Strip and remove vegetation and topsoil from the existing channel from Station 1+555 to Station 1+703 and fill up to existing grade with clean native backfill including compaction in maximum 300 mm lifts.
- Placement of salvaged or imported topsoil complete with fine grading over the following areas between Station 1+560 and Station 1+703.
  - On top of the old drain at 100 mm depth.
  - On new drain banks at 50 mm depth.
- Supply and placement of fibre reinforced matrix hydraulic mulch seed on new drain banks from Station 1+575 to Station 1+703.
- Supply and placement of stone erosion protection (R-50 riprap) on upstream end of Culvert No. 1 (Station 0+284 to Station 0+293) minimum 500 mm thickness, complete with filter fabric underlay, (approx. 80 m<sup>2</sup>).
- Supply and placement of stone erosion protection consisting of a wire mesh gabion mat (R-10 riprap) on drain banks (Station 1+575 to Station 1+650) 4.0 m wide, minimum 300 mm thickness, complete with filter fabric underlay, (approx. 300 m<sup>2</sup>)
- Supply and placement of stone erosion protection (R-50 riprap) on drain bend (Station 1+555 to Station 1+575) minimum 350 mm thickness, complete with filter fabric underlay, (approx. 270 m<sup>2</sup>)
- Road Culvert Work, as follows:
  - Culvert No. 1 D/S Extension (King's Highway No. 3) – Supply and installation of a new 27.6 m long culvert 3046 mm x 2279 mm precast concrete box culvert connected to the existing culvert with flush end, complete with skewed outlet end, waterproofing membrane and protection board, compacted Granular 'A' bedding (min. 300 mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade, cast-in-place concrete end walls within the drain channel beyond fully lined for a minimum 9 m distance and minimum 500 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also include drain bottom cleanout and the flushing and cleaning of the existing 28.65 m long culvert and the removal off-site of excess materials not suitable for culvert backfill.
  - Culvert No. 4 – Station 1+203 (South Talbot Road) – Supply and installation of a new 90.0 m long culvert 2130 mm x 910 mm concrete box culvert, complete with flush outlet end, waterproofing membrane and protection board, compacted Granular 'A' bedding (min. 300 mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade, sloping stone end treatment at both ends with a minimum 350 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas and the removal off-site of excess materials not suitable for culvert backfill.
  - Culvert No. 5 – Station 1+728 (South Talbot Road) – Supply and installation of a new 40.0 m long, 900 mm diameter High-density polyethylene (HDPE), clear stone bedding (min. 150 mm thickness, compacted full Granular 'A' backfill up to road subgrade. Sloping stone end treatment. Work to include fine grading, seeding and restoration of

all disturbed areas and the removal off-site of excess materials not suitable for culvert backfill.

- Road Cleaning Work, as follows:
  - Culvert No. 2 – (South Talbot Road) – Remove sediment build up from within the existing 15.0 m long 3046 mm x 1830 mm concrete culvert, complete with disposal off-site.
  - Culvert No. 3 – (Roll No. 570-00100) – Remove sediment build up from within the existing 5.0 m long 4000 mm x 1500 mm concrete culvert, complete with disposal off-site.
- Temporary silt control measures during construction.

### 3.0 ACCESS TO THE WORK

Access to the drain shall be from the King’s Highway No. 3, South Talbot Road and the County Road No. 27 right-of-way. The Contractor shall make his/her own arrangements for any additional access for his/her convenience. All grass areas disturbed shall be restored to original conditions at the Contractor’s expense.

### 4.0 WORKING AREA

For both the construction and future maintenance of the drain the Contractor shall restrict his/her equipment to the working corridors as specified in this Section. Any damage resulting from non-compliance with this Section shall be borne by the Contractor. The working corridor shall be as follows:

<b>FROM STA.</b>	<b>TO STA.</b>	<b>PRIMARY (See Note 1)</b>	<b>SECONDARY (See Note 2)</b>
0+000	0+210	9.0 m wide on the south side of the drain measured off top of south bank	N/A
0+210	0+300	King’s Highway No. 3 right-of-way	N/A
0+300	1+158	9.0 m wide on the north side of the drain measured off top of north bank	South Talbot Road
1+158	1+270	South Talbot Road right-of-way	N/A
1+270	1+560	9.0 m wide on the north side of the drain measured off top of north bank	South Talbot Road
1+560	1+708	9.0 m wide on the west side of the drain measured off top of west bank	County Road No. 27
1+708	1+750	South Talbot Road right-of-way	N/A
1+750	2+055	9.0 m wide on the west side of the drain measured off top of west bank	County Road No. 27
2+055	2+220	County Road No. 27 right-of-way	N/A

Note 1: *Primary working corridor* indicates the access corridor along the side of the drain where excavation is recommended (unless noted otherwise below and/or in the Specifications, as well as all purposes listed for Secondary Working Corridors).

Note 2: *Secondary working corridor* indicates the access corridor alongside the drain where construction equipment may travel for the purpose of trucking.

## 5.0 CLEARING & GRUBBING DRAIN PRIOR TO DRAIN EXCAVATION

Prior to drain excavation and removal of sediment within the existing drain as well as drain infilling activities, all brush and trees within the limits of the channel and within 1 metre from the top of the drain banks and in the designated spread area for the excavated material, are to be cut and those roots and stumps within the channel and on the banks where the filling takes place shall be completely removed to a depth at least 1 metre below the level of the finished grade.

Brush and trees removed from the existing drain are to be put into piles by the Contractor, in locations where they can be safely burned, and to be burned by the contractor after obtaining the necessary permits, as required. If, in the opinion of the Drainage Superintendent, any of the piles are too wet or green to be burned, he shall so advise the Contractor to haul away the unburned materials to an approved dump site or advise the Contractor to obtain an agreement in writing with the owners when to return to burn the materials. Prior to and during the course of burning operations the Contractor shall comply with the current guidelines prepared by the Air Quality Branch of the Ontario Ministry of Environment and shall ensure that the Environmental Protection Act is not violated.

The Contractor shall first consult with and obtain approval from the landowner, Drainage Superintendent and Town of Kingsville Fire Services prior to burning the brush removed from this specified area.

## 6.0 EXCAVATION FOR DRAIN CLEANOUT

### 6.1 Excavation of Existing Drain Channel

In all cases, the Contractor shall use the benchmarks to establish the proposed grade. However, for convenience, the drawings provide the approximate depth from the surface of the ground and from the existing drain bottom to the proposed grades. **THE CONTRACTOR SHALL NOT EXCAVATE DEEPER THAN THE GRADELINES SHOWN ON THE DRAWINGS.** Should over-excavation of the drain bank occur, the Contractor will **not** be permitted to repair with native material packed into place by the excavator and reshaped. Should over-excavation occur, the Contractor will be required to have a bank repair detail engineered by a Professional Engineer (hired by the Contractor), to ensure long term stability of the bank is maintained. Such repairs shall be subject to approval by the Engineer and will be at no extra cost to the item.

All excavated material shall be handled as specified in Section 6.2. Materials deposited on the farmlands shall be within the working corridors, at least 1.0 m from the top of the drain bank, or as specified on the drawings. Upon allowing drying of excavated materials (if necessary) and as approved by the Drainage Superintendent, the Contractor shall level excavated materials in accordance with Section 6.2. Excavated material shall not be placed on dykes, in ditches, tiles or depressions intended to conduct water into the drain.

All excavation work shall be done in such a manner as to not harm any vegetation or trees, not identified in this report or by the Drainage Superintendent for clearing. Any damages to trees or vegetation caused by the Contractors work shall be rectified to the satisfaction of the Drainage Superintendent. The Contractor shall exercise caution around existing tile inlets and shall confirm with the property owners that all tiles have been located and tile ends repaired as specified.

Where the existing guy anchors may be affected by the proposed work, the Contractor shall notify the utility in advance of the work to determine if the guy anchor requires relocation outside of open drain

channel limits.

## **6.2 Levelling of Excavated Materials**

Excavation of the drain bottom shall be completed as specified in Section 6.1, above as shown on the drawings.

Excavated drain materials shall be spread to a depth not to exceed 300 mm, unless specified otherwise on the drawings. The material shall be sufficiently levelled to allow further working by agricultural implements. All stones and other debris removed from the drain, which may interfere with agricultural implements, shall be disposed of off-site. Excavated material shall not be placed on dykes, in ditches, tiles or depressions intended to conduct water into the drain.

## **6.3 Trucking of Excavated Materials**

Contractor shall be solely responsible for acquiring all permits required prior to hauling any fill materials off-site. The Contractor shall restore any such areas which are damaged by his operations, to original or better condition. The Contractor will be held liable for damages to roads, sodded areas and gardens, resulting from his non-compliance with these specifications. Should the landowner prefer to have the excavated materials trucked rather than levelled on site, all additional costs shall be at the landowner's expense

## **7.0 DRAIN REALIGNMENT**

### **7.1 New Drain Excavation**

Excavation shall be carried out in accordance with the profile shown on the drawings for the drain relocation. In all cases, the Contractor shall use the benchmarks to establish the proposed grade.

All excavated material from the new drain construction (Station 1+575 to Station 1+708), shall be used as backfill for the infilling of the old section of drain. All roadways and laneways disturbed by the trucking of excavated materials shall be restored to original conditions.

In all cases, the Contractor shall use the benchmarks to establish the proposed grade. However, for convenience, the drawings provide the approximate depth from the surface of the ground and from the existing drain bottom to the proposed grades. **THE CONTRACTOR SHALL NOT EXCAVATE DEEPER THAN THE GRADELINES SHOWN ON THE DRAWINGS.**

Should over excavation of the drain bank occur, the Contractor will not be permitted to repair with native material packed into place by the excavator and reshaped. Should over excavation occur, the Contractor will be required to have a bank repair detail engineered by a Professional Engineer (hired by the Contractor), to ensure long term stability of the bank is maintained. Such repairs shall be subject to approval by the Engineer and will be at no extra cost to the item.

Prior to seeding of the drain, the stripped topsoil shall be placed on the drain banks at 50 mm depth.

Hydraulic Seeding of the newly shaped drain banks shall be completed immediately following drain construction and as specified in Section 9.0.

All excavation work shall be done in such a manner as to not harm any vegetation or trees, not identified in this report or by the Drainage Superintendent for clearing.

The Contractor shall exercise caution around existing tile inlets and shall confirm with the property owners that all tiles have been located and tile ends repaired as specified.

## **8.0 DRAIN INFILLING**

Prior to the infilling of the open drain, the contractor shall remove all vegetation and organic debris from

the existing drain slopes. The native materials used to fill the drain shall be placed in maximum 300 mm loose lifts and compacted with vibratory compaction equipment capable of achieving 95% of the maximum standard proctor density or better.

## 9.0 HYDRAULIC SEEDING OF NEW DRAIN CHANNEL

The newly established drain banks and all existing grassed areas disturbed by construction shall be hydraulic mulch seeded as specified herein. The surface shall be predominantly fine and free from weeds and other unwanted vegetation. All other loose surface litter shall be removed and disposed of.

The Contractor shall apply a fibre reinforced matrix (FRM) hydromulch engineered with pasteurized wood fibers and cross-linked with dispersible synthetic fibers and exclusive soil bonding agents for immediate and effective soil erosion control on newly constructed drain channels where the sideslopes are 2:1 (horizontal : vertical) such as the FlexGuard product by Fibremulch company or approved equal . The hydromulch should be non-toxic and 100% biodegradable with a minimal curing period and up to 12 months longevity. The hydromulch shall be applied at a minimum rate of 3,300 kg of dry product per 10,000 m<sup>2</sup>. It shall be thoroughly mixed with water in a hydraulic seeder and mulcher at a rate of 20 kg of dry product to 225 litres of water. Refer to OPSS.PROV 804 for additional specifications.

Seeding and mulching shall be a one step process in which the seed and hydraulic mulch are applied simultaneously in a water slurry via the hydraulic seeder/mulcher. The materials shall be added to the supply tank while it is being loaded with water. The materials shall be thoroughly mixed into a homogeneous water slurry and shall be distributed uniform, cohesive mat over the prepared surface. The materials shall be measured by mass or by a mass-calibrated volume measurement, acceptable to the Drainage Superintendent.

The hydraulic seeder/mulcher shall be equipped with mechanical agitation equipment capable of mixing the materials into a homogenous state until applied. The discharge pumps and gun nozzles shall be capable of applying the material uniformly. Grass seed shall be MTO roadside seed mixture meeting the requirements as follows:

<i>Creeping Red Fescue</i>	52%
<i>Perennial Ryegrass</i>	35%
<i>Kentucky Bluegrass</i>	10%
<i>White Clover</i>	3%

Bags shall bear the label of the supplier indicating the content by species, grade and mass. Seed shall be applied at a rate of 170 kg per 10,000 m<sup>2</sup>. **The hydraulic seeding shall be deemed "Completed by the Contractor" when the seed has established in all areas to the satisfaction of the Engineer. Re-seeding and/or other methods required to establish the grass will be taken into consideration to achieve the end result and the costs shall be incidental to the works.**

## 10.0 STONE EROSION PROTECTION

Erosion protection, within the drain channel, shall be constructed of quarry stone rip-rap (R50) as shown on the drawings and as specified herein. The size of the rip-rap shall mostly vary between 150 mm and 250 diameter. The rip-rap shall be sloped 1 vertical to 1.5 horizontal, with filter fabric underlay spanning across the entire width of the drain.

The minimum thickness requirement of the erosion stone layer is 350 mm with no portion of the filter fabric to be exposed.

## 11.0 GABION MATS (STA. 1+575 TO STA. 1+650)

Gabion mats shall be manufactured from PVC or HDPE based polymer coated galvanized steel wire mesh. Gabion mats shall be manufactured so that the sides, ends, lid, base, and diaphragms can be readily assembled into rectangular units.

Where the length of the gabion mat exceeds its horizontal width, the gabion mat shall be divided into equal cells by diaphragms. Cell length shall not exceed its horizontal width. Diaphragms shall be made of wire mesh and shall be secured in the proper position on the base section. Gabion mats shall be manufactured with all components connected at the production facility with the exception of the gabion mat lid. Gabion mats manufactured from PVC coated galvanized wire mesh shall be assembled using stainless steel ring fasteners. Fasteners shall be installed at a maximum spacing of 150 mm with at least one fastener per gabion mesh opening.

Gabion mats shall be according to OPSS 1430 Tables 2, 4 & 5. Gabion stones shall be according to OPSS 1004 and as specified in the Contract Documents. Excavation for gabion mats shall be according to OPSS 206.

Gabions shall be installed at the locations and to the line, grade, and dimensions specified in the Contract Documents. As per Table 2, Mat Size 14 having a length of 30 m, 2 m width and 0.3 m depth is recommended for this application for two mats fastened together to form a 4 m wide gabion mat. Gabions shall be assembled according to the manufacturer's instructions and as specified in the Contract Documents. Gabions shall be assembled so that wire ends do not project outside the units on any exposed surface.

Gabion stones shall be placed in a manner as not to damage the wire mesh or the PVC coating on the wire or cause deformation of the gabion. Gabion stones shall be placed to minimize the voids between the stones. When specified in the Contract Documents, the front face of exposed wall surfaces shall be hand placed gabion stone to ensure a uniform appearance.

Prior to securing the lids on the gabion mat, the gabion mat shall be slightly overfilled by 25 to 50 mm of gabion stone in order to allow for settlement of the stone within the units.

Internal connecting wires shall be installed according to the manufacturer's recommendations. When gabions are used as a channeling revetment, internal connecting wires are not necessary.

When the gabion has been filled, the gabion lid shall be bent over until all lid edges coincide with the front and side edges of the gabion and shall be secured to the front and sides by wire according to manufacturer's instructions and as specified in the Contract Documents.

Geotextile shall be placed uniformly, free of folds, tears or punctures and as specified in the Contract Documents. The geotextile shall be joined so that the material overlaps a minimum of 500 mm and shall be pinned together. Alternatively, the geotextile shall be joined to conform to the seam requirements of OPSS 1860. Geotextile shall be fixed to prevent movement during installation.

## **12.0 ROAD CULVERT CONSTRUCTION**

### **12.1 Location**

The road culvert shall be located and installed as shown on the drawings attached hereto.

### **12.2 Materials**

Materials shall be as follows:

*Culvert No. 1*                      *New 27.6 m long, 3046 mm x 2279 mm reinforced precast concrete box (downstream extension) culvert per OPSS 1821 or CHBDC CAN/CSA 56-06 standards where applicable.*

*Culvert No. 4*                      *New 90.0 m long, 2130 mm x 910 mm reinforced precast concrete box culvert per OPSS 1821 or CHBDC CAN/CSA 56-06 standards where applicable.*

<i>Culvert No. 5</i>	<i>New 40.0 m long, 900 mm diameter corrugated high-density polyethylene pipe, 320 kPa (smooth interior wall), complete with bell and spigot pipe joining system.</i>
<i>Bedding below culvert pipes</i>	<i>Granular 'A' conforming to OPSS Division 10 or 19 mm clearstone minimum 150 mm.</i>
<i>Bedding below box culverts</i>	<i>Concrete mud matt minimum 100 mm thickness and Granular 'A' conforming to OPSS Division 10, minimum 300 mm thickness.</i>
<i>Culvert Backfill</i>	<i>Granular 'A' conforming to OPSS Division 10.</i>
<i>Erosion Stone</i>	<i>All stone to be used for erosion protection shall be R-50 clear quarried rock per OPSS 1004, minimum 350 mm thickness.</i>
<i>Filter Fabric</i>	<i>“Non-Woven” geotextile filter fabric with a minimum strength equal or greater than Terrafix 270R, Amoco 4546, Mirafi 140NC, or approved equivalent.</i>

### **12.3 Culvert Installation**

Suitable dykes shall be constructed in the drain so that the installation of the culvert can be accomplished in the dry. The drain bottom shall be cleaned, prepared, shaped and compacted to suit the new culvert configuration, as shown on the drawings. Granular materials shall be compacted to 100% of their maximum dry density; imported clean native materials shall be supplied, placed and compacted to 95% of their maximum dry density.

### **12.4 Vertical Cast-in-Place End walls (Culvert No. 1)**

The wingwalls shall be designed by the contractor and shall retain a Professional Engineer for which a Professional engineer’s stamped shop drawings shall be submitted to the MTO for review and approval prior to construction.

### **12.5 Sloping stone End walls (Culvert No. 4 and Culvert No. 5)**

Sloping stone end walls shall be constructed of quarry stone riprap (R-50), as shown on the drawings and as specified herein. The riprap shall be sloped 1 vertical to 1.5 horizontal, with filter fabric underlay and spanning across the entire drain. The minimum thickness requirement of the erosion stone layer is 350 mm with no portion of the filter fabric to be exposed.

### **12.6 Lateral Tile Drains**

The Contractor shall re-route any outlet tile drains, in consultation with the Drainage Superintendent, as required to accommodate the new culverts. Tile drain outlets through the wall of the new culvert will not be permitted. All costs associated with re-routing lateral tile drains (if any) shall be at the Contractor’s expense.

### **12.7 Site Cleanup and Restoration**

As part of the work and upon completion, the Contractor shall remove and dispose of, off-site any loose timber, logs, stumps, large stones, rubber tires, cinder blocks or other debris from the drain bottom and from the side slopes. Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

## **GENERAL SPECIFICATIONS**

### **1.0 AGREEMENT AND GENERAL CONDITIONS**

The part of the Specifications headed "Special Provisions" which is attached hereto forms part of this Specification and is to be read with it. Where there is any difference between the requirements of this General Specification and those of the Special Provisions, the Special Provisions shall govern.

Where the word "Drainage Superintendent" is used in this specification, it shall mean the person or persons appointed by the Council of the Municipality having jurisdiction to superintend the work.

Tenders will be received and contracts awarded only in the form of a lump sum contract for the completion of the whole work or of specified sections thereof. The Tenderer agrees to enter into a formal contract with the Municipality upon acceptance of the tender. The General Conditions of the contract and Form of Agreement shall be those of the Stipulated Price Contract CCDC2-Engineers, 1994 or the most recent revision of this document.

### **2.0 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS**

Each tenderer must visit the site and review the plans and specifications before submitting his/her tender and must satisfy himself/herself as to the extent of the work and local conditions to be met during the construction. Claims made at any time after submission of his/her tender that there was any misunderstanding of the terms and conditions of the contract relating to site conditions, will not be allowed. The Contractor will be at liberty, before bidding to examine any data in the possession of the Municipality or of the Engineer.

The quantities shown or indicated on the drawings or in the report are estimates only and are for the sole purpose of indicating to the tenderers the general magnitude of the work. The tenderer is responsible for checking the quantities for accuracy prior to submitting his/her tender.

### **3.0 MAINTENANCE PERIOD**

The successful Tenderer shall guarantee the work for a period of one (1) year from the date of acceptance thereof from deficiencies that, in the opinion of the Engineer, were caused by faulty workmanship or materials. The successful Tenderer shall, at his/her own expense, make good and repair deficiencies and every part thereof, all to the satisfaction of the Engineer. Should the successful Tenderer for any cause, fail to do so, then the Municipality may do so and employ such other person or persons as the Engineer may deem proper to make such repairs or do such work, and the whole costs, charges and expense so incurred may be deducted from any amount due to the Tenderer or may be collected otherwise by the Municipality from the Tenderer.

### **4.0 GENERAL CO-ORDINATION**

The Contractor shall be responsible for the coordination between the working forces of other organizations and utility companies in connection with this work. The Contractor shall have no cause of action against the Municipality or the Engineer for delays based on the allegation that the site of the work was not made available to him by the Municipality or the Engineer by reason of the acts, omissions, misfeasance or non-feasance of other organizations or utility companies engaged in other work.

### **5.0 RESPONSIBILITY FOR DAMAGES TO UTILITIES**

The Contractor shall note that overhead and underground utilities such as hydro, gas, telephone and water are not necessarily shown on the drawings. It is the Contractor's responsibility to contact utility companies for information regarding utilities, to exercise the necessary care in construction operations and to take other precautions to safeguard the utilities from damage.

All work on or adjacent to any utility, pipeline, railway, etc., is to be carried out in accordance with the requirements of the utility, pipeline, railway, or other, as the case may be, and its specifications for such work are to be followed as if they were part of this specification. The Contractor will be liable for any damage to utilities.

## **6.0 CONTRACTOR'S LIABILITY**

The Contractor, his/her agents and all workmen or persons under his/her control including sub-contractors, shall use due care that no person or property is injured and that no rights are infringed in the prosecution of the work. The Contractor shall be solely responsible for all damages, by whomsoever claimable, in respect to any injury to persons or property of whatever description and in respect of any infringement of any right, privilege or easement whatever, occasioned in the carrying on of the work, or by any neglect on the Contractor's part.

The Contractor, shall indemnify and hold harmless the Municipality and the Engineer, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the contract.

## **7.0 PROPERTY BARS AND SURVEY MONUMENTS**

The Contractor shall be responsible for marking and protecting all property bars and survey monuments during construction. All missing, disturbed or damaged property bars and survey monuments shall be replaced at the Contractor's expense, by an Ontario Land Surveyor.

## **8.0 MAINTENANCE OF FLOW**

The Contractor shall, at his/her own cost and expense, permanently provide for and maintain the flow of all drains, ditches and water courses that may be encountered during the progress of the work.

## **9.0 ONTARIO PROVINCIAL STANDARDS**

Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) shall apply and govern at all times unless otherwise amended or extended in these Specifications or on the Drawing. Access to the electronic version of the Ontario Provincial Standards is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>. Under the title Technical Manuals is a link to the Ontario Provincial Standards. Users require Adobe Acrobat to view all pdf files.

## **10.0 APPROVALS, PERMITS AND NOTICES**

The construction of the works and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced in this Contract. The Contractor shall obtain all approvals and permits and notify the affected authorities when carrying out work in the vicinity of any public utility, power, underground cables, railways, etc.

## **11.0 TRAFFIC CONTROL**

The Contractor will be required to control vehicular and pedestrian traffic along roads at all times and shall, at his/her own expense, provide for placing and maintaining such barricades, signs, flags, lights and flag persons as may be required to ensure public safety. The Contractor will be solely responsible for controlling traffic and shall appoint a representative to maintain the signs and warning lights at night, on weekends and holidays and at all other times that work is not in progress. All traffic control during construction shall be strictly in accordance with the **Occupational Health and Safety Act** and the current version of the **Ontario Traffic Manuals**. Access to the electronic version of the **Ontario Traffic Manual** is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>, click on "Library Catalogue," under the "Title," enter "Ontario Traffic Manual" as the search. Open the applicable "Manual(s)" by choosing the "Access

Key," once open look for the "Attachment," click the pdf file. Users require Adobe Acrobat to view all pdf files.

**Contractors are reminded of the requirements of the Occupational Health and Safety Act pertaining to Traffic Protection Plans for workers and Traffic Control Plan for Public Safety.**

## **12.0 SITE CLEANUP AND RESTORATION**

As part of the work and upon completion, the Contractor shall remove and dispose of, off-site any loose timber, logs, stumps, large stones, rubber tires, cinder blocks or other debris from the drain bottom and from the side slopes. Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

## **13.0 UTILITY RELOCATION WORKS**

In accordance with Section 26 of the Drainage Act, if utilities are encountered during the installation of the drainage works that conflict with the placement of the new culvert, the operating utility company shall relocate the utility at their own costs. The Contractor however will be responsible to co-ordinate these required relocations (if any) and their co-ordination work shall be considered incidental to the drainage works.

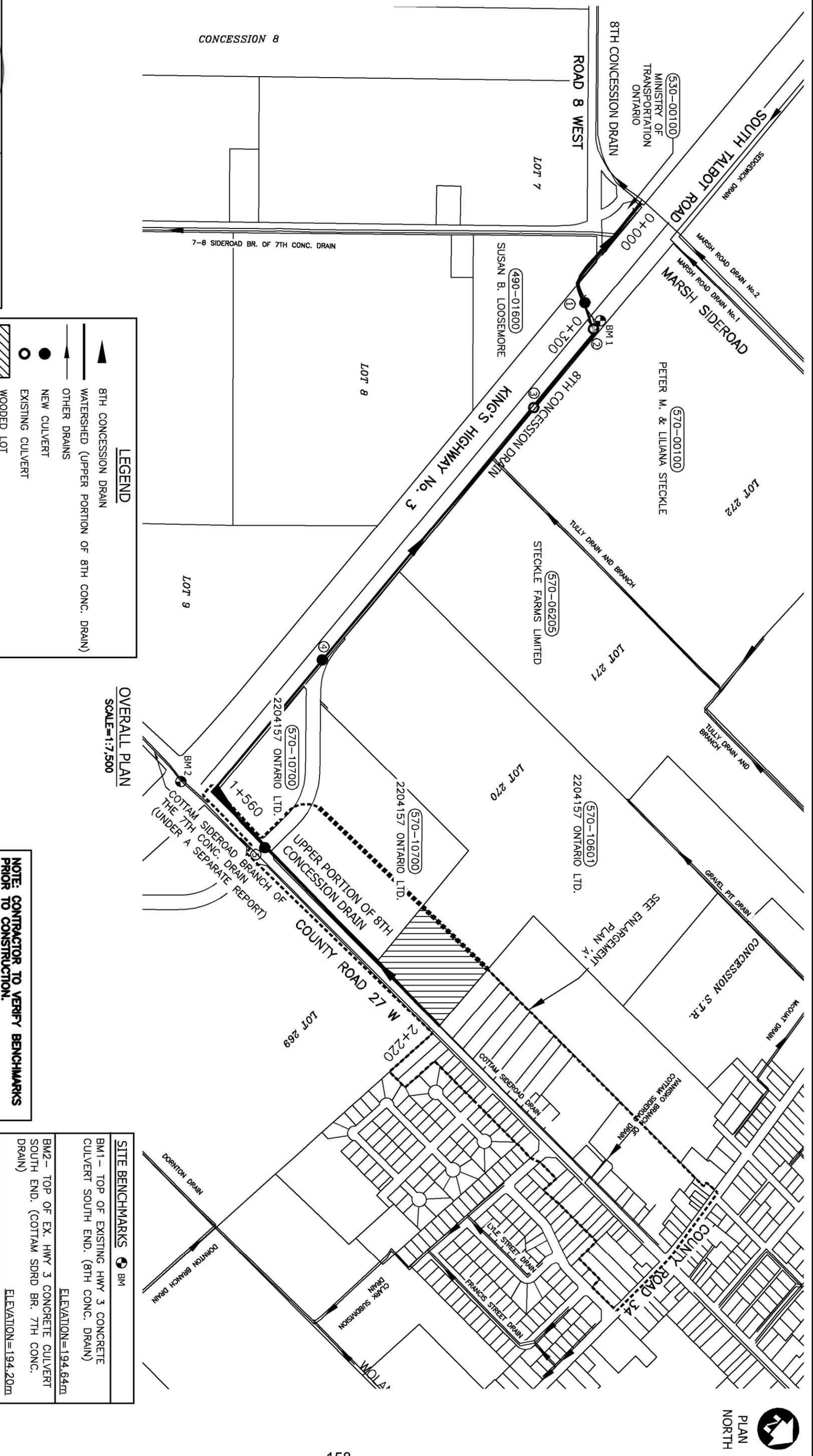
## **14.0 FINAL INSPECTION**

All work shall be carried out to the satisfaction of the Drainage Superintendent for the Municipality, in compliance with the specifications, drawings and the Drainage Act. Upon completion of the project, the work will be inspected by the Engineer and the Drainage Superintendent. Any deficiencies noted during the final inspection shall be immediately rectified by the Contractor.

Final inspection will be made by the Engineer within 20 days after the Drainage Superintendent has received notice in writing from the Contractor that the work is completed, or as soon thereafter as weather conditions permit.

## **15.0 FISHERIES CONCERNS**

Standard practices to be followed to minimize disruption to fish habitat include embedment of the culvert a minimum 10% below grade, constructing the work 'in the dry' and cutting only trees necessary to do the work (no clear-cutting). No in-water work is to occur during the timing window unless otherwise approved by the appropriate authorities.



**LEGEND**

- ▲ 8TH CONCESSION DRAIN
- WATERSHED (UPPER PORTION OF 8TH CONC. DRAIN)
- OTHER DRAINS
- NEW CULVERT
- EXISTING CULVERT
- ▨ WOODED LOT

**OVERALL PLAN**  
SCALE=1:7,500

**NOTE: CONTRACTOR TO VERIFY BENCHMARKS PRIOR TO CONSTRUCTION.**

**SITE BENCHMARKS** ● BM

BM1 - TOP OF EXISTING HWY 3 CONCRETE CULVERT SOUTH END. (8TH CONC. DRAIN)	ELEVATION=194.64m
BM2 - TOP OF EX. HWY 3 CONCRETE CULVERT SOUTH END. (COTTAM SDRD BR. 7TH CONC. DRAIN)	ELEVATION=194.20m

**Conditions of Use**

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No.	ISSUED FOR	DATE	BY
1	CLIENT REVIEW	JUNE 4/24	TRO

DESIGN	REVIEWED BY
TRO	MDH
DRAWN	CHECKED BY
JNS	TRO

DATE	June 10, 2024
SCALE	AS SHOWN

**DILLON CONSULTING**

PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

**8TH CONCESSION DRAIN**  
Town of Kingsville

**OVERALL PLAN**  
1 of 8



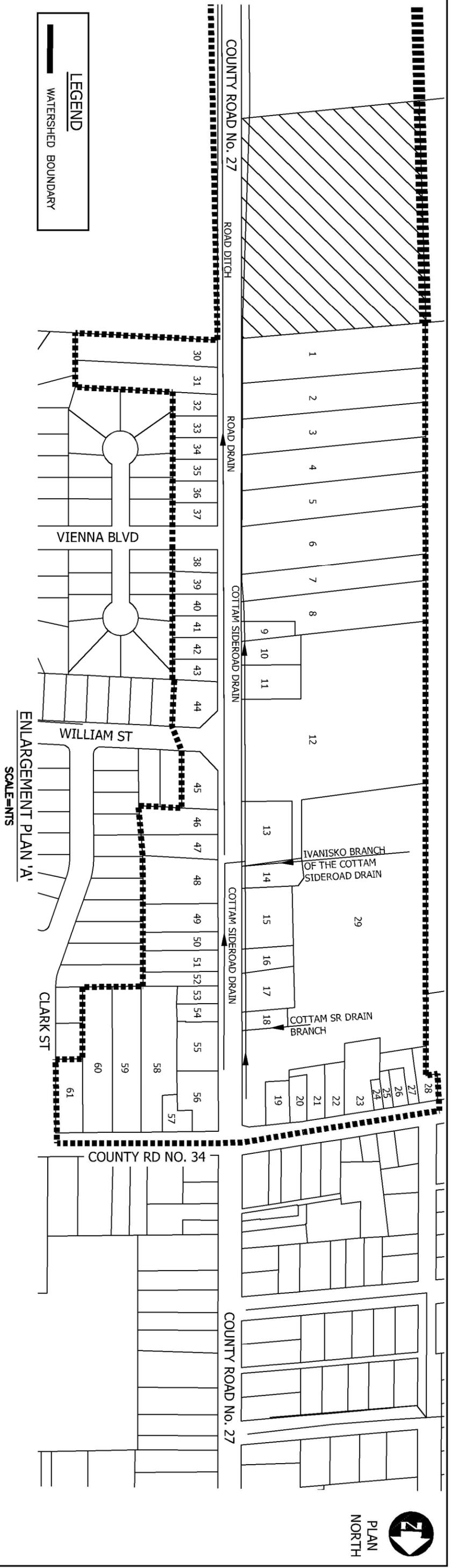


PROPERTY INFORMATION	
ID	OWNER
1	KEVIN M. & JUDETH I. HAMM
2	JEFFREY V. & CHELSEA J. BAS
3	EDWARD F. & KIMBERLIE M. FUERTH
4	GUY R. & ANGELA F. WIGLE
5	GARY W. & ELAINE K. THORTON
6	LEONARD H. TONER
7	ABRAM NEUFELD & ANNA HEINRICHS
8	TRUDY UNGER & ABRAM KNELSEN
9	NATHAN W. BENNETT
10	MICHAEL J. ETZEL
11	KANDUS L. FLOOD
12	RAJAC GROUP INC.
13	JAMES A. CARTER
14	AGRI CO-OPERATIVE LTD.
15	DANIEL MCARTHY & HANS KLUYMANS
16	KRISTOPHER ENNIS
17	KINGSVILLE ROOFING LTD
18	813816 ONTARIO LIMITED.

PROPERTY INFORMATION	
ID	OWNER
19	TIMOTHY & TERESA LINDSAY
20	1882102 ONTARIO INC.
21	MICHAEL & TRACEY SMITH
22	LOUIS B. COUVILLON & ELIZABETH A. SAMPAGNA
23	JOHN W. BOER
24	13246566 CANADA INC.
25	PAN WEST PHARMA INC.
26	1670057 ONTARIO LIMITED
27	TOWN OF KINGSVILLE
28	WILLIAM P. HODGKINS
29	AGRI CO-OPERATIVE LTD.
30	PATRICK J. & THERESA A. DIEMER
31	BRIAN J. & JACYLN R. JACQUES
32	MICHAEL BOSSE & DANIELLE SOULLIERE
33	BRYCON D. SWEET & KENDALL L. PENNER
34	REJEAN R. & NICOLE T. FILLION
35	LEONARD & CORINNE JOHNSON
36	KAITLYN J. NADIN & BRADLEY CARROLL

PROPERTY INFORMATION	
ID	OWNER
37	BRENT A. & KATHRYN M. BRINACOMBE
38	JOSEPH M. & LINDSAY L. IATONNA
39	GERALD A. & PATRICIA R. CRISFORD
40	MARTIN J. & MELINDA S. JANZEN
41	MARK & NAJETTE RADIGAN
42	GERALD A. & DIANE E. SOULLIERE
43	JENNIFER L. WILKINSON
44	PHILLIP & ELIZABETH BLAIS
45	LOUIS S. & CAROL A. HELMER
46	KEVIN M. & DALE C. ROSS
47	ERWIN & JACQUELINE M. ETZEL
48	ERIC AMLIN
49	MARIMUS H. & ELIZABETH A. RETSMA
50	DEREK S. & SUSAN J. TOMKINS
51	NO TAN LINES TANNING SALON INC.
52	TIMOTHY D. BEZANSON
53	TAMMY L. MCDERMOTT
54	813816 ONTARIO LIMITED

PROPERTY INFORMATION	
ID	OWNER
55	KINGSVILLE ROOFING LTD
56	11337840 CANADA INC.
57	KUGAN MERUGESU
58	BRIAN D. & MALANA A. CANDIDO
59	BERNARD C. & KATHRYN J. CORMIER
60	ROBERT LAMAN
61	BARBARA E. SISLEY



SCHEDULE C'

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No.	CLIENT REVIEW	ISSUED FOR	DATE	BY
1			JUNE 4/24	TRO

DESIGN	REVIEWED BY
TRO	MDH
DRAWN	CHECKED BY
JNS	TRO
DATE	SCALE
June 10, 2024	AS SHOWN

Drainage Report for  
**8TH CONCESSION DRAIN**  
 Town of Kingsville

**DILLON CONSULTING**

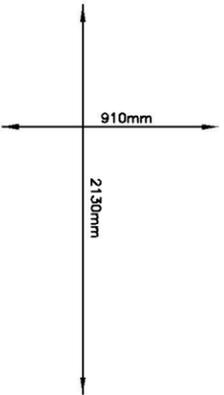
PROJECT NO: 21-3142  
 DRAWING SCALES BASED ON A 11" X 17" SHEET

SHEET TITLE: ENLARGEMENT PLAN 'A'  
 PAGE NO: 2 OF 8





**CULVERT NO. 4 SECTION**  
N.T.S.

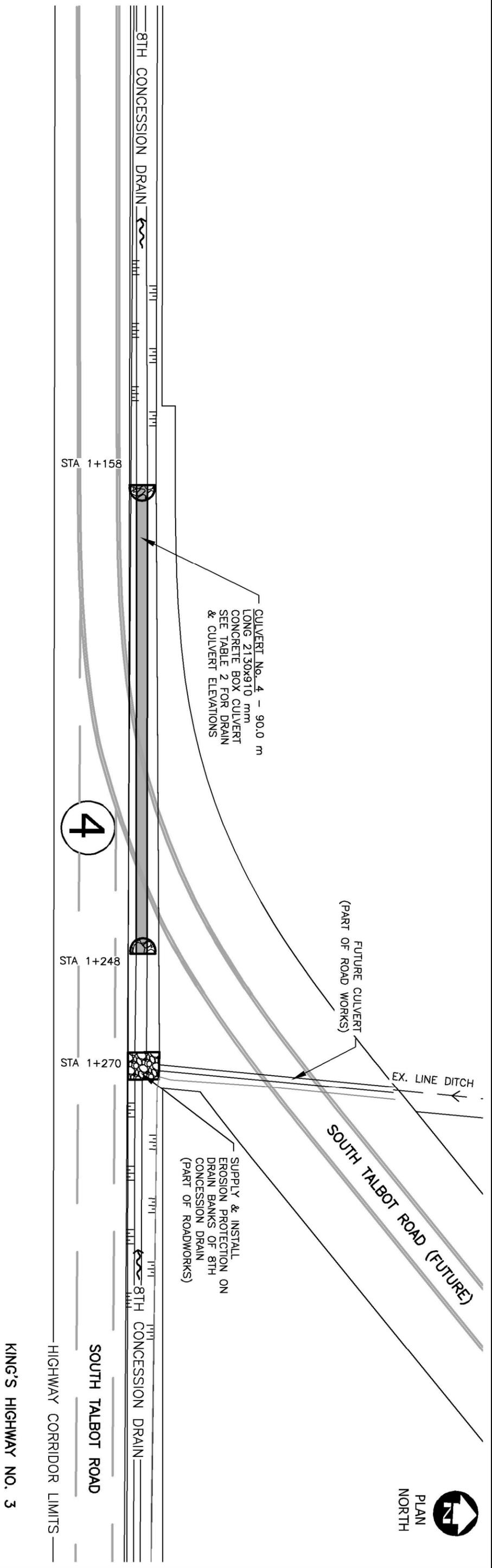


SELF-ADHERED WATERPROOFING TO BE APPLIED TO TOP & UPPER 50% OF CULVERT SIDES AT ALL PRECAST BOX JOINTS. HOT-APPLIED WATERPROOFING ON TOP & 300mm DOWN SIDES. ALL WATERPROOFING TO BE COVERED WITH PROTECTION BOARD.

**DETAIL**  
SCALE=1:750

**TABLE 2 - CULVERT DESIGN INFORMATION (CULVERT No. 4)**

DESCRIPTION	CULVERT NO. 4
DRAIN BOTTOM DESIGN ELEVATION	192.88(W)/192.91(E)
CULVERT INVERT ELEVATION	192.78(W)/192.81(E)
CULVERT SIZE	2130 mm x 910 mm
CULVERT LENGTH (m)	90.0
CULVERT GRADE (%)	0.03



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No.	ISSUED FOR	DATE	BY
1	CLIENT REVIEW	JUNE 4/24	TRO

DESIGN	REVIEWED BY	DATE	SCALE
TRO	MDH	June 10, 2024	AS SHOWN
JNS	TRO		

**DILLON CONSULTING**  
PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

**SCHEDULE G'**  
Drainage Report for  
**8TH CONCESSION DRAIN**  
Town of Kingsville  
SHEET TITLE  
**CULVERT NO. 4 DETAILS**  
PAGE NO. 4 OF 8





**LICENSED PROFESSIONAL ENGINEER**  
 T. R. OLIVER  
 100046433  
 10/06/24  
 PROVINCE OF ONTARIO

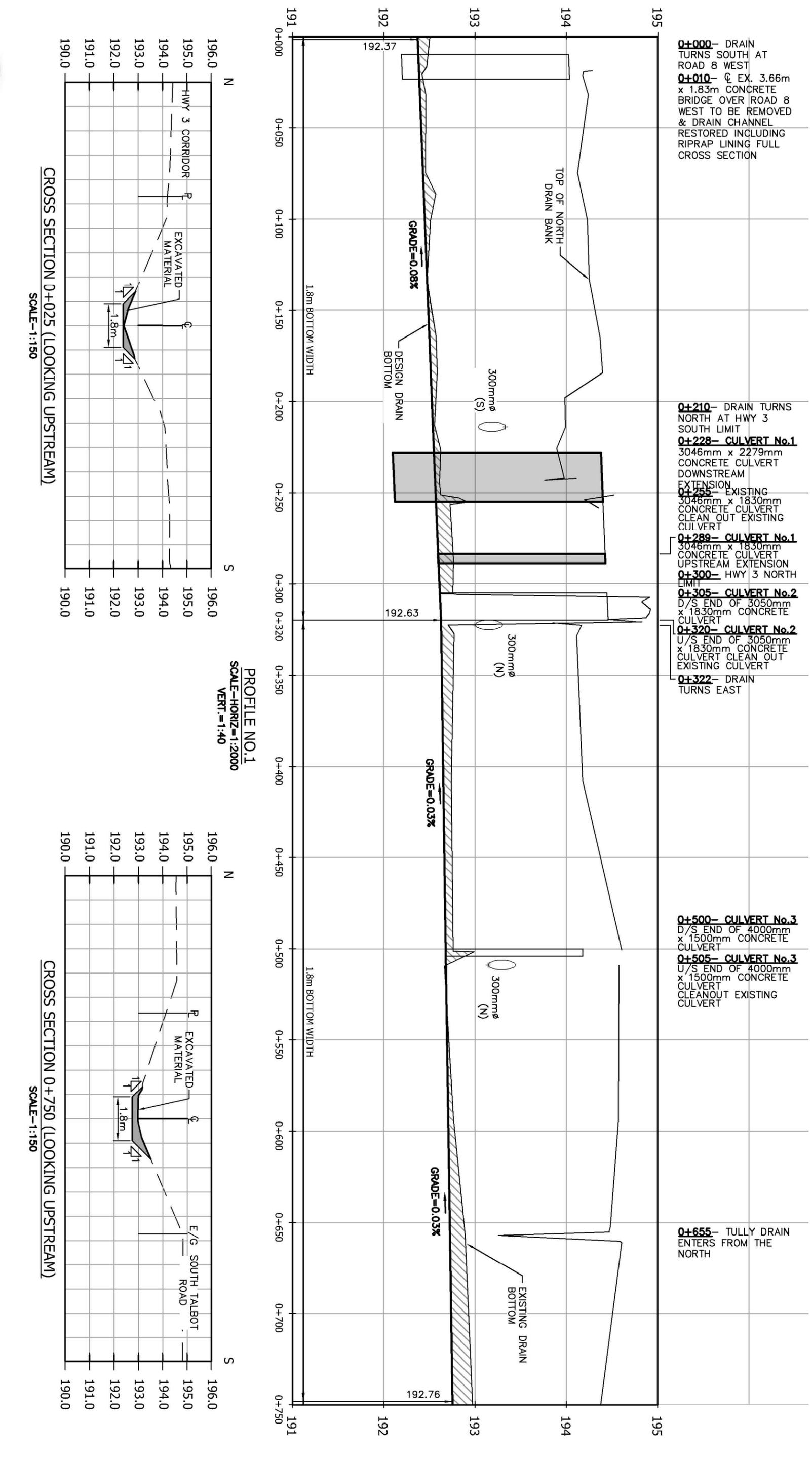
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No.	1	CLIENT REVIEW	ISSUED FOR
DATE	JUNE 4/24	TRQ	BY

DESIGN	OEM	REVIEWED BY	MDH
DRAWN	JNS	CHECKED BY	TRQ
DATE	June 10, 2024	SCALE	AS SHOWN

PROJECT NO.	21-3142
DRAWING SCALES BASED ON A 1/1" X 1/1" SHEET	

**8TH CONCESSION DRAIN**  
 Drainage Report for  
 Town of Kingsville  
**PROFILE NO. 1 & CROSS SECTIONS**  
 SHEET TITLE  
 PAGE NO. 6 of 8



**0+000**- DRAIN TURNS SOUTH AT ROAD 8 WEST  
**0+010**- C EX. 3.66m x 1.83m CONCRETE BRIDGE OVER ROAD 8 WEST TO BE REMOVED & DRAIN CHANNEL RESTORED INCLUDING RIPRAP LINING FULL CROSS SECTION

**0+210**- DRAIN TURNS NORTH AT HWY 3 SOUTH LIMIT  
**0+228**- **CULVERT No.1**  
 3046mm x 2279mm CONCRETE CULVERT DOWNSTREAM EXTENSION  
**0+255**- EXISTING 3046mm x 1830mm CONCRETE CULVERT CLEAN OUT EXISTING CULVERT  
**0+289**- **CULVERT No.1**  
 3046mm x 1830mm CONCRETE CULVERT UPSTREAM EXTENSION  
**0+300**- HWY 3 NORTH LIMIT  
**0+305**- **CULVERT No.2**  
 D/S END OF 3050mm x 1830mm CONCRETE CULVERT  
**0+320**- **CULVERT No.2**  
 U/S END OF 3050mm x 1830mm CONCRETE CULVERT CLEAN OUT EXISTING CULVERT  
**0+322**- DRAIN TURNS EAST

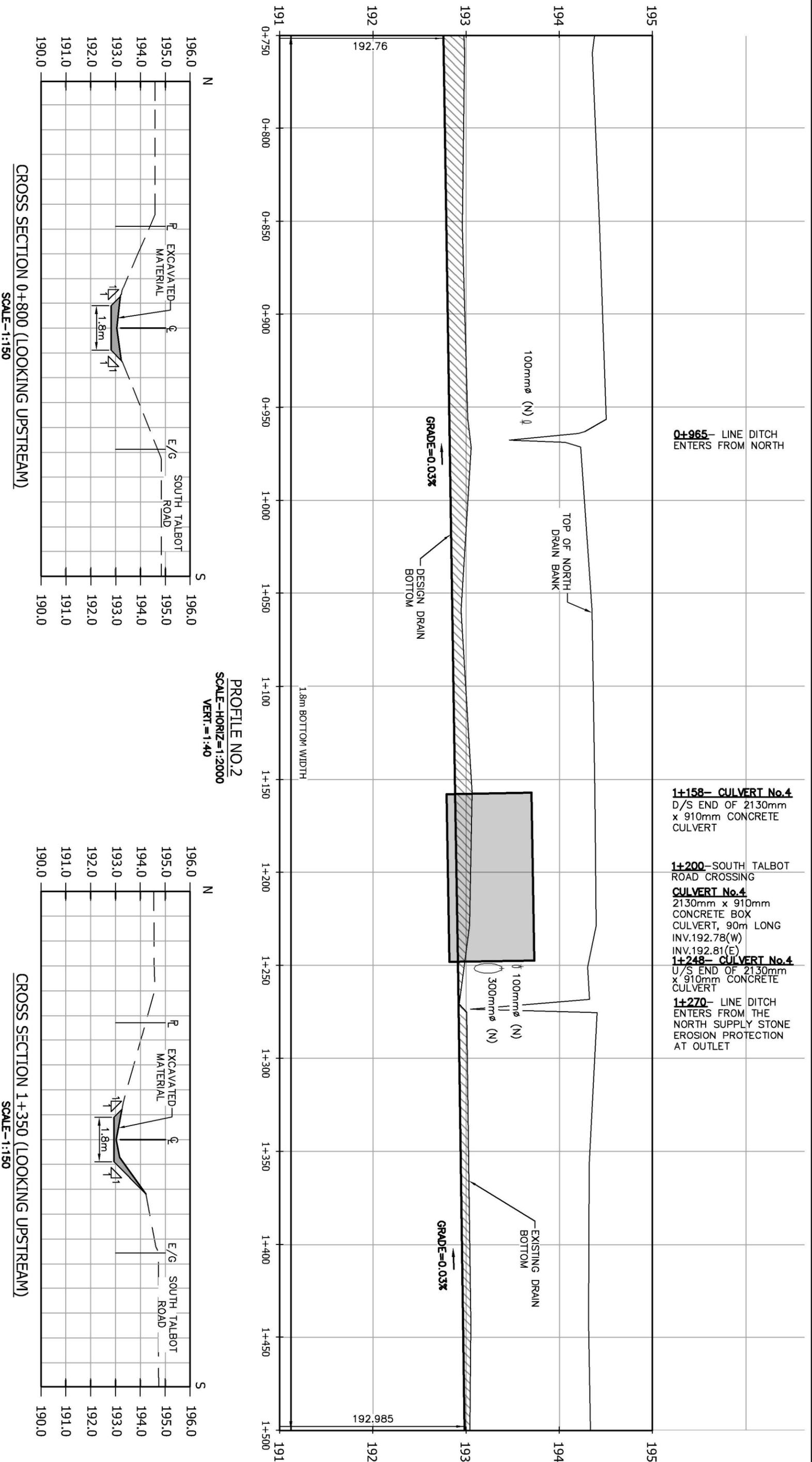
**0+500**- **CULVERT No.3**  
 D/S END OF 4000mm x 1500mm CONCRETE CULVERT  
**0+505**- **CULVERT No.3**  
 U/S END OF 4000mm x 1500mm CONCRETE CULVERT CLEANOUT EXISTING CULVERT

**0+655**- TULLY DRAIN ENTERS FROM THE NORTH

**PROFILE NO. 1**  
 SCALE-HORIZ=1:2000  
 VERT.=1:40

**CROSS SECTION 0+025 (LOOKING UPSTREAM)**  
 SCALE-1:150

**CROSS SECTION 0+750 (LOOKING UPSTREAM)**  
 SCALE-1:150



SCHEDULE 'C'

8TH CONCESSION DRAIN

Drainage Report for  
Town of Kingsville

**Conditions of Use**  
Verify elevations and/or dimensions on drawing prior to use.  
Report any discrepancies to Dillon Consulting Limited.  
Do not scale dimensions from drawing.  
Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	CLIENT REVIEW	ISSUED FOR	DATE	BY	DESIGN	REVIEWED BY
1	AS SHOWN	AS SHOWN	JUNE 4/24	TRQ	OEM	MIDH
			JUNE 10, 2024		JMS	TRQ

**DILLON CONSULTING**

PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

**8TH CONCESSION DRAIN**

SHEET TITLE  
**PROFILE NO.2 & CROSS SECTIONS**

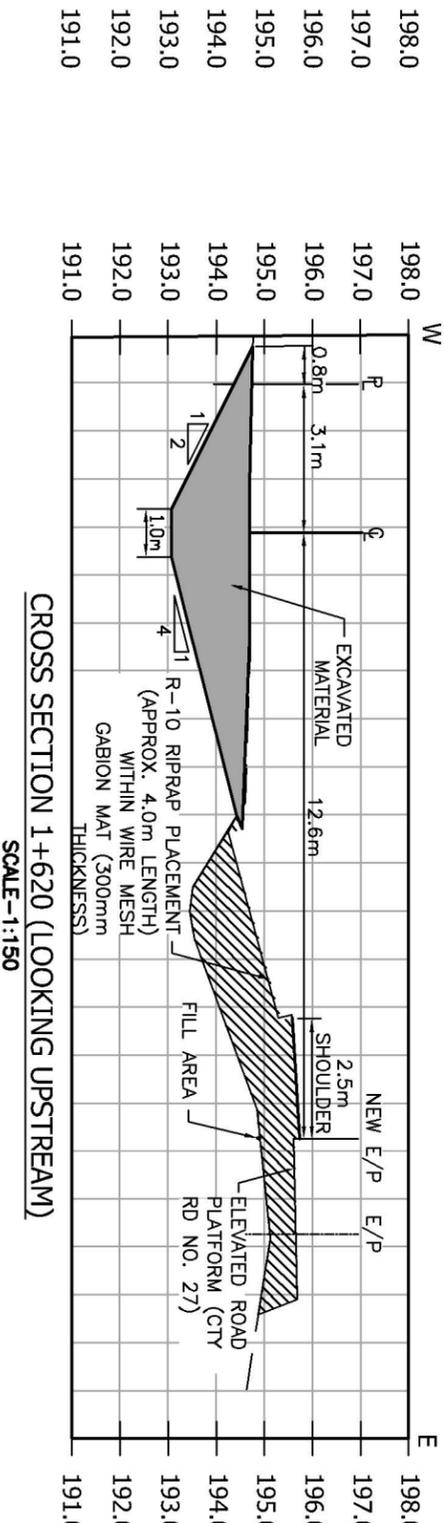
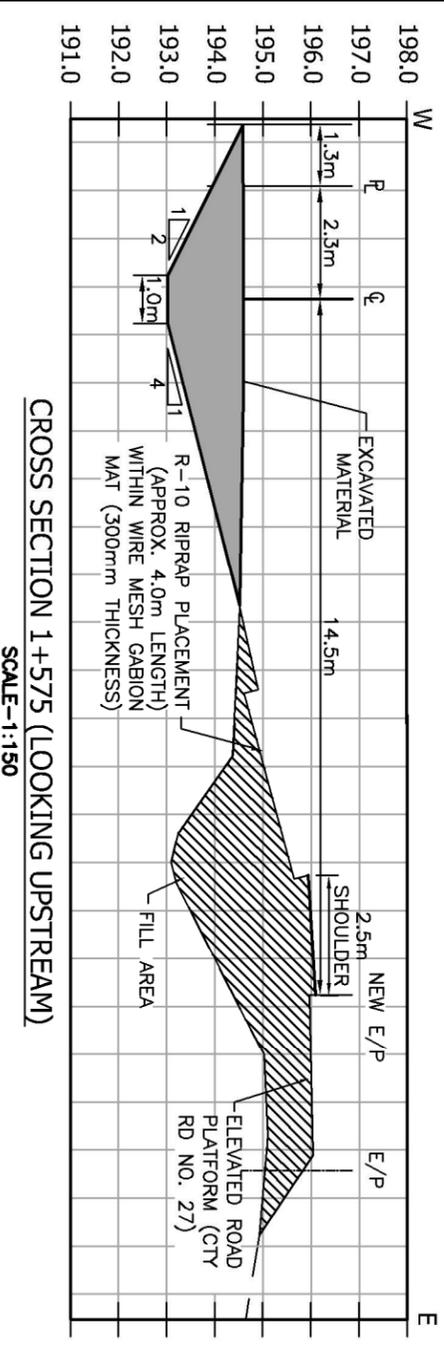
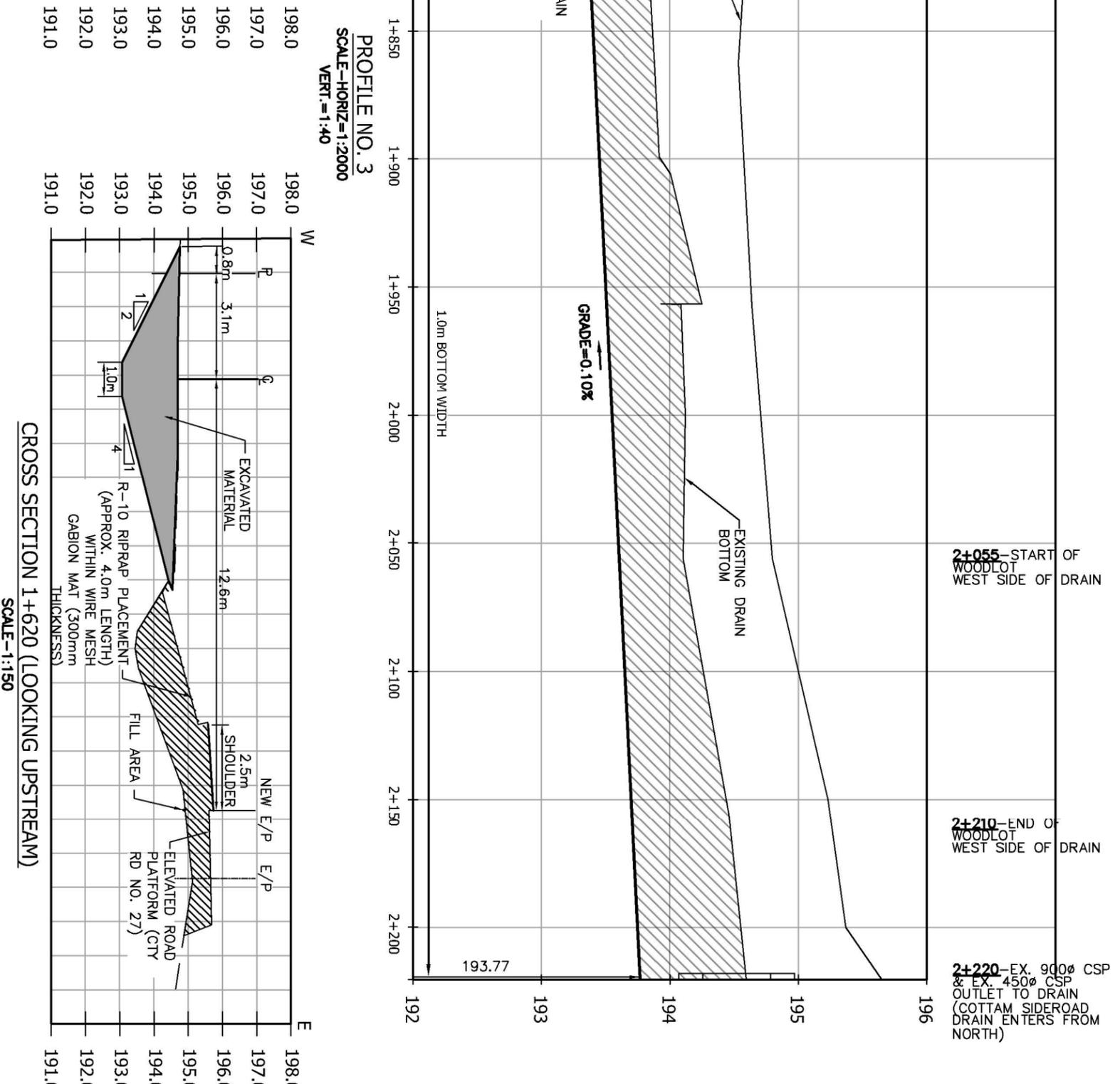
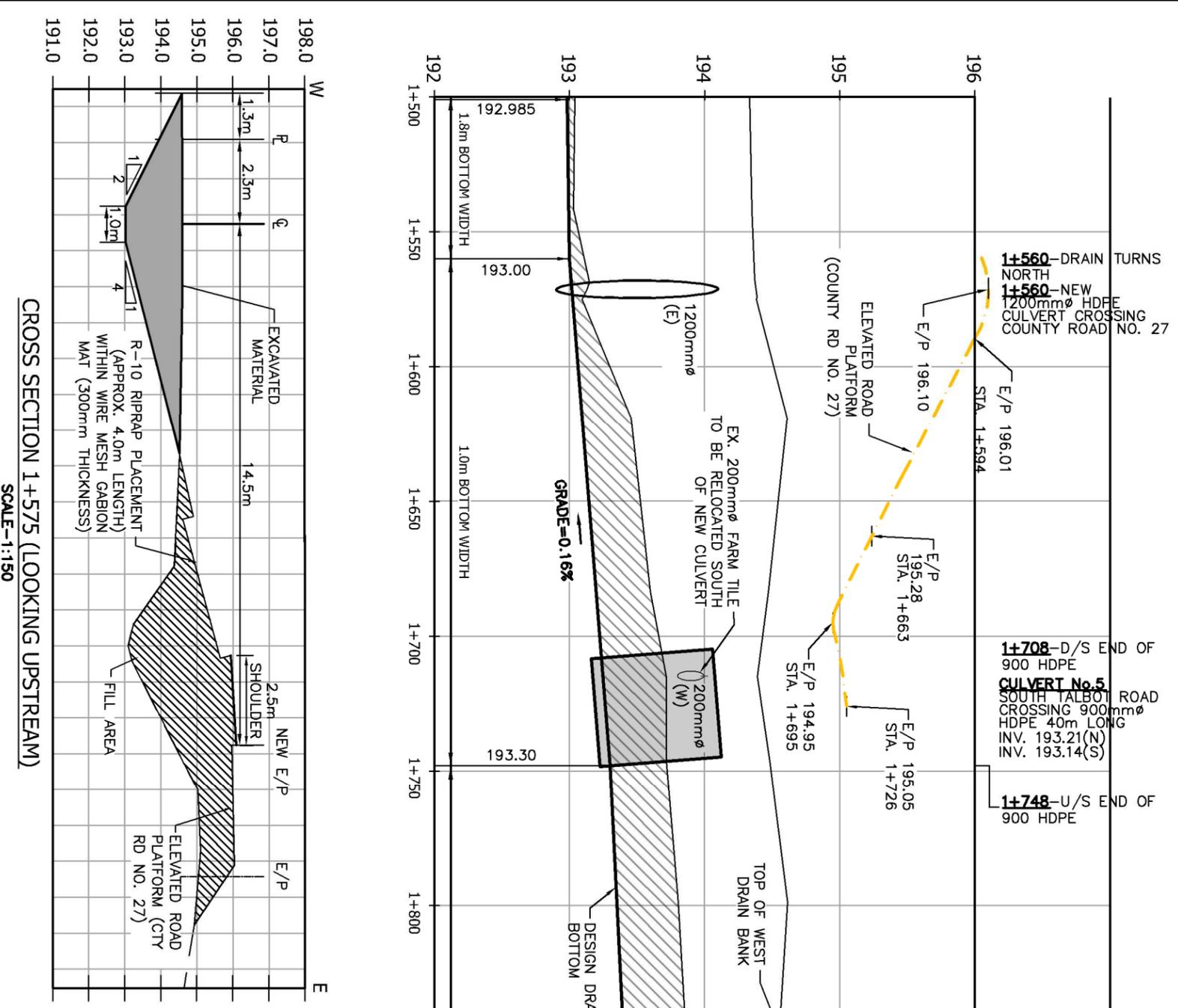
PAGE NO. 7 of 8



**Conditions of Use**  
 Verify elevations and/or dimensions on drawing prior to use.  
 Report any discrepancies to Dillon Consulting Limited.  
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No.	1	CLIENT REVIEW	ISSUED FOR
DATE	JUNE 4/24	BY	TRO
DESIGN	OEM	REVIEWED BY	MDH
DRAWN	JNS	CHECKED BY	TRO
DATE	JUNE 10, 2024	SCALE	AS SHOWN

PROJECT NO.	21-3142	
DRAWING SCALES BASED ON A 11" X 17" SHEET		
SHEET TITLE	PROFILE NO. 3 & CROSS SECTIONS	Drainage Report for <b>8TH CONCESSION DRAIN</b> Town of Kingsville
PAGE NO.	8 of 8	



**1+560**-DRAIN TURNS NORTH  
**1+560**-NEW 1200mm $\varnothing$  HDPE CULVERT CROSSING COUNTY ROAD NO. 27  
 STA. 1+594  
 E/P 196.01

**1+708**-D/S END OF 900 HDPE CULVERT No. 5 SOUTH TALBOT ROAD CROSSING 900mm $\varnothing$  HDPE 40m LONG INV. 193.21(N) INV. 193.14(S)

**1+748**-U/S END OF 900 HDPE

**2+055**-START OF WOODLOT WEST SIDE OF DRAIN

**2+210**-END OF WOODLOT WEST SIDE OF DRAIN

**2+220**-EX. 900 $\varnothing$  CSP & EX. 450 $\varnothing$  CSP OUTLET TO DRAIN (COTTAM SIDEROAD DRAIN ENTERS FROM NORTH)



**Date:** July 8, 2023  
**To:** Mayor and Council  
**Author:** Lu-Ann Marentette, Drainage Superintendent  
**RE:** 9th Concession Drain – MTO Highway 3 Culvert Extension

---

### **RECOMMENDED ACTION**

That Report provided by Dillon Consulting, dated June 10, 2024, on the 9<sup>th</sup> Concession Drain for the MTO Highway 3 culvert extension, under a report of an Engineer pursuant to Section 78(5) of the Drainage Act, **BE ADOPTED.**

### **BACKGROUND**

On July 10, 2023, staff received a request from the Ministry of Transportation to request drain improvements for the Highway 3 Widening Project.

### **DISCUSSION**

The engineer has provided his report dated June 10, 2024. He is proposing to extend the Highway 3 culvert and realign part of the drain at the 9<sup>th</sup> Concession Road along with a clean-out from the 9<sup>th</sup> Concession Road upstream to South Talbot Road.

### **FINANCIAL CONSIDERATIONS**

The project is assessed 100% to MTO at an estimated cost of \$640,000.00

### **ENVIRONMENTAL CONSIDERATIONS**

Report sent to ERCA for review and comments. A permit application and fee may be required.

Department of Fisheries and Oceans self-screening report completed.

### **CONSULTATIONS**

PREPARED BY:



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Lu-Ann Marentette  
Drainage Superintendent

**REVIEWED BY:**



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Tim Del Greco P.Eng.  
Senior Manager, Capital Projects and Engineering



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Richard J.H. Wyma CSLA  
Director of Planning and Development



---

John Norton  
CAO

**DRAINAGE REPORT  
FOR THE**

**REALIGNMENT OF THE  
9TH CONCESSION DRAIN &  
KING'S HIGHWAY NO. 3  
CULVERT EXTENSION**

**FORMER TOWNSHIP OF GOSFIELD NORTH  
TOWN OF KINGSVILLE**



FINAL REPORT  
10 JUNE 2024  
TIM R. OLIVER, P. ENG.  
FILE No. 21-3142

File No. 21-3142

Members of Council  
Town of Kingsville  
2021 Division Road North  
Kingsville, Ontario  
N9Y 2Y9



**Drainage Report for the  
REALIGNMENT OF THE 9<sup>TH</sup> CONCESSION DRAIN &  
KING'S HIGHWAY NO. 3 CULVERT EXTENSION  
Former Township of Gosfield North  
Now In the Town of Kingsville**

Mayor and Members of Council:

**Instructions**

The Municipality received a request on 10 July 2023 from the Ministry of Transportation Ontario, for the downstream extension of the King's Highway No. 3 culvert over the 9<sup>th</sup> Concession Drain and for the realignment of the drain at the Road 9 West junction with the highway. The proposed drainage works are required to facilitate the King's Highway No. 3 widening. Council accepted the request under Section 78(5) of the Drainage Act for minor improvements to a drainage works and on 14 August, 2023 appointed Dillon Consulting Limited to prepare a report.

**Ontario Regulation 500/21**

We have assessed the applicability of Section 78(5) of the Drainage Act and find the proposed works satisfy the requirements for minor improvement work as described in Subsection 7 of O.Reg 500/21 Part II.

**Watershed Description**

The 9th Concession Drain consists of an open channel commencing at Lot 274, South Talbot Road Concession. It flows westerly along the north side of South Talbot Road for a distance of approximately 485 metres, then turns southerly crossing King's Highway No. 3 and then turns westerly following the south limit of the highway to Road 9 West. Joined by the Gilboe Relief Drain, the 9<sup>th</sup> Concession Drain continues to flow in a westerly direction for an approximate length of 2100 metres where it outlets into the West Townline Drain. The upstream drainage area beyond the highway culvert is approximately 82 hectares (202 acres). The surficial soils are predominately Brookston Clay which is defined as having poor natural drainage.

**Drain History**

The recent history of Engineers' reports for the 9th Concession Drain follows:

- **6 April 2018 by Gerard Rood, P.Eng.:** The report was prepared to recommend an access bridge replacement serving property on the west half of Lot 3, Concession 9.
- **21 May 1981 by William J. Settingington, P.Eng.:** The report was prepared to recommend a realignment of the drain across the lands used to build the King's

10 Fifth Street South  
Chatham, Ontario  
Canada  
N7M 4V4  
Telephone  
519.354.7802  
Fax  
519.354.2050



- Highway No. 3 by-pass with the new alignment that would follow along the southerly limit of the highway corridor and then to join back to upstream portion of drain crossing South Talbot Road with a reconfiguration and replacement of the South Talbot Road culvert.
- **5 February 1970 by William J. Settington, P.Eng.:** The report was prepared to cleanout the upper portion of the drain starting from the confluence with the Barlow Drain in Lot 4, Concession 9 and proceeding upstream to the top end of the drain. This is the current governing report for future maintenance on the portion of drain located upstream and downstream of the highway.

### **Survey**

Our survey and examination of the 9th Concession Drain was carried out in June 2023. The survey comprised the recording of topographic data and examining the channel for available depth necessary to provide sufficient drainage.

### **Design Considerations**

The size of the highway culvert downstream extension is to match the existing culvert opening dimension, being a 2440 mm span x 1520 mm rise concrete culvert supported on footings. It is to be connected to the existing culvert on a skewed alignment and is 36.5 m in length. The culvert extension is to accommodate the road widening and construction of the new east bound lanes for the King's Highway No. 3 by-pass. The downstream end of the culvert shall consist of gabion basket headwalls. Beyond the headwalls, the disturbed drain channel section shall be lined with R-50 riprap, minimum 350 mm thickness for a minimum distance of 5 metres.

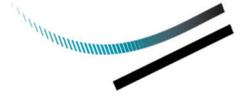
The MTO design criteria for rural arterial road bridges is to convey a 1 in 25 year event such that approximately 1 metre of freeboard is provided from the high water level to the edge of the travelled lane. This criterion was used to assess the affects the culvert extensions may have on the upstream high water level. The highway culvert is located within the upper portion of the 9th Concession Drain and the upstream 485 metres of drain has less than a 1 in 25 year storm capacity.

A Drainage, Hydrology/Hydraulics and Stormwater Management Report was completed by Dillon Consulting Limited (August 2023) to document the expected high water levels in the drain upstream in both an existing and proposed condition. The report identified that the existing culvert currently does meet the MTO freeboard design criteria, despite the limited capacity of the downstream 9th Concession Drain being less than the flows expected during a 1 in 25 year storm event. The extension of the culvert recommended would have a negligible increase in the 25 year storm water elevation and therefore no adverse impacts to the upstream lands served by the 9th Concession Drain.

With the proposed roadworks to disconnect Road 9 West from the highway and construct a cul-de-sac, a realignment of the 9<sup>th</sup> Concession Drain further west of the said road is required. The length of the realigned drain to wrap around the westerly side of the cul-de-sac is approximately 100 m long and shall be lined with R-50 riprap, minimum 350 mm thick. The existing portion of the 9<sup>th</sup> Concession Drain being replaced by the new realignment shall be filled in. Beyond Station 0+100 to Station 0+125, the 9<sup>th</sup> Concession Drain channel shall be reconstructed in association with the removal of the Road 9 West bridge crossing and to be fully lined with R-50 riprap minimum 350 mm thickness.

In conjunction with the Highway 3 culvert extension and the downstream realignment of the drain at Road 9 West, the cleanout of the drain is required to facilitate these works.

### **Allowances**

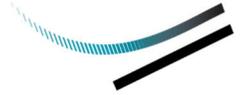


In accordance with Sections 29 and 30 of the Drainage Act, we do not anticipate any agricultural lands being damaged or used as a result of the proposed drainage works. Any damage to the roadway or existing grassed areas shall be restored to original conditions as part of the work. Therefore, 'Schedule B' for Allowances has not been included in this report.

**Recommendations and Cost Estimate**

Based on our review of the history, the information obtained from our examination and analysis of the survey data, we recommend that the drainage works be repaired and improved as described below:

Item	Description	Amount
	<b><u>DRAIN WORKS</u></b>	
1.	Open Drain Realignment Work, as follows:	
	a) Excavate new open channel along proposed alignment, approximately 100 lineal metres, Station 0+000 to Station 0+100. Any excess soils required to be removed and hauled off-site will be shall be managed by the Contractor for the highway improvements.	\$15,000.00
	b) Supply and placement of stone erosion protection R-50 riprap on drain banks and drain bottom, minimum 350 mm thickness, complete with filter fabric underlay, (approx. 900 m <sup>2</sup> ) Station 0+000 to Station 0+100.	\$90,000.00
	c) Clearing and grubbing of existing drain to be filled in as well as the existing drain upstream from Station 0+125 to Station 0+242 and from Station 0+303 to Station 0+323.	\$5,000.00
	d) Fill in the existing drain channel including clean native backfill and compaction.	\$5,000.00
	e) Excavation of drain bottom cleanout from Station 0+125 to Station 0+242 and from Station 0+303 to Station 0+323 including disposal of drain spoils to be hauled off-site will be shall be managed by the Contractor for the highway improvements.	\$10,000.00
	f) Remove existing 4270 mm x 1830 mm open footing concrete culvert and headwalls, 14 m long including disposal of debris off-site.	\$30,000.00
	g) Reconstruct and reshape the existing open drain channel approximately 25 lineal metres, Station 0+100 to Station 0+125, fine grade and placement of stone erosion protection R-50 riprap on drain banks and drain bottom minimum 350 mm thickness, complete with filter fabric underlay, (approx. 200 m <sup>2</sup> ). The work to also include riprap placement on the inlet spillway for existing road ditch on the east side of Road 9 West into the drain.	\$25,000.00



Item	Description	Amount
2.	Road Culvert Work, as follows:	
	a) <u>Downstream Culvert Extension (King’s Highway No. 3)</u> – Supply and installation of a new 36.5 m long culvert 2440 mm x 1520 mm open bottom concrete box culvert with footings connected to the existing culvert with skewed end, complete with flush outlet end, waterproofing membrane and protection board, compacted Granular ‘A’ bedding (min. 300 mm thickness), compacted full Granular ‘B’ Type II backfill up to road subgrade, gabion basket headwall and R-50 riprap within the drain channel beyond fully lined for a minimum 5 m distance and minimum 350 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also the flushing and cleaning of the existing 25.6 m long culvert and the removal off-site of excess materials not suitable for culvert backfill.	\$435,000.00
3.	Temporary silt control measures during construction.	<u>\$5,000.00</u>
	<b>SUB-TOTAL</b>	<b>\$620,000.00</b>
4.	Report, Assessments and Final Inspection.	\$19,000.00
5.	Expenses and Incidentals.	<u>\$1,000.00</u>
	<b>TOTAL ESTIMATE – 9TH CONCESSION DRAIN (excluding Net HST)</b>	<b>\$640,000.00</b>

The estimate provided in this report was prepared according to current materials and installation prices as of the date of this report. In the event of delays from the time of filing of the report by the Engineer to the time of tendering the work, it is understood that the estimate of cost is subject to inflation. The rate of inflation shall be calculated using the Consumer Price Index applied to the cost of construction from the date of the report to the date of tendering.

**Assessment of Costs**

The individual assessments are comprised of three (3) assessment components:

- i. Benefit (*advantages relating to the betterment of lands, roads, buildings, or other structures resulting from the improvement to the drain*).
- ii. Outlet Liability (*part of cost required to provide outlet for lands and roads*).
- iii. Special Benefit (*additional work or feature that may not affect function of the drain*).

We have assessed the estimated costs for the realignment of the 9th Concession Drain, extension of the King’s Highway No. 3 culvert and associated cleanout of the drain against the affected roads as listed in Schedule 'C' under "Special Benefit." Details of the Special Benefit assessment listed are provided in the Assessment Rationale below.



## **Assessment Rationale**

Special Benefit assessment shown in Schedule ‘C’ was derived as follows:

1. As the minor drain improvements are only required for the proposed highway widening project, we have assessed 100% of the costs to the Ministry of Transportation Ontario in accordance with Section 26 of the Drainage Act as a non-proratable assessment. Since there are no special benefit assessments to other landowners, Schedule ‘D’ for the purposes of Special Benefit details has been omitted from this report.

## **Future Maintenance**

After completion, the Highway 3 culvert and the open portion of drain from Station 0+000 to Station 0+323 shall be maintained by the Ministry of Transportation Ontario for 100% of the costs, subject of course, to any variations that may be made under the authority of the Drainage Act. Since there is no assessment of costs to the other landowners on the drain, Schedule ‘E’ for the purposes of future maintenance has been omitted from this report.

## **Drawings and Specifications**

Attached to this report is Schedule ‘F’, which are Specifications setting out the details of the recommended works and Schedule ‘G’ which represent the drawings that are attached to this report.

**Page 1 of 4 – Overall Plan**

**Page 2 of 4 – Drain Realignment Plan**

**Page 3 of 4 – Culvert Extension Detail**

**Page 4 of 4 – Profile & Cross Sections**

## **Construction Drawings and Specifications**

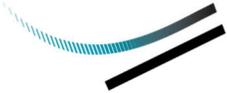
The work included in this report will be performed under the provincial contract for the Widening of King’s Highway No. 3 starting from 0.8 km west of Cameron Sideroad and continuing easterly to 1.8 km west of County Road No. 31. Culvert drawings have been prepared for the construction complete with associated specifications which shall adhere to the elevations, alignment, sizes, materials and location and be generally in compliance with this report.

## **Approvals**

The construction and/or improvement to a drainage works, including repair and maintenance activities, and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced by the proposed works. Prior to any construction or maintenance works, the Municipality or proponent designated on the Municipality’s behalf shall obtain all required approvals/permits and confirm any construction limitations including timing windows, mitigation/off-setting measures, standard practices or any other limitations related to in-stream works.

## **Agency Reviews**

The Essex Region Conservation Authority (ERCA) has been previously notified and provided the opportunity to review the proposed drainage works set out within this report. An application for permit and associated fee payment is not required for provincial undertakings. The Town of Kingsville will subsequently give notice to ERCA and other



prescribed persons of an upcoming meeting of Council that will consider and adopt the final report, at which time this meeting is an opportunity to provide input.

Correspondence received from the Department of the Fisheries and Oceans (DFO) on January 31, 2023 (Letter of Advice approval) is included herein as Schedule 'A' of this report. Specifically, for the 9<sup>th</sup> Concession Drain, the measures to be implemented to avoid and mitigate the potential for prohibited effects to fish and fish habitat will not require an authorization under the *Fisheries Act* or permit under the *Species at Risk Act*.

Respectfully submitted,

**DILLON CONSULTING LIMITED**

Tim R. Oliver, P.Eng.  
TRO:sjc



## SCHEDULE “A”



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Ontario and Prairies Region  
Fish and Fish Habitat  
Protection Program  
867 Lakeshore Road  
Burlington, ON L7S 1A1

Région de l'Ontario et des Prairies  
Programme de la protection  
du poisson et de son habitat  
867 Lakeshore Road  
Burlington, ON L7S 1A1

January 31, 2023

*Our file*      *Notre référence*

22-HCAA-02305

Ontario Ministry of Transportation  
ATTENTION: Michael Nadeau  
659 Exeter Road  
London, Ontario, N6E 1L3

**Subject: Culvert Replacements and Drain Realignment, Three Class F Drains, Essex County – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat**

Dear Michael Nadeau:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on July 28, 2022. We understand that you propose the following:

- Realign an ~200m<sup>2</sup> (~102 linear meters) section of 9<sup>th</sup> Concession Road Drain resulting in ~275m<sup>2</sup> (~126 linear meters) of new drain.
- Remove the culvert under 9<sup>th</sup> Concession Road;
- Realign an ~200m<sup>2</sup> (~155 linear meters) section of Schiller Drain resulting in ~225m<sup>2</sup> (~209 linear meters) of new drain;
- Relocate and resize four Schiller Drain culverts;
- Realign an ~390m<sup>2</sup> (~191 linear meters) section of 4<sup>th</sup> Concession Road Drain resulting in ~360m<sup>2</sup> (~190 linear meters) of new drain;
- Relocate and resize two 4<sup>th</sup> Concession Road Drain culverts; and
- Perform one fish rescue per drain if the drain is not dry during construction.

Our review considered the following information:

- Request for review form submitted to DFO on July 28, 2022; and
- Email and telephone correspondence between Colby Nolan (DFO), Kelly Everts (GHD), Ian Dobrindt (GHD), Jordan Widmaier (GHD), and Chris Evans (MTO) from September 22, 2022 to December 15, 2022.

Your proposal has been reviewed to determine whether it is likely to result in:

Canada

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures outlined in your plan, in addition to the following listed below:

- Conduct work outside the spring timing windows (i.e. no in-water work between March 15 to July 15).
- Minimize duration of in-water work;
- Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Screen size requirements will be determined as per DFO's Freshwater Intake End-of-Pipe Screen Guideline (1995);
- Retain a qualified environmental professional to ensure appropriate protocols are applied and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding of the coffer dams occur;
- Install appropriate sediment erosion controls downstream of construction activities (e.g. silt curtain, straw-bale check dam, rock check dam etc.);
  - Conduct works during low or no flow;
  - Schedule work to avoid wet, windy, and rainy periods that may increase erosion and sedimentation; and
  - Work in the dry.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal will not require an authorization under the *Fisheries Act* or permit under the *Species at Risk Act*.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of

fish habitat. Such notifications should be directed to (<http://www.dfo-mpo.gc.ca/pnw-ppe/contact-eng.html>).

Notify this office at least 10 days before starting any in-water works. Send your notification to Colby Nolan ([Colby.Nolan@dfo-mpo.gc.ca](mailto:Colby.Nolan@dfo-mpo.gc.ca)) and the DFO 10 notification mailbox: [DFO.OP.10DayNotification-Notification10Jours.OP.MPO@dfo-mpo.gc.ca](mailto:DFO.OP.10DayNotification-Notification10Jours.OP.MPO@dfo-mpo.gc.ca). A copy of this letter should be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

If you have any questions with the content of this letter, please contact Colby Nolan at our Burlington office at (289) 253-8302, or by email at [Colby.Nolan@dfo-mpo.gc.ca](mailto:Colby.Nolan@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



A/Senior Biologist

CC: Kelly Evertsen – GHD  
Chris Evans – MTO  
Ian Dobrindt – GHD  
Colby Nolan – DFO

**SCHEDULE C  
SCHEDULE OF ASSESSMENT  
9TH CONCESSION DRAIN  
TOWN OF KINGSVILLE**

**ONTARIO LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
King's Highway No. 3	0.00	0.00	Ministry of Transportation Ontario	\$640,000.00	\$0.00	\$0.00	\$640,000.00
<b>Total on Ontario Lands</b> .....				<b>\$640,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$640,000.00</b>
<b>TOTAL ASSESSMENT</b> .....				<b>\$640,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$640,000.00</b>

“SCHEDULE F”  
DRAINAGE REPORT FOR THE  
**REALIGNMENT OF THE 9TH CONCESSION DRAIN &  
KING’S HIGHWAY NO. 3 CULVERT EXTENSION**  
TOWN OF KINGSVILLE

**SPECIAL PROVISIONS - GENERAL**

**1.0 GENERAL SPECIFICATIONS**

The General Specifications attached hereto is part of “Schedule F.” It also forms part of this specification and is to be read with it, but where there is a difference between the requirements of the General Specifications and those of the Special Provisions which follow, the Special Provisions will take precedence.

**2.0 DESCRIPTION OF WORK**

The work to be carried out under this Contract includes, but is not limited to, the supply of all **labour, equipment and materials** to complete the following items:

➤ Open Drain Realignment Work, as follows:

- Excavate new open channel along proposed alignment, approximately 100 lineal metres, Station 0+000 to Station 0+100. Any excess soils required to be removed and hauled off-site will be shall be managed by the Contractor for the highway improvements.
- Supply and placement of stone erosion protection R-50 riprap on drain banks and drain bottom, minimum 350 mm thickness, complete with filter fabric underlay, (approx. 900 m<sup>2</sup>) Station 0+000 to Station 0+100.
- Clearing and grubbing of existing drain to be filled in as well as the existing drain upstream from Station 0+125 to Station 0+242 and from Station 0+303 to Station 0+323.
- Fill in the existing drain channel including clean native backfill and compaction.
- Excavation of drain bottom cleanout from Station 0+125 to Station 0+242 and from Station 0+303 to Station 0+323 including disposal of drain spoils to be hauled off-site will be shall be managed by the Contractor for the highway improvements.
- Remove existing 4270 mm x 1830 mm open footing concrete culvert and headwalls, 14 m long including disposal of debris off-site.
- Reconstruct and reshape the existing open drain channel approximately 25 lineal metres, Station 0+100 to Station 0+125, fine grade and placement of stone erosion protection R-50 riprap on drain banks and drain bottom minimum 350 mm thickness, complete with filter fabric underlay, (approx. 200 m<sup>2</sup>). The work to also include riprap placement on the inlet spillway for existing road ditch on the east side of Road 9 West into the drain.

➤ Road Culvert Work, as follows:

- Downstream Culvert Extension (King’s Highway No. 3) – Supply and installation of a new 36.5 m long culvert 2440 mm x 1520 mm open bottom concrete box culvert with footings connected to the existing culvert with skewed end, complete with flush outlet end, waterproofing membrane and protection board, compacted

Granular 'A' bedding (min. 300 mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade, gabion basket headwall and R-50 riprap within the drain channel beyond fully lined for a minimum 5 m distance and minimum 350 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also include the flushing and cleaning of the existing 25.6 m long culvert and the removal off-site of excess materials not suitable for culvert backfill.

- Temporary silt control measures during construction.

### **3.0 ACCESS TO THE WORK**

Access to the drain shall be from the King's Highway No. 3 right-of-way and Road 9 West right-of-way. The Contractor shall make his/her own arrangements for any additional access for his/her convenience. All grass areas disturbed shall be restored to original conditions at the Contractor's expense.

### **4.0 WORKING AREA**

The working area for both construction and future maintenance purposes shall be restricted to the road right-of-way. **Any damages to lands and/or roads from the Contractor's work within the working areas for the new culvert site shall be rectified to pre-existing conditions at his/her expense.**

### **5.0 DRAIN RELOCATION**

#### **5.1 Topsoil**

All topsoil within the proposed new drain location is to be stripped a minimum 200 mm deep and stockpiled in the working area, as described in Section 4.0.

#### **5.2 New Drain Excavation**

Excavation shall be carried out in accordance with the profile shown on the drawings for the drain relocation. In all cases, the Contractor shall use the benchmarks to establish the proposed grade.

All excavated sub-soil materials from the new drain realignment construction (Station 0+000 to Station 0+100), shall be used as backfill for the infilling of the old section of drain. All roadways and laneways disturbed by the trucking of excavated materials shall be restored to original conditions.

In all cases, the Contractor shall use the benchmarks to establish the proposed grade. However, for convenience, the drawings provide the approximate depth from the surface of the ground and from the existing drain bottom to the proposed grades. **THE CONTRACTOR SHALL NOT EXCAVATE DEEPER THAN THE GRADELINES SHOWN ON THE DRAWINGS.**

**All excavation work shall be done in such a manner as to not harm any vegetation or trees, not identified in this report or by the Drainage Superintendent for clearing. Any damages to trees or vegetation caused by the Contractors work shall be rectified to the satisfaction of the Drainage Superintendent.**

The Contractor shall exercise caution around existing tile inlets and shall confirm with the property owners that all tiles have been located and tile ends repaired as specified.

### **6.0 CLEARING & GRUBBING DRAIN PRIOR TO INFILLING**

Prior to filling the existing drain, all brush and trees within the limits of the channel are to be cut and those roots and stumps within the channel and on the banks where the filling takes place shall be completely removed to a depth at least 1 metre below the level of the finished grade.

Brush and trees removed from the existing drain are to be put into piles by the Contractor, in locations where they can be safely burned, and to be burned by the contractor after obtaining the necessary permits, as required. If, in the opinion of the Drainage Superintendent, any of the piles are too wet or green to be burned, he shall so advise the Contractor to haul away the unburned materials to an approved dump site or advise the Contractor to obtain an agreement in writing with the owners when to return to burn the materials. Prior to and during the course of burning operations the Contractor shall comply with the current guidelines prepared by the Air Quality Branch of the Ontario Ministry of Environment and shall ensure that the Environmental Protection Act is not violated.

The Contractor shall first consult with and obtain approval from the landowner, Drainage Superintendent and Town of Kingsville Fire Services prior to burning the brush removed from this specified area.

## **7.0 DRAIN INFILLING**

Prior to the infilling of the open drain, the Contractor shall remove all vegetation and organic debris from the existing drain slopes. The native materials used to fill the drain shall be placed in maximum 300 mm loose lifts and compacted with vibratory compaction equipment capable of achieving 95% of the maximum standard proctor density or better. Furthermore, the Contractor shall confirm with the Drainage Superintendent that all existing lateral and main tile outlets have been found and marked prior to infilling the drain.

The Contractor shall complete the excavation of the new course of the drain from Station 0+000 to Station 0+100. First, the Contractor will be required to strip all topsoil between the new drain and the existing drain, and stockpile it along the east side of the existing drain.

The subsoil is to be excavated from the new course, and is to be placed along the west bank of existing drain or temporarily stockpiled. Where working space is restricted, backfill material may be placed directly in the old ditch as long as it is later spread or removed to ensure proper compaction practices. Once the excavation of the new channel has been completed, then the subsoil excavated from the new course of the drain is to be placed and spread in the old course of the drain in uniform full width layers of not more than 300 mm in depth.

Each layer shall be compacted to a Standard Proctor Dry Density of 95% by repetitive passes over the fill area with standard levelling equipment or compaction equipment if necessary. Then, the excess excavated subsoil is to be placed and graded in the area of the old ditch and the areas where topsoil was stripped on both sides of the old ditch. These areas are to be levelled and graded to provide a uniform contour and slope.

Once the backfilling and regrading of the area near the abandoned section of open drain has been completed, any excess topsoil stockpiled along the east side of the old course that is not required for the backfilling operation is to be levelled along the east side of the old drain. **Alternative methods or procedures for completing the earthworks may be proposed by the Contractor for approval of the engineer prior to construction. All work must be acceptable to the Drainage Superintendent in charge.**

## **8.0 STONE EROSION PROTECTION**

Erosion protection, within the drain channel, shall be constructed of quarry stone rip-rap (R50) as shown on the drawings and as specified herein. The size of the rip-rap shall mostly vary between 150 mm and 250 diameter. The rip-rap shall be sloped 1 vertical to 1.5 horizontal, with filter fabric underlay spanning across the entire width of the drain for a minimum of 5 metres distance beyond the end of the culvert.

The minimum thickness requirement of the erosion stone layer is 350 mm with no portion of the filter fabric to be exposed.

## **9.0 GABION BASKET END PROTECTION**

Gabion baskets shall be manufactured from galvanized steel wire mesh or PVC coated galvanized steel wire mesh as specified in the Contract Documents. When the type of mesh is not specified in the Contract Documents, the gabion baskets shall be manufactured from PVC coated galvanized steel wire mesh.

Gabion baskets shall be manufactured so that the sides, ends, lid, base, and diaphragms can be readily assembled into rectangular units.

Where the length of the gabion basket exceeds its horizontal width, the gabion basket shall be divided into equal cells by diaphragms. Cell length shall not exceed its horizontal width. Diaphragms shall be made of wire mesh and shall be secured in the proper position on the base section. Gabion baskets shall be manufactured with all components connected at the production facility with the exception of the gabion mat lid. Gabion baskets manufactured from galvanized wire mesh shall be assembled using either lacing wire or fasteners. Gabion baskets manufactured from PVC coated galvanized wire mesh shall be assembled using stainless steel ring fasteners. Fasteners shall be installed at a maximum spacing of 150 mm with at least one fastener per gabion mesh opening.

Gabion baskets shall be according to OPSS 1430.

Gabion stones shall be according to OPSS 1004 and as specified in the Contract Documents.

Excavation for gabions shall be according to OPSS 206.

Bedding and backfill shall be as specified in the Contract Documents.

Gabions shall be installed at the locations and to the line, grade, and dimensions specified in the Contract Documents.

Gabions shall be assembled according to the manufacturer's instructions and as specified in the Contract Documents.

Gabions shall be assembled so that wire ends do not project outside the units on any exposed surface.

Gabion stones shall be placed in a manner as not to damage the wire mesh or the PVC coating on the wire or cause deformation of the gabion. Gabion stones shall be placed to minimize the voids between the stones. When specified in the Contract Documents, the front face of exposed wall surfaces shall be hand placed gabion stone to ensure a uniform appearance.

Prior to securing the lids on the gabion basket, the gabion basket shall be slightly overfilled by 25 to 50 mm of gabion stone in order to allow for settlement of the stone within the units.

Internal connecting wires shall be installed according to the manufacturer's recommendations. When gabions are used as a channelling revetment, internal connecting wires are not necessary.

When the gabion has been filled, the gabion lid shall be bent over until all lid edges coincide with the front and side edges of the gabion and shall be secured to the front and sides by wire according to manufacturer's instructions and as specified in the Contract Documents.

Geotextile shall be placed uniformly, free of folds, tears or punctures and as specified in the Contract Documents. The geotextile shall be joined so that the material overlaps a minimum of 500 mm and shall be pinned together. Alternatively, the geotextile shall be joined to conform to the seam requirements of OPSS 1860. Geotextile shall be fixed to prevent movement during installation.

## **10.0 ROAD CULVERT CONSTRUCTION**

### **10.1 Location**

The road culvert shall be located and installed as shown on the drawings attached hereto.

### **10.2 Materials**

Materials shall be as follows:

<i>Downstream Culvert Extension</i>	<i>New 36.5 m long, 2440 mm x 1520 mm reinforced concrete open footing culvert per OPSS 1821 or CHBDC CAN/CSA 56-06 standards where applicable</i>
<i>Culvert Bedding</i>	<i>Granular 'A' conforming to OPSS Division 10.</i>
<i>Culvert Backfill</i>	<i>Granular 'B' conforming to OPSS Division 10.</i>
<i>Erosion Stone</i>	<i>All stone to be used for erosion protection shall be R-50 clear quarried rock per OPSS 1004, minimum 350 mm thickness.</i>
<i>Filter Fabric</i>	<i>"Non-Woven" geotextile filter fabric with a minimum strength equal or greater than Terrafix 270R, Amoco 4546, Mirafi 140NC, or approved equivalent.</i>

### **10.3 Culvert Installation**

Suitable dykes shall be constructed in the drain so that the installation of the culvert can be accomplished in the dry. The drain bottom shall be cleaned, prepared, shaped and compacted to suit the new culvert configuration, as shown on the drawings. Granular materials shall be compacted to 100% of their maximum dry density; imported clean native materials shall be supplied, placed and compacted to 95% of their maximum dry density.

### **10.4 Lateral Tile Drains**

The Contractor shall re-route any outlet tile drains, in consultation with the Drainage Superintendent, as required to accommodate the new culverts. Tile drain outlets through the wall of the new culvert will not be permitted. All costs associated with re-routing lateral tile drains (if any) shall be at the Contractor's expense.

### **10.5 Site Cleanup and Restoration**

As part of the work and upon completion, the Contractor shall remove and dispose of, off-site any loose timber, logs, stumps, large stones, rubber tires, cinder blocks or other debris from the drain bottom and from the side slopes. Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

## **GENERAL SPECIFICATIONS**

### **1.0 AGREEMENT AND GENERAL CONDITIONS**

The part of the Specifications headed "Special Provisions" which is attached hereto forms part of this Specification and is to be read with it. Where there is any difference between the requirements of this General Specification and those of the Special Provisions, the Special Provisions shall govern.

Where the word "Drainage Superintendent" is used in this specification, it shall mean the person or persons appointed by the Council of the Municipality having jurisdiction to superintend the work.

Tenders will be received and contracts awarded only in the form of a lump sum contract for the completion of the whole work or of specified sections thereof. The Tenderer agrees to enter into a formal contract with the Municipality upon acceptance of the tender. The General Conditions of the contract and Form of Agreement shall be those of the Stipulated Price Contract CCDC2-Engineers, 1994 or the most recent revision of this document.

### **2.0 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS**

Each tenderer must visit the site and review the plans and specifications before submitting his/her tender and must satisfy himself/herself as to the extent of the work and local conditions to be met during the construction. Claims made at any time after submission of his/her tender that there was any misunderstanding of the terms and conditions of the contract relating to site conditions, will not be allowed. The Contractor will be at liberty, before bidding to examine any data in the possession of the Municipality or of the Engineer.

The quantities shown or indicated on the drawings or in the report are estimates only and are for the sole purpose of indicating to the tenderers the general magnitude of the work. The tenderer is responsible for checking the quantities for accuracy prior to submitting his/her tender.

### **3.0 MAINTENANCE PERIOD**

The successful Tenderer shall guarantee the work for a period of one (1) year from the date of acceptance thereof from deficiencies that, in the opinion of the Engineer, were caused by faulty workmanship or materials. The successful Tenderer shall, at his/her own expense, make good and repair deficiencies and every part thereof, all to the satisfaction of the Engineer. Should the successful Tenderer for any cause, fail to do so, then the Municipality may do so and employ such other person or persons as the Engineer may deem proper to make such repairs or do such work, and the whole costs, charges and expense so incurred may be deducted from any amount due to the Tenderer or may be collected otherwise by the Municipality from the Tenderer.

### **4.0 GENERAL CO-ORDINATION**

The Contractor shall be responsible for the coordination between the working forces of other organizations and utility companies in connection with this work. The Contractor shall have no cause of action against the Municipality or the Engineer for delays based on the allegation that the site of the work was not made available to him by the Municipality or the Engineer by reason of the acts, omissions, misfeasance or non-feasance of other organizations or utility companies engaged in other work.

### **5.0 RESPONSIBILITY FOR DAMAGES TO UTILITIES**

The Contractor shall note that overhead and underground utilities such as hydro, gas, telephone and water are not necessarily shown on the drawings. It is the Contractor's responsibility to contact utility companies for information regarding utilities, to exercise the necessary care in construction operations and to take other precautions to safeguard the utilities from damage.

All work on or adjacent to any utility, pipeline, railway, etc., is to be carried out in accordance with the requirements of the utility, pipeline, railway, or other, as the case may be, and its specifications for such work are to be followed as if they were part of this specification. The Contractor will be liable for any damage to utilities.

#### **6.0 CONTRACTOR'S LIABILITY**

The Contractor, his/her agents and all workmen or persons under his/her control including sub-contractors, shall use due care that no person or property is injured and that no rights are infringed in the prosecution of the work. The Contractor shall be solely responsible for all damages, by whomsoever claimable, in respect to any injury to persons or property of whatever description and in respect of any infringement of any right, privilege or easement whatever, occasioned in the carrying on of the work, or by any neglect on the Contractor's part.

The Contractor, shall indemnify and hold harmless the Municipality and the Engineer, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the contract.

#### **7.0 PROPERTY BARS AND SURVEY MONUMENTS**

The Contractor shall be responsible for marking and protecting all property bars and survey monuments during construction. All missing, disturbed or damaged property bars and survey monuments shall be replaced at the Contractor's expense, by an Ontario Land Surveyor.

#### **8.0 MAINTENANCE OF FLOW**

The Contractor shall, at his/her own cost and expense, permanently provide for and maintain the flow of all drains, ditches and water courses that may be encountered during the progress of the work.

#### **9.0 ONTARIO PROVINCIAL STANDARDS**

Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) shall apply and govern at all times unless otherwise amended or extended in these Specifications or on the Drawing. Access to the electronic version of the Ontario Provincial Standards is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>. Under the title Technical Manuals is a link to the Ontario Provincial Standards. Users require Adobe Acrobat to view all pdf files.

#### **10.0 APPROVALS, PERMITS AND NOTICES**

The construction of the works and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced in this Contract. The Contractor shall obtain all approvals and permits and notify the affected authorities when carrying out work in the vicinity of any public utility, power, underground cables, railways, etc.

#### **11.0 TRAFFIC CONTROL**

The Contractor will be required to control vehicular and pedestrian traffic along roads at all times and shall, at his/her own expense, provide for placing and maintaining such barricades, signs, flags, lights and flag persons as may be required to ensure public safety. The Contractor will be solely responsible for controlling traffic and shall appoint a representative to maintain the signs and warning lights at night, on weekends and holidays and at all other times that work is not in progress. All traffic control during construction shall be strictly in accordance with the **Occupational Health and Safety Act** and the current version of the **Ontario Traffic Manuals**. Access to the electronic version of the **Ontario Traffic Manual** is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>, click on "Library Catalogue," under the "Title," enter "Ontario Traffic Manual" as the search. Open the applicable "Manual(s)" by

choosing the "Access Key," once open look for the "Attachment," click the pdf file. Users require Adobe Acrobat to view all pdf files.

**Contractors are reminded of the requirements of the Occupational Health and Safety Act pertaining to Traffic Protection Plans for workers and Traffic Control Plan for Public Safety.**

## **12.0 SITE CLEANUP AND RESTORATION**

As part of the work and upon completion, the Contractor shall remove and dispose of, off-site any loose timber, logs, stumps, large stones, rubber tires, cinder blocks or other debris from the drain bottom and from the side slopes. Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

## **13.0 UTILITY RELOCATION WORKS**

In accordance with Section 26 of the Drainage Act, if utilities are encountered during the installation of the drainage works that conflict with the placement of the new culvert, the operating utility company shall relocate the utility at their own costs. The Contractor however will be responsible to co-ordinate these required relocations (if any) and their co-ordination work shall be considered incidental to the drainage works.

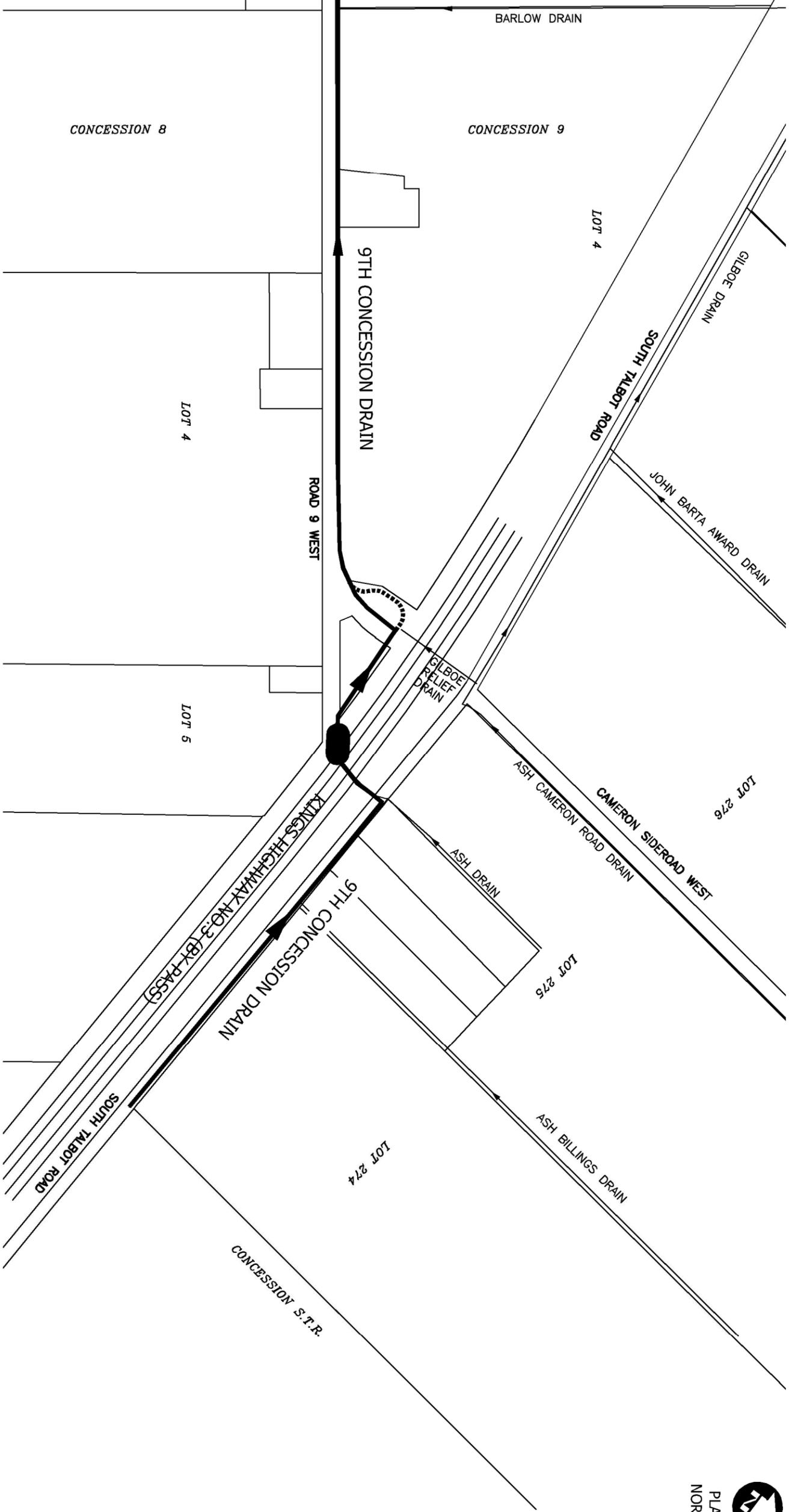
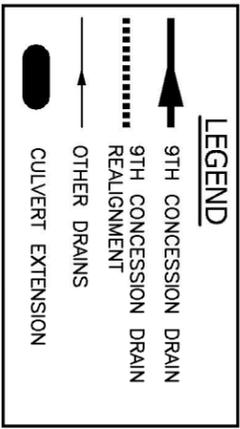
## **14.0 FINAL INSPECTION**

All work shall be carried out to the satisfaction of the Drainage Superintendent for the Municipality, in compliance with the specifications, drawings and the Drainage Act. Upon completion of the project, the work will be inspected by the Engineer and the Drainage Superintendent. Any deficiencies noted during the final inspection shall be immediately rectified by the Contractor.

Final inspection will be made by the Engineer within 20 days after the Drainage Superintendent has received notice in writing from the Contractor that the work is completed, or as soon thereafter as weather conditions permit.

## **15.0 FISHERIES CONCERNS**

Standard practices to be followed to minimize disruption to fish habitat include embedment of the culvert a minimum 10% below grade, constructing the work 'in the dry' and cutting only trees necessary to do the work (no clear-cutting). No in-water work is to occur during the timing window unless otherwise approved by the appropriate authorities.



**OVERALL PLAN**  
SCALE=1:5,000



**Conditions of Use**

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
Do not scale dimensions from drawing.  
Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	1	CLIENT REVIEW	ISSUED FOR	DATE	JUNE 4/24	BY	TRO	DESIGN	TRO	REVIEWED BY	MIDH
								SCALE	AS SHOWN	CHECKED BY	TRO
								DATE	June 10, 2024		

**SCHEDULE G**

Drainage Report for the  
**9TH CONCESSION DRAIN**  
(King's Highway No. 3 Culvert Extension)  
Town of Kingsville

**DILLON CONSULTING**

PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

SHEET TITLE: **OVERALL PLAN**  
PAGE NO. 1 OF 4



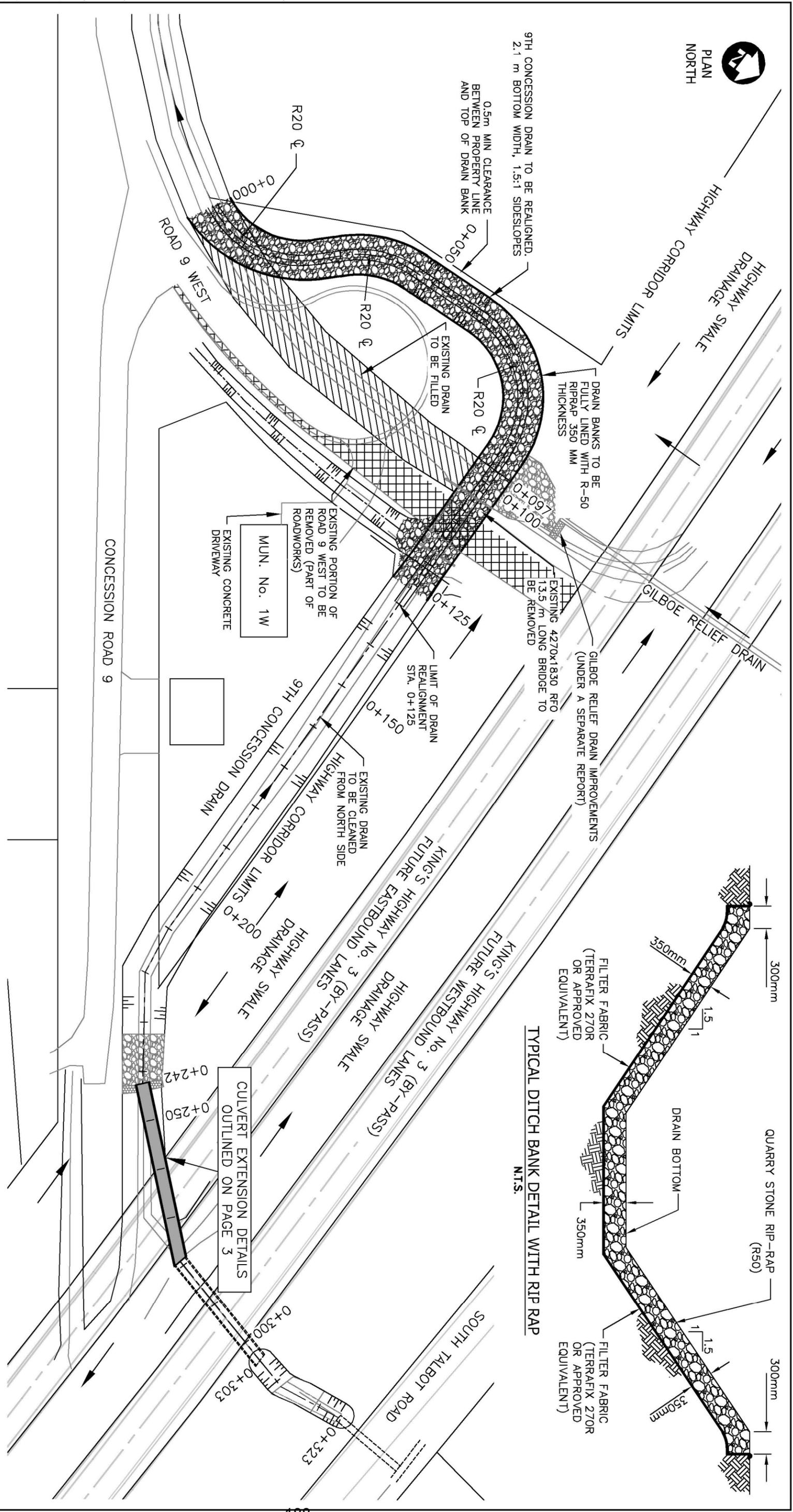
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No.	CLIENT REVIEW	ISSUED FOR	DATE	BY
1			JUNE 4/24	TRO

DESIGN	REVIEWED BY	DATE	SCALE
TRO	MDH	JUNE 10, 2024	AS SHOWN
DRAWN	CHECKED BY	DATE	SCALE
SJC	TRO		

<p><b>DILLON CONSULTING</b></p>	<p>PROJECT NO. 21-3142</p> <p>DRAWING SCALES BASED ON A 11" X 17" SHEET</p>	<p>SHEET TITLE: DRAIN REALIGNMENT PLAN</p> <p>PAGE NO. 2 OF 4</p>
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**DRAIN REALIGNMENT PLAN**  
 SCALE=1:750



PLAN NORTH

HIGHWAY CORRIDOR LIMITS

HIGHWAY SWALE

0.5m MIN CLEARANCE BETWEEN PROPERTY LINE AND TOP OF DRAIN BANK

DRAIN BANKS TO BE FULLY LINED WITH R-50 RIPRAP 350 MM THICKNESS

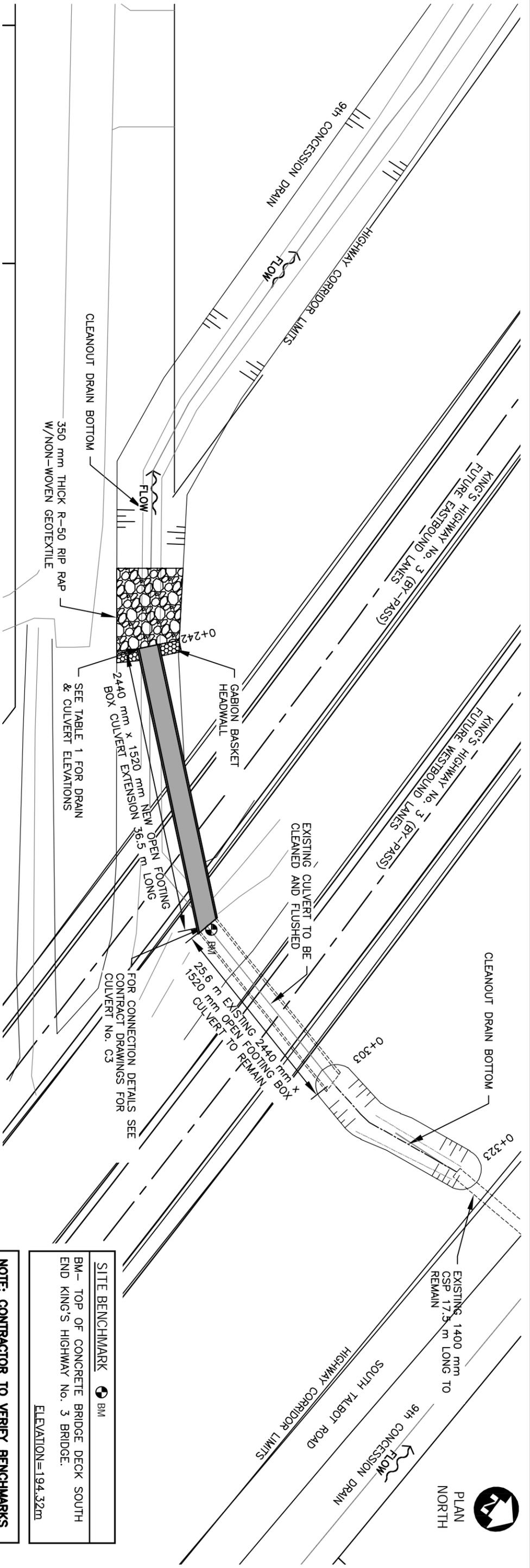
FILTER FABRIC (TERRAFIX 270R OR APPROVED EQUIVALENT)

FILTER FABRIC (TERRAFIX 270R OR APPROVED EQUIVALENT)

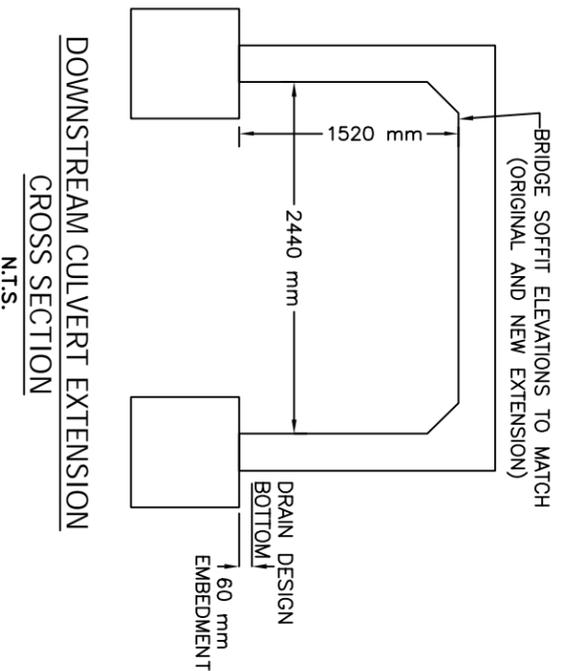
TYPICAL DITCH BANK DETAIL WITH RIP RAP N.T.S.



DESCRIPTION	EXISTING CULVERT	DOWNSTREAM EXTENSION
TOP OF FOOTING ELEV. U/S SIDE(m)	192.56	192.56
TOP OF FOOTING ELEV. D/S SIDE(m)	192.56	192.54
DRAIN BOTTOM (m) (DESIGN) (AT U/S SIDE OF CULVERT)	192.64	192.62
DRAIN BOTTOM (m) (DESIGN) (AT D/S SIDE OF CULVERT)	192.62	192.60
MIN. CULVERT GRADE (%)	0.06	0.06
CULVERT TYPE	BOX CULVERT	BOX CULVERT
CULVERT MATERIAL	CONC. RFO	CONC. RFO
CULVERT LENGTH (m)	25.6	36.5
CULVERT SIZE (mm)	2440x1520	2440x1520
CULVERT ENDWALL TYPE	N/A	GABION BASKETS



CULVERT EXTENSION DETAIL  
SCALE=1:500



DOWNSTREAM CULVERT EXTENSION  
CROSS SECTION  
N.T.S.

**NOTE: CONTRACTOR TO VERIFY BENCHMARKS PRIOR TO CONSTRUCTION.**

**SITE BENCHMARK** BM  
 BM - TOP OF CONCRETE BRIDGE DECK SOUTH END KING'S HIGHWAY No. 3 BRIDGE.  
 ELEVATION=194.32m

SCHEDULE G

**Conditions of Use**  
 Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
 Do not scale dimensions from drawing.  
 Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	CLIENT REVIEW	ISSUED FOR	DATE	BY
1	CLIENT REVIEW	ISSUED FOR	JUNE 4/1/24	TRO

DESIGN	REVIEWED BY
TRO	MDH
SJC	TRO

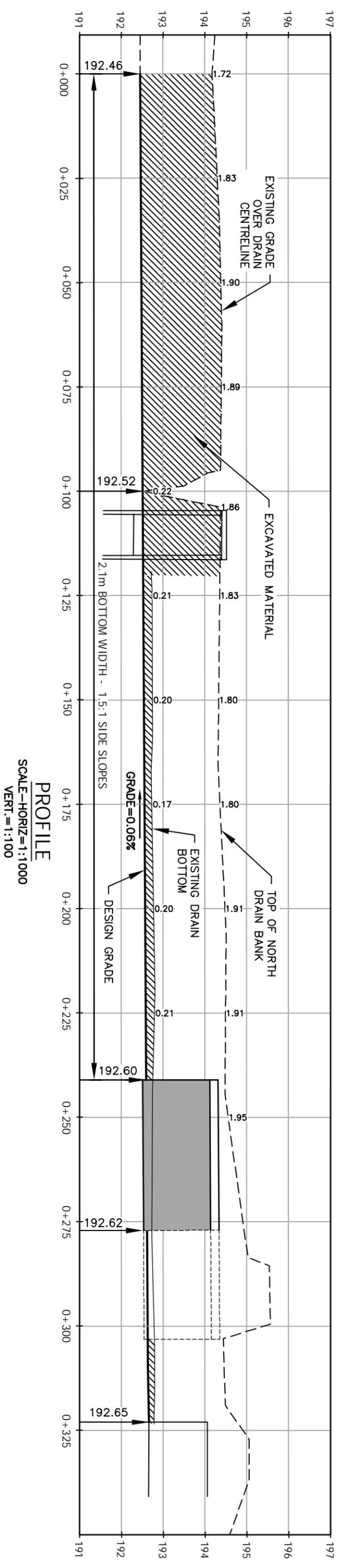
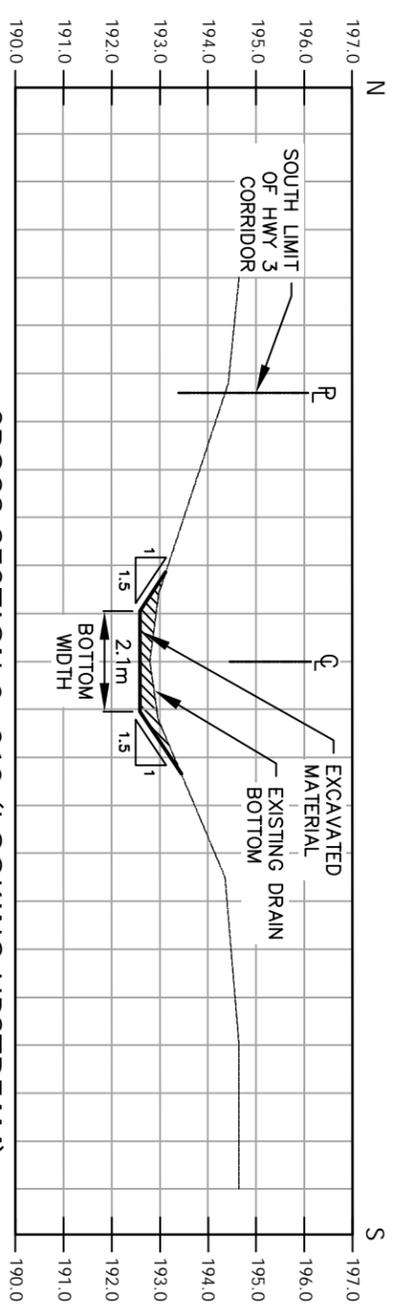
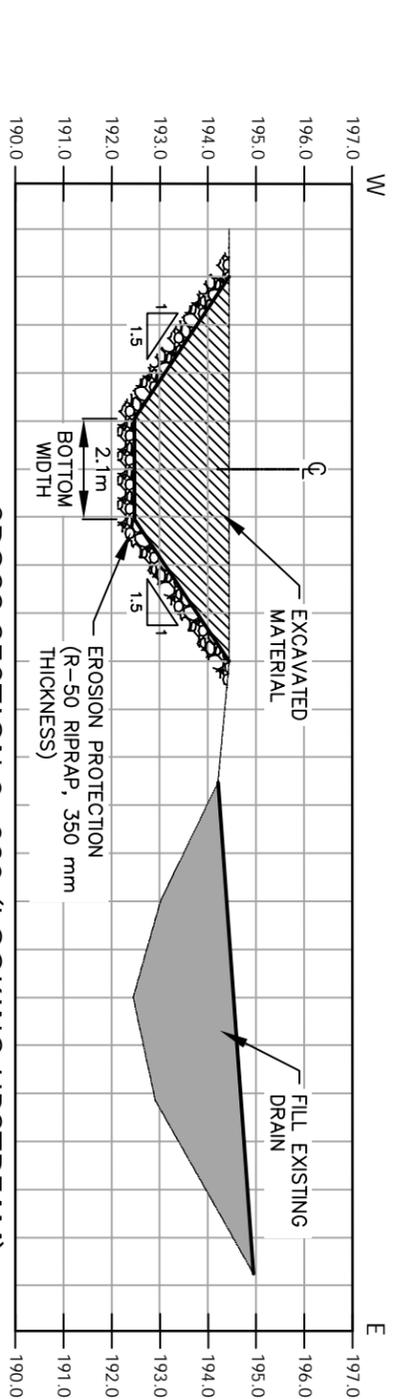
DATE	JUNE 10, 2024
SCALE	AS SHOWN

**DILLON CONSULTING**

PROJECT NO. 21-3142  
 DRAWING SCALES BASED ON A 11" X 17" SHEET

**9TH CONCESSION DRAIN**  
 (King's Highway No. 3 Culvert Extension)  
 Town of Kingsville

SHEET TITLE: CULVERT EXTENSION DETAIL  
 PAGE NO. 3 OF 4



**0+000**-START OF DRAIN REALIGNMENT

**0+097**-GILBOE RELIEF DRAIN ENTERS  
**0+100**-END OF NEW DRAIN REALIGNMENT

**0+116**-EX. 4720x1830 CONCRETE BRIDGE TO BE REMOVED

**0+125**-END OF BANK RESTORATION RIPRAP LINED CHANNEL

**0+242**-2440x1520 CONCRETE BOX CULVERT EXTENSION (SOUTH END)

**0+277**-KING'S HWY. NO. 3  
2440x1520 EXISTING CONCRETE BOX CULVERT (SOUTH END)

**0+303**- $\phi$  KING'S HWY. NO. 3  
2440x1520 EXISTING CONCRETE BOX CULVERT (NORTH END)

**0+323**-SOUTH TALBOT ROAD  
1400mm CSP CULVERT SOUTH END

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Do not modify, drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	1	CLIENT REVIEW	ISSUED FOR
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DESIGN	TRO	REVIEWED BY	MDH
DRAWN	SJC	CHECKED BY	TRO
DATE	June 10, 2024	SCALE	AS SHOWN
DATE	JUNE 4/24	BY	TRO

PROJECT NO.	21-3142
DRAWING SCALES BASED ON A 11" X 17" SHEET	

SHEET TITLE	PROFILE & CROSS SECTIONS
PAGE NO.	4 OF 4

SCHEDULE G

Drainage Report for the  
**9TH CONCESSION DRAIN**  
(King's Highway No. 3 Culvert Extension)  
Town of Kingsville



**Date:** July 8, 2024  
**To:** Mayor and Council  
**Author:** Lu-Ann Marentette, Drainage Superintendent  
**RE:** Union Avenue Drain – Extending to Outlet – Notice to Abandon  
**Project**

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### **RECOMMENDED ACTION**

That the Report dated April 10, 2024, prepared by Baird AE for the abandonment of the Extension Drain as per Section 40 of the Drainage Act **BE ADOPTED.**

### **BACKGROUND**

Baird AE was appointed on February 23, 2015, under Section 78 of the Drainage Act, Subsection 1.5 - Otherwise improving, extending to an outlet or altering the drainage works.

### **DISCUSSION**

The intention of the appointment was made so that the owner of the outlet could have the drain improved so that they could build a home on the property.

Given the cost of engineering and the estimated construction cost (\$1,200,000), the owner wishes that the project not proceed.

### **FINANCIAL CONSIDERATIONS**

To date, the cost on record is \$100,187.21.

As this work was initiated by the Town for the benefit of parcel #290-15800, we would recommend that the cost be shared by the Town of Kingsville and parcel #290-15800 as follows:

Parcel #290-15800	\$83,155.38
Town of Kingsville	\$17,031.83

## ENVIRONMENTAL CONSIDERATIONS

Not required.

## CONSULTATIONS

PREPARED BY:



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Lu-Ann Marentette  
Drainage Superintendent

REVIEWED BY:



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Tim Del Greco P.Eng.  
Senior Manager, Capital Projects and Engineering



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Richard J.H. Wyma CSLA  
Director of Planning and Development



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John Norton  
CAO



# Union Avenue Drain Extension Section 40 Report

The Town of Kingsville

April 10, 2024

Project No. 15-033



27 Princess St., Unit 102  
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[bairdAE.ca](http://bairdAE.ca)

April 10, 2024

Mayor and Municipal Council  
2021 Division Road North  
Kingsville ON N9Y 2Y9

Mayor and Members of Council,

Subject: Union Avenue Drain Extension  
Town of Kingsville  
Our File Reference 15-033

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## **1.0 Introduction**

A request for drainage improvements has been initiated by the Town of Kingsville under Section 78 of the Drainage Act. Crozier Baird, now known as Baird AE, was appointed on February 23, 2015, to prepare a Report and Assessment Schedule to extend the Union Avenue Drain, the Bert Mucci Drain and the Fuller Drive drain to a sufficient outlet.

## **2.0 Drainage History**

The Union Avenue Drain is located east of County Road (CR) 45 and extends from 2<sup>nd</sup> Concession Road south to approximately 105 metres north of County Road 20 (Seacliff Drive). The enclosed drain was established under a report dated November 9, 1987, by Bruce D. Crozier Engineering. The drain outlets into a natural channel.

## **3.0 Findings and Recommendations**

This natural channel has experienced significant erosion. The Town of Kingsville initiated the request for a sufficient outlet at the request of parcel 290-15800 through whose lands the natural watercourse flows. The landowner intended to construct a residence on the parcel and could not do so until the erosion was stabilized. The owner of parcel 290-15800 has been involved in the design process since the project started in 2015.

Extensive environmental and geotechnical studies were undertaken to design a solution to prevent further erosion to the buildable lot. The final design, cost estimate and assessment rationale were presented to the landowner in August 2022. At this time, the landowner determined that the project was cost-prohibitive and did not wish to proceed with the works.

During the design process, no issues were raised by upstream landowners about the condition of the Union Avenue Drain or its ability to convey water.

Based on our discussions with the Drainage Superintendent and the fact that the design and Engineer's report were substantially complete, we determined that the report should be finalized and proceed in accordance with the requirements of Section 40 of the Drainage Act, which states:

**40** Where the engineer finds that a drainage works is not required or is impractical, or cannot be constructed under this Act, the engineer shall forthwith file with the clerk of the initiating municipality a report to that effect,

stating the reasons therefor, the amount of the engineer's fees and other charges and by whom they shall be paid, and the clerk shall forthwith send a notice of the filing of such report to all persons who signed the petition and matter shall not be further proceeded with unless the decision of the engineer is reversed on appeal. R.S.O. 1990, c. D. 17, s. 40; 2010, c. 16, Sched. 1, s.2 (8).

As a result of the landowners' request and discussions with the Town's Drainage Superintendent, we find that the drainage works under our appointment "is not required" pursuant to Section 40 of the Act.

We find that the Engineer's fees and other charges related to this project total \$100,187.21 plus HST. As this work was initiated by the Town for the benefit of parcel 290-15800, we would recommend that the cost be shared by the Town of Kingsville and parcel 290-15800.

This would be in general accordance with Section 40, as above.

**4.0 Assessment**

We would recommend that all the costs associated with the work completed on this report, which is no longer required, be assessed to the Town of Kingsville and parcel 290-15800 as follows pursuant to Section 40 of the Drainage Act, R.S.O. 1990, Chapter D.17, as amended in 2010:

<b>Owner/ Roll Number</b>	<b>Assessment Value (\$)</b>
290-15800	83,155.38
Town of Kingsville	17,031.83
<b>Total</b>	

All of which is respectfully submitted,

**BAIRD AE**  
**27 PRINCESS STREET, SUITE 102**  
**LEAMINGTON, ONTARIO**  
**N8H 2X8**

*Halliday Pearson*  
 \_\_\_\_\_  
 Halliday Pearson, P.Eng.





**Date:** July 8, 2024  
**To:** Mayor and Council  
**Author:** Lu-Ann Marentette, Drainage Superintendent  
**RE:** Cottam Sideroad Branch of the 7th Concession Drain –  
Improvements for MTO Highway Widening Project

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## **RECOMMENDED ACTION**

That the Report provided by Dillon Consulting, dated June 10, 2024, on the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain for improvements on the drain for the MTO Highway Widening Project, under a Report of an Engineer pursuant to Section 78 of the Drainage Act **BE ADOPTED**.

## **BACKGROUND**

On July 10, 2023, staff received a request from the Ministry of Transportation to request drain improvements for the Highway 3 Widening Project.

## **DISCUSSION**

The Engineer has provided his report and notes the following. Proposed to replace and relocate the Hwy 3 culvert and to extend drain upstream to new South Talbot Road, relocate a farm access, replacement of County Road 27 culvert that interconnects the Cottam Sideroad Drain to the 8<sup>th</sup> Concession Drain and finally a cleanout of the Cottam Sideroad Drain downstream of Highway 3 to the 7<sup>th</sup> Concession Drain to facilitate depth required for the upstream drain extension.

Landowners within the watershed have been invited and have received a copy of the Engineer's report. The upstream watershed for the drain has changed and therefore a new future maintenance schedule has been prepared for the drain to supersede the 1968 report for the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain.

## **FINANCIAL CONSIDERATIONS**

Some landowners receive allowances for land and damages.

Assessment of costs 100% to MTO. The total cost of project is \$1,669,000.

## ENVIRONMENTAL CONSIDERATIONS

Report sent to ERCA for review and comments. A permit application and fee may be required.

Department of Fisheries and Oceans self screening report completed.

## CONSULTATIONS

PREPARED BY:



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Lu-Ann Marentette  
Drainage Superintendent

REVIEWED BY:



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Tim Del Greco P.Eng.  
Senior Manager, Capital Projects and Engineering



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Richard J.H. Wyma CSLA  
Director of Planning and Development



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John Norton  
CAO

**DRAINAGE REPORT  
FOR THE**

**REALIGNMENT & EXTENSION  
OF THE  
COTTAM SIDEROAD BRANCH  
OF THE 7<sup>TH</sup> CONCESSION DRAIN**

**FORMER TOWNSHIP OF GOSFIELD NORTH  
TOWN OF KINGSVILLE**



FINAL REPORT  
10 JUNE 2024  
TIM R. OLIVER, P. ENG.  
FILE No. 21-3142



File No. 21-3142

Mayor and Members of Council  
Town of Kingsville  
2021 Division Road North  
Kingsville, Ontario  
N9Y 2Y9

**Drainage Report for the  
REALIGNMENT & EXTENSION OF THE COTTAM SIDEROAD BRANCH  
OF THE 7<sup>TH</sup> CONCESSION DRAIN  
Former Township of Gosfield North  
Now In the Town of Kingsville**

Mayor and Members of Council:

**Instructions**

The Municipality received a request on 10 July 2023 from the Ministry of Transportation Ontario (MTO), for the realignment of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain. The proposed drainage works are required to facilitate the King's Highway No. 3 widening and associated culvert replacements. Council accepted the request under Section 78(1) of the Drainage Act for major improvements to a drainage works and on 14 August, 2023 appointed Dillon Consulting Limited to prepare a report.

Furthermore, the Municipality received a petition on 18 October 2023 from the MTO for the upstream northerly extension of the drain in order to facilitate a drainage outlet for the proposed new South Talbot Road realignment. The MTO has jurisdiction and is serving as an interim road authority to construct a new intersection between South Talbot Road and County Road No. 27 in its new location that is approximately 170 metres further north as a part of the highway widening project.

**Watershed Description**

The Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain consists of an open channel commencing just north of the north limit of the current South Talbot Road right-of-way. The drain flows south along the east limit of County Road 27 (Cottam Sideroad) crossing the highway and proceeding southerly to its outlet into the 7<sup>th</sup> Concession Drain. The upstream drainage area for the said works described herein is approximately 41.2 hectares (101.9 acres). This drainage area has been reduced by excluding the existing residential lands within the Village of Cottam. During the late 1990's, the drainage for the said area was redirected south and east to the Dornton Drain.

Roadside drainage along the east side of County Road No. 27, between South Talbot Road and County Road No. 34, will be redirected to the 8<sup>th</sup> Concession Drain as part of the future roadworks associated with the Highway 3 improvements. Historically, the watersheds for the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain and the 8<sup>th</sup> Concession Drain have been interconnected across County Road No. 27 at South Talbot Road via an existing 1390 mm x 910 mm corrugated steel pipe culvert. The surficial soils are predominately Brookston Clay which is defined as having poor natural drainage.

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## **Drain History**

The recent history of Engineers' reports for the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain follows:

- **July 1968 by William J. Settingington, P.Eng.:** The report recommended the repair and improvement of the drain including a drain cleanout and extension of a farm access culvert within Lot 9, Concession 7. This is the most current engineer's report on the said drain
- **1 March 1960 by Wm. D. Colby, B.Sc.:** The report recommended the repair and improvement of the drain including a drain cleanout.

## **Area Requiring Drainage / Sufficiency of Petition**

The area requiring drainage encompasses lands within the west half of Lot 269, South Talbot Road Concession where the new South Talbot Road realignment will traverse the said lands. The Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain already provides legal outlet to the existing South Talbot Road, however with its proposed realignment further to the north, it will require an upstream extension of the drain to direct the road drainage to. In terms of sufficiency of the petition, we have determined the petition to be valid in accordance with Section 4(1)(c) of the Drainage Act, where the drainage works is required for a road and the petition has been signed by a person having jurisdiction over such road.

## **On-site Meeting**

An on-site meeting was held on November 20, 2023 to discuss the proposed improvements to the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain including the realignment of the drain further east of its existing location where it crosses the King's Highway No. 3 by-pass. To facilitate this drain realignment, the existing highway culvert will be removed and replaced with a new longer and larger culvert to encompass the highway widening. The proposed works also include a northerly extension of the drain upstream, as a covered drain tile, to be situated along the westerly side of property Roll No. 560-01002 to serve both the drainage needs of the future South Talbot Road alignment as well as the existing farm drainage tiles from the said property. A summary of the on-site meeting is provided within Schedule 'A' herein.

## **Survey**

Our survey and examination of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain was carried out in June 2023. The survey comprised the recording of topographic data and examining the channel for available depth necessary to provide sufficient drainage.

## **Design Considerations**

### **(Drain Cleanout and Culvert Works)**

To provide sufficient depth and improved design capacity to better serve the upstream lands and associated new drain crossings required for the King's Highway No. 3 widening and the proposed new northerly alignment of South Talbot Road, a drain realignment, extension, clean out and lowering of the existing drain is required. The improvements start at the drain's outlet into the 7<sup>th</sup> Concession Drain and continue to the northerly extents of the future South Talbot Road intersection with County Road No. 27. The drain spoils removed as part of the drain cleanout are to be cast upon the adjacent lands to the east side of the drain.

For Culvert No. 1, serving as the existing primary farm access to the south part of Lot 9, Concession 7 (Roll No. 490-01800), it consists of an 11 m long, 1200 mm diameter



corrugated steel pipe that requires cleaning to remove the accumulated sediment. The culvert presently has capacity to convey drainage flows from a 1 in 10 year storm event.

For Culvert No. 2, involving the relocation and replacement of an existing secondary farm access serving the north part of Lot 9, Concession 7 (Roll No. 490-01800), the culvert is designed to convey drainage flows from a 1 in 10 year storm event. The existing culvert was discovered to be perched by approximately 200 mm above the drain's design bottom and the new replacement culvert will be lowered. The proposed culvert is a new 18.0 m long, 1200 mm diameter aluminized corrugated steel pipe complete with sloping stone end treatment and providing a minimum 9.0 m driveable top width. The new access location will be approximately 70 metres further south in order to provide a safer distance away from the County Road No. 27 and Highway No. 3 intersection that is being reconstructed and improved to include left hand turning lanes.

For Culvert No. 3, involving a new larger culvert across King's Highway No. 3, it replaces the existing 33.5 m long, 3050 mm x 1520 mm concrete open footing structure to be situated approximately 27 metres east of its present location. The proposed culvert is a 52.0 m long, 3648 mm x 1910 mm precast concrete box culvert. Both ends of the culvert shall consist of cast-in-place concrete headwalls. The new highway culvert shall be embedded a minimum of 400 mm below the design's drain bottom and a 400 mm layer of river stone shall be placed within the bottom of the culvert for fish habitat considerations. The new culvert will accommodate the widening of the King's Highway No. 3 bypass.

The MTO design criteria for rural arterial road bridges is to convey a 1 in 25 year event such that approximately 1 metre of freeboard is provided from the high water level to the edge of the travelled lane. This criterion was used to assess the effects of a longer culvert may have on the upstream high water level, and it was determined a larger and deeper culvert was required. The highway culvert is located within the upper portion of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain and the upstream portion of drain has less than a 1 in 25 year storm capacity. A Drainage, Hydrology/Hydraulics and Stormwater Management Report was completed by Dillon Consulting Limited (August 2023) to document the expected high water levels in the drain upstream in both an existing and proposed condition. The report identified that the existing culvert currently does meet the MTO freeboard design criteria, despite the limited capacity of the downstream Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain being less than the flows expected during a 1 in 25 year storm event. The replacement of the culvert recommended would have a negligible increase in the 25 year storm water elevation and therefore no adverse impacts to the upstream or downstream lands served by the Cottam Sideroad Branch of the 7<sup>th</sup> Drain.

For Culvert No. 4, involving a new culvert across County Road No. 27, it replaces the existing 20.0 m long 1390 mm x 910 mm corrugated steel arch pipe (CSPA) culvert across County Road No. 27 interconnected with the 8<sup>th</sup> Concession Drain. The proposed culvert is a new 32.0 m long, 1200 mm diameter HDPE culvert having a similar capacity. The existing culvert has deteriorated beyond repair and the new culvert will continue to serve as a relief drain for both the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain and the 8<sup>th</sup> Concession Drain being interconnected thereto.

(Drain Realignment Station 0+572 to Station 0+858)

For the upper portion of the existing Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain, we recommend the drain be realigned further to the east to permit the widening of the highway and intersection improvements with County Road No. 27. From Station 0+572 to Station 0+705, the bank slopes shall be constructed with a 4:1 fore slope and 2:1 back slope for the portion of the realigned drain alongside County Road No. 27.



From Station 0+705 to Station 0+858 where the drain will be situated inside the highway corridor, the new drain channel shall be constructed with bank slopes at 1.5:1 and be fully lined with R-50 riprap, minimum 350 mm thickness. The realigned drain channel will pick up drainage from the highway corridor as well as drainage from the existing South Talbot Road to the east of County Road No. 27.

**(Drain Extension Station 0+000A to Station 0+182A)**

Beyond the upstream realignment of the open portion of drain, we recommend the drain be extended northerly as a covered drain to the proposed new South Talbot Road intersection with County Road No. 27. The drain pipe is designed to convey drainage flows from a 1 in 10 year storm event.

The drain extension shall consist of 172 m long, 750 mm diameter HDPE pipe extending up to the north limit of South Talbot Road and picking up the surface and sub-surface drainage from the roadway and adjacent farmlands. As part of the drain extension, a 10 m long, 250 mm diameter HDPE stub pipe shall be provided to pick up existing tile drainage that is north of the new South Talbot Road and serving property Roll No. 560-01000. As part of the South Talbot Road construction along its alignment, a new header tile will be provided to intercept the existing farm tile drainage and be connected to the new municipal drain extension.

The existing farm tile drainage system that resides south of the new South Talbot Road is captured within existing header tiles that shall be connected to the new municipal drain extension near the southwest corner of the said farm property Roll No. 560-01002.

**Allowances (Cottam Sideroad Branch Drain Extension)**

In accordance with Sections 29 and 30 of the Drainage Act, we have determined that the landowner on the east side of the drain receive compensation for additional lands required to establish a new 6.0 m wide corridor to be centred over and along the drain’s length from Station 0+000A to Station 0+182A and for damages to the said lands. Schedule ‘B’ herein, shows the distribution of these allowances in the total amount of \$5,000.00 for the extension of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain.

**Recommendations and Cost Estimate**

Based on our review of the history, the information obtained from our examination and analysis of the survey data, we recommend that the drainage works be repaired and improved as described below:

Item	Description	Amount
<b><u>OPEN DRAIN WORKS</u></b>		
1.	Excavation and levelling of excavated material, as follows:	
	a) Excavation of the drain bottom from Station 0+000 to Station 0+573, totalling approximately 573 linear meters of drain and approximately 200 m <sup>3</sup> of material. The work shall include levelling the drain spoils within the 9.0 m wide drain corridor on the east side of the drain.	\$12,000.00
2.	Strip and remove vegetation and topsoil from the existing drain channel to be filled beyond Station 0+705 up to existing grade with clean native backfill including compaction in maximum 300 mm lifts.	\$5,000.00



Item	Description	Amount
3.	Excavation and trucking of material, as follows	
	a) Excavate new open channel along proposed alignment from Station 0+573 to Station 0+705, approximately 132 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.	\$40,000.00
	b) Excavate new open channel along proposed alignment from Station 0+705 to Station 0+747, approximately 42 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.	\$13,500.00
	c) Excavate new open channel along proposed alignment from Station 0+799 to Station 0+858, approximately 59 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.	\$19,000.00
4.	Hydroseeding of drain banks on new channel, as follows:	
	a) Supply and placement of fibre reinforced matrix hydraulic mulch seed on new drain banks from Station 0+573 to Station 0+705, approx. 1,200 m <sup>2</sup> .	\$10,000.00
5.	Stone erosion protection, as follows:	
	a) Supply and placement of R-50 riprap stone erosion protection 2 m wide on east drain bank around existing 375 mm tile outlet (Station 0+585), minimum 350 mm thickness, complete with filter fabric underlay, approx. 10 m <sup>2</sup> .	\$1,000.00
	b) Supply and placement of R-50 riprap stone erosion protection on west drain bank (Station 0+573 to Station 0+595), minimum 350 mm thickness, complete with filter fabric underlay, approx. 90 m <sup>2</sup> .	\$9,000.00
	c) Supply and placement of wired gabion basket mat protection on west drain bank including filling with R-10 riprap, (Station 0+615 to Station 0+705), 4.0 m wide, minimum 300 mm thickness, complete with filter fabric underlay, approx. 360 m <sup>2</sup> .	\$65,000.00
	d) Supply and placement of R-50 riprap stone erosion protection on full drain channel, (Station 0+705 to Station 0+747), minimum 350 mm thickness, complete with filter fabric underlay, approx. 330 m <sup>2</sup> .	\$33,000.00



Item	Description	Amount
	e) Supply and placement of R-50 riprap stone erosion protection of full drain channel, (Station 0+799 to Station 0+858), minimum 350 mm thickness, complete with filter fabric underlay, approx. 470 m <sup>2</sup> .	\$47,000.00
6.	Access Culvert removal, as follows;	
	a) Removal and disposal offsite of existing 24.0 m long 1200 mm diameter CSP culvert including end wall materials crossing existing South Talbot Road. Work to include restoration of all disturbed areas.	\$10,000.00
	b) Removal and disposal offsite of 20.0 m long 1390 mm x 910 mm CSPA culvert including end wall materials crossing existing County Road No. 27. Work to include road restoration and traffic control.	\$15,000.00
7.	New Culvert Work, as follows:	
	a) Culvert No. 1 (Roll No. 490-01800) – Clean and remove sediment from existing 11 m long, 1200 mm diameter CSP including levelling of sediment within working corridor.	\$1,000.00
	b) <u>Culvert No. 2 (Roll No. 490-01800)</u> – Removal and disposal of existing 13.8 m long, 1200 mm diameter CSP, existing riprap sloping end wall materials and backfill off-site that are not suitable for native backfill. Supply and installation of a new 18.0 m long, 1200 mm diameter CSP aluminium type-II, 2.8 mm thick with 125mm x 25 mm corrugations. Clear stone bedding below the culvert pipe, minimum 150 mm thickness (approximately 20 tonnes), within driveway full Granular ‘A’ (crushed limestone) backfill material from the bottom of the pipe to the top of the driveway surface (approximately 230 tonnes) compacted, clean native or imported clean native backfill material beyond driveway compacted (approximately 20 m <sup>3</sup> ). Stone erosion protection (minimum 350 mm thickness) c/w filter cloth underlay to be provided for sloping end walls (approximately 90 m <sup>2</sup> )	\$35,000.00



Item	Description	Amount
	c) <u>Culvert No. 3 (King's Highway No. 3)</u> - Supply and installation of a new 52.0 m long, 3648 mm x 1910 mm precast concrete box culvert, complete with waterproofing membrane and protection board, including a 100 mm concrete mud slab, compacted Granular 'A' bedding (min. 300mm thickness), compacted full Granular 'B' Type II backfill up to road subgrade with precast concrete headwalls and supply and placement of riverstone (D50 average size) in bottom of new culvert minimum 400 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also include removal off-site of all excess materials not suitable for bridge backfill.	\$1,050,000.00
	d) <u>Culvert No. 4 (County Road No. 27)</u> –Supply and installation of a new 32.0 m long, 1200 mm diameter solid high-density polyethylene (HDPE) smooth interior wall, 320 kPa pipe (Duromaxx or approved equal) with water tight joints. Clear stone bedding below the culvert pipe, minimum 150 mm thickness (approximately 30 tonnes), within roadway full Granular 'A' (crushed limestone) backfill material from the bottom of the pipe to the bottom of road surface (approximately 300 tonnes) compacted, clean native or imported clean native backfill material beyond roadway compacted (approximately 70 m <sup>3</sup> ) and sloping stone erosion protection R-50 rip rap, minimum 350 mm thickness pipe end treatment, approximately 50 m <sup>2</sup> .	\$60,000.00
8.	Temporary silt control measures during construction.	\$5,000.00
<b><u>TILE DRAIN WORKS</u></b>		
9.	Supply and installation of a 172.0 m long 750 mm diameter HDPE pipe, 320 kPa, corrugated with smooth interior wall and bell and spigot joints, complete with Granular 'A' pipe bedding up to pipe spring line and native backfill except for crossing under South Talbot Road to be full Granular 'A' backfill compacted. Work to also include lateral tee connections for existing farm header tiles.	\$190,000.00
10.	Supply and installation of a 10.0 m long 250 mm diameter HDPE pipe, 320 kPa, corrugated with smooth interior wall and bell and spigot couplers, complete with Granular 'A' pipe bedding up to pipe spring line.	\$1,000.00



Item	Description	Amount
11.	Supply and installation of two (2) new 600 mm x 1200 mm precast concrete ditch inlet catch basins (OPSD 705.040) and grating (OPSD 403.01) complete with compacted Granular 'A' bedding (min. 150 thickness) and compacted full Granular 'B' Type-II backfill. Work to include supply and placement of R-50 riprap, minimum 350 mm thickness around perimeter of catch basin approximately (5 m <sup>2</sup> ).	\$10,000.00
12.	Supply and installation of one (1) new 600 mm x 600 mm precast concrete catch basin CB (OPSD 705.010) and maintenance hole frame and cover (OPSD 401.010) complete with compacted Granular 'A' bedding (min. 150 thickness) and compacted full Granular 'B' Type-II backfill.	\$2,500.00
	<b>SUB-TOTAL</b>	<b>\$1,634,000.00</b>
13.	Allowances as per Sections 29 and 30 of the Drainage Act	\$5,000.00
14.	Report, Assessments and Final Inspection	\$29,000.00
15.	Expenses and Incidentals	\$1,000.00
		<b>\$1,669,000.00</b>

The estimate provided in this report was prepared according to current materials and installation prices as of the date of this report. In the event of delays from the time of filing of the report by the Engineer to the time of tendering the work, it is understood that the estimate of cost is subject to inflation. The rate of inflation shall be calculated using the Consumer Price Index applied to the cost of construction from the date of the report to the date of tendering.

### **Assessment of Costs**

The individual assessments are comprised of three (3) assessment components:

- i. Benefit (*advantages relating to the betterment of lands, roads, buildings, or other structures resulting from the improvement to the drain*).
- ii. Outlet Liability (*part of cost required to provide outlet for lands and roads*).
- iii. Special Benefit (*additional work or feature that may not affect function of the drain*).

We have assessed the estimated costs for the drain improvements and extension thereof the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain against the affected roads as listed in Schedule 'C' under "Special Benefit." Details of the Special Benefit assessment listed are provided in the Assessment Rationale below.

### **Assessment Rationale**

Special Benefit assessment shown in Schedule 'C' was derived as follows:

1. As the new drain realignment, extension, new culvert works and cleanout are to facilitate the proposed highway project, we have assessed 100% of the costs to the Ministry of Transportation Ontario in accordance with Section 26 of the Drainage Act as a non-proratable assessment. Since there are no special benefit assessments to other landowners, Schedule 'D' for the purposes of Special Benefit details has been omitted from this report.



#### **Future Maintenance (Culverts No. 2 to 4)**

Culvert No. 2 shall be maintained by the Town of Kingsville and future repair and maintenance costs assessed 100% to the owner of the access, Roll No. 490-01800, as a secondary access to said property.

For Culvert No. 3, it shall be maintained by the Ministry of Transportation Ontario for 100% of the costs, subject of course, to any variations that may be made under the authority of the Drainage Act.

For Culvert No. 4, it shall be maintained by the County of Essex Road Department for 100% of the costs, subject of course, to any variations that may be made under the Authority of the Drainage Act.

#### **Future Maintenance (Open Drain Portion from Station 0+000 to 0+705)**

The open drain portion along the east side of County Road No. 27 from Station 0+000 to Station 0+705 shall be maintained by the Town of Kingsville. The future repair and maintenance costs shall be assessed to the lands and the roads for Benefit and Outlet assessments in the same relative proportions as listed in Schedule 'E-1' herein, subject of course to any variations that may be made under the authority of the Drainage Act. The assessment schedule is based on an arbitrary \$10,000.00 of future maintenance costs for which actual costs would be prorated.

#### **Future Maintenance (Open Drain Portion from Station 0+705 to 0+858)**

The open drain portion existing within the King's Highway No. 3 corridor from Station 0+705 to Station 0+858 shall be maintained by the Ministry of Transportation Ontario (MTO). The future repair and maintenance costs shall be assessed 100% against the MTO, should the Town of Kingsville be required to complete the future maintenance works.

#### **Future Maintenance (Tile Drain from Station 0+000A to Station 0+182A)**

The tile drain portion along the east side of County Road No. 27 from Station 0+000A to Station 0+182A shall be maintained by the Town of Kingsville. The future repair and maintenance costs shall be assessed to the lands and roads for Benefit and Outlet assessments in the same relative proportions as listed in Schedule 'E-2' herein, subject of course, to any variations that may be made under the authority of the Drainage Act. The assessment schedule is based on an arbitrary \$10,000.00 of future maintenance costs for which actual costs would be prorated.

#### **Future Maintenance (Culvert No. 1 – Property Roll No. 490-01800)**

The farm access culvert serving property Roll No. 490-01800 shall be maintained by the Town of Kingsville. The future repair and maintenance costs shall be shared with 50% assessed as a Special Benefit assessment to property Roll No. 490-01800 as the culvert serves as the primary access to the said property. The remaining 50% shall be assessed as an Outlet assessment to the lands and roads in the same relative proportions as listed in Schedule 'E-3' herein, subject of course, to any variations that may be made under the authority of the Drainage Act. The assessment schedule is based on an arbitrary \$10,000.00 representing the 50% share of the Culvert No. 1 future maintenance costs for which actual costs would be prorated.

#### **Drawings and Specifications**

Attached to this report is Schedule 'F', which are Specifications setting out the details of the recommended works and Schedule 'G' which represent the drawings that are attached to this report.



**Page 2 of 10 – Plan 1**  
**Page 3 of 10 – Plan 2**  
**Page 4 of 10 – Drain Enlargement Plan 1**  
**Page 5 of 10 – Drain Enlargement Plan 2**  
**Page 6 of 10 – Drain Extension Details**  
**Page 7 of 10 – Profile 1 & Cross Sections**  
**Page 8 of 10 – Profile 2 & Cross Sections**  
**Page 9 of 10 – Culvert No. 2 Details**  
**Page 10 of 10 – Typical Details**

### **Construction Drawings and Specifications**

The work included in this report will be performed under the provincial contract for the Widening of King’s Highway No. 3 starting from 0.8 km west of Cameron Sideroad and continuing easterly to 1.8 km west of County Road No. 31. Contract drawings for the roadworks including drain realignment, Culvert No. 3 (Hwy 3 crossing) and other associated road culverts under County Road No. 27 have been prepared complete with associated specifications which shall adhere to the elevations, alignment, sizes, materials and location and be generally in compliance with this report.

### **Approvals**

The construction and/or improvement to a drainage works, including repair and maintenance activities, and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced by the proposed works. Prior to any construction or maintenance works, the Municipality or proponent designated on the Municipality’s behalf shall obtain all required approvals/permits and confirm any construction limitations including timing windows, mitigation/off-setting measures, standard practices or any other limitations related to in-stream works.

### **Agency Reviews**

The Essex Region Conservation Authority (ERCA) has been previously notified and provided the opportunity to review the proposed drainage works as outlined within this report. An application for permit has been made for the proposed undertakings associated with this municipal drain. The Town of Kingsville will subsequently give notice to ERCA and other prescribed persons of an upcoming meeting of Council that will consider and adopt the final report, at which time this meeting is an opportunity to provide input.

In 2021, a Fish and Fish Habitat Impact assessment was undertaken to identify the impacts of the approved improvements to fish and fish habitat within the Highway 3 Study Area. The assessment was completed in accordance with the requirements of the Interim 2020 *MTO/DFO/NDMNRF Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings, Version 4* (Fisheries Protocol) and the guidance provided in MTO’s (2020) *Interim Environmental Guide for Fish and Fish Habitat* (Fish Guide).

As per the direction received from Mr. Chris Evans, Environmental Planner MTO, all documentation (i.e., forms and templates) has been prepared so as to be compliant with the Interim Fish Guide (April 2020). The *Fish and Fish Habitat Existing Conditions and Impact Assessment Report, Highway 3 Widening and Safety Enhancement Study* (GHD, July 2021) provides the impact analysis.

The Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain was identified to support direct fish habitat and the culvert replacement across Highway 3 and associated drain realignment

are not likely to result in the death of fish or harmful alteration, disruption or destruction (HADD) of fish habitat

Respectfully submitted,



**DILLON CONSULTING LIMITED**

Tim R. Oliver, P.Eng.

TRO:wlb



**SCHEDULE 'A'**  
**SUMMARY OF ON-SITE MEETING**  
**November 20, 2023 @ 3:00 p.m.**

**Present:**

Steve Merritt	Landowner
Rick Kendrick	Landowner
Kyle Saulnier	Ministry of Transportation Ontario
Carlo DiMambro	Green Infrastructure Partners Inc.
Mark Fishleigh	County of Essex Roads Dept.
Lu-Ann Marentette	Town of Kingsville
Clarke Campbell	Dillon Consulting Limited
Tim Oliver	Dillon Consulting Limited

**Tim Oliver** provided an overview of drainage improvements proposed to the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain which involve a realignment at the Highway 3 crossing and new culvert, the relocation of an existing farm access culvert and an extension of the drain northerly to provide a drainage outlet for the future South Talbot Road realignment. The work also includes a replacement of the existing culvert across County Road No. 27 that interconnects the two drains (Cottam Sideroad Branch of 7<sup>th</sup> Concession Drain and 8<sup>th</sup> Concession Drain).

**Steve Merritt** mentioned there are some drainage concerns downstream on the 7<sup>th</sup> Concession Drain that should be tended to before improvements are made upstream as part of the highway project.

**Lu-Ann Marentette** replied that a previous request for maintenance of the 7<sup>th</sup> Concession Drain has been received for the downstream portion along County Road No. 27 and expects the drain will be cleaned out later this year which should help drainage flows.

**Tim Oliver** noted that the existing farm access culvert serving as a secondary access to the Merritt farm has an existing roadside vegetable stand business. During our survey of the drain, we discovered that this existing culvert is too high for the upstream portion of drain. For its proposed relocation being approximately 70 metres further downstream to facilitate the widening of County Road No. 27 and the associated turning lanes at the intersection with Highway 3, the drain will also require a minor deepening on the upstream end and a cleanout along its entire length downstream to its outlet into the 7<sup>th</sup> Concession Drain.

**Steve Merritt** mentioned that he also has the farm access culvert on the opposite (west) side of the road that will be relocated as well as part of same roadworks involving County Road No. 27. He noted the ditch on the west side of the road should not be conveying drainage from the Highway 3 improvements. In discussions with the highway project team, a new culvert across County Road No. 27 would bring the highway drainage into the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain.

**Tim Oliver** explained that the upstream extension of the drain north of Highway 3 will involve a covered drain tile to interconnect existing farm tile drainage that is being redirected to the new drain extension as well as the drainage from the new South Talbot Road portion bisecting the Kendrick farm. The new drain extension will be situated along the westerly portion of the Kendrick farm. The size of tile will be 750 mm (30 inches) in diameter. A new private header tile will be placed along the northerly limit of the new South Talbot Road to intercept all the existing farm tile lateral runs and bring this drainage into the drain extension. The area drained by this tile is approximately 45 acres and we determined that a 250 mm (10 inches) in diameter tile would be of sufficient capacity and the new 30 inch pipe drain extension would have enough depth to receive this drainage. Tim also asked if tile plans were available for the Kendrick farm. The new header tile would need to be designed and installed by a licensed tile drainage contractor.

**Rick Kendrick** mentioned the entire 100 acre farm is systematically tiled with the middle third of the farm having tiles running north-south at 1 rod (16.5 feet) spacing, while the outside third portions of the farm has tiles at 2 rod (33 feet) spacing.

**Carlo DiMambro** mentioned that his company has a licensed tiler to complete the new header tile installation

**Tim Oliver** stated that the drainage report would be completed within the next 6 months to accommodate construction schedule starting this Summer 2024.

*Meeting summary prepared by Tim Oliver, P. Eng.*

DRAFT

**"SCHEDULE B"**  
**SCHEDULE OF ALLOWANCES**

**COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

Roll No.	Con.	Description	Owner	Section 30 Damages	Section 29 Land	Total Allowances
560-01002	S.T.R.	PT LOT 269	Richard B. & Sharon M. Kendrick	\$150.00	\$4,850.00	\$5,000.00
<b>TOTAL ALLOWANCES .....</b>				<b>\$150.00</b>	<b>\$4,850.00</b>	<b>\$5,000.00</b>

**"SCHEDULE C"**  
**SCHEDULE OF ASSESSMENT**

**COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

**ONTARIO LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
King's Highway No. 3	11.00	4.45	Ministry of Transportation	\$1,669,000.00	\$0.00	\$0.00	\$1,669,000.00
Total on Ontario Lands.....				\$1,669,000.00	\$0.00	\$0.00	\$1,669,000.00
<b>TOTAL ASSESSMENT</b> .....				<b>\$1,669,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,669,000.00</b>
	(Acres)	(Ha.)					
<b>Total Area:</b>	<b>11.00</b>	<b>4.45</b>					

**"SCHEDULE E-1"**  
**SCHEDULE OF ASSESSMENT FOR FUTURE MAINTENANCE (OPEN DRAIN PORTION STA. 0+000 TO STA. 0+705)**

**COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

**ONTARIO LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
King's Highway No. 3	11.00	4.45	Ministry of Transportation	\$0.00	\$880.00	\$1,990.00	\$2,870.00
Total on Ontario Lands.....				\$0.00	\$880.00	\$1,990.00	\$2,870.00

**MUNICIPAL LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
County Road No. 27	3.10	1.25	County of Essex	\$0.00	\$1,094.00	\$588.00	\$1,682.00
South Talbot Road	5.80	2.35	Town of Kingsville	\$0.00	\$289.00	\$885.00	\$1,174.00
Total on Municipal Lands.....				\$0.00	\$1,383.00	\$1,473.00	\$2,856.00

**PRIVATELY-OWNED - AGRICULTURAL LANDS**

Roll No.	Con.	Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
			(Acres)	(Ha.)					
490-01700	S.T.R.	Pt Lot 9	10.00	4.05	Donna J. & Steven J. Merritt	\$0.00	\$63.00	\$176.00	\$239.00
490-01800	S.T.R.	Pt Lots 9 & 10	20.00	8.09	Donna J. & Steven J. Merritt	\$0.00	\$1,027.00	\$381.00	\$1,408.00
560-01000	7	Pt Lot 269	45.00	18.21	Richard B. & Sharon M. Kendrick	\$0.00	\$560.00	\$1,714.00	\$2,274.00
560-01002	7	Pt Lot 269	7.00	2.83	Richard B. & Sharon M. Kendrick	\$0.00	\$87.00	\$266.00	\$353.00
Total on Privately-Owned - Agricultural Lands .....				\$0.00	\$1,737.00	\$2,537.00	\$4,274.00		

<b>TOTAL ASSESSMENT .....</b>				<b>\$0.00</b>	<b>\$4,000.00</b>	<b>\$6,000.00</b>	<b>\$10,000.00</b>
			(Acres)	(Ha.)			
<b>Total Area:</b>			<b>101.90</b>	<b>41.23</b>			

**"SCHEDULE E-2"**  
**SCHEDULE OF ASSESSMENT FOR FUTURE MAINTENANCE (TILE DRAIN PORTION STA. 0+000A TO STA. 0+182A)**

**COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

**MUNICIPAL LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
South Talbot Road	2.20	0.89	Town of Kingsville	\$0.00	\$2,500.00	\$925.00	\$3,425.00
Total on Municipal Lands.....				\$0.00	\$2,500.00	\$925.00	\$3,425.00

**PRIVATELY-OWNED - AGRICULTURAL LANDS**

Roll No.	Con.	Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
			(Acres)	(Ha.)					
560-01000	7	Pt Lot 269	45.00	18.21	Richard B. & Sharon M. Kendrick	\$0.00	\$2,000.00	\$3,782.00	\$5,782.00
560-01002	7	Pt Lot 269	7.00	2.83	Richard B. & Sharon M. Kendrick	\$0.00	\$500.00	\$293.00	\$793.00
Total on Privately-Owned - Agricultural Lands .....				\$0.00	\$2,500.00	\$4,075.00	\$6,575.00		

<b>TOTAL ASSESSMENT .....</b>				<b>\$0.00</b>	<b>\$5,000.00</b>	<b>\$5,000.00</b>	<b>\$10,000.00</b>
			(Acres)	(Ha.)			
<b>Total Area:</b>			<b>54.20</b>	<b>21.93</b>			

**"SCHEDULE E-3"**  
**SCHEDULE OF ASSESSMENT FOR FUTURE MAINTENANCE (CULVERT No. 1)**

**COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
**TOWN OF KINGSVILLE**

**ONTARIO LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
King's Highway No. 3	11.00	4.45	Ministry of Transportation	\$0.00	\$0.00	\$3,425.00	\$3,425.00
Total on Ontario Lands.....				\$0.00	\$0.00	\$3,425.00	\$3,425.00

**MUNICIPAL LANDS:**

Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
	(Acres)	(Ha.)					
County Road No. 27	3.10	1.25	County of Essex	\$0.00	\$0.00	\$960.00	\$960.00
South Talbot Road	5.80	2.35	Town of Kingsville	\$0.00	\$0.00	\$1,445.00	\$1,445.00
Total on Municipal Lands.....				\$0.00	\$0.00	\$2,405.00	\$2,405.00

**PRIVATELY-OWNED - AGRICULTURAL LANDS**

Roll No.	Con.	Description	Area Affected		Owner	Special Benefit	Benefit	Outlet	Total Assessment
			(Acres)	(Ha.)					
490-01700	S.T.R.	Pt Lot 9	10.00	4.05	Donna J. & Steven J. Merritt	\$0.00	\$0.00	\$310.00	\$310.00
490-01800	S.T.R.	Pt Lots 9 & 10	20.00	8.09	Donna J. & Steven J. Merritt	\$0.00	\$0.00	\$625.00	\$625.00
560-01000	7	Pt Lot 269	45.00	18.21	Richard B. & Sharon M. Kendrick	\$0.00	\$0.00	\$2,800.00	\$2,800.00
560-01002	7	Pt Lot 269	7.00	2.83	Richard B. & Sharon M. Kendrick	\$0.00	\$0.00	\$435.00	\$435.00
Total on Privately-Owned - Agricultural Lands .....						\$0.00	\$0.00	\$4,170.00	\$4,170.00

**TOTAL ASSESSMENT** ..... **\$0.00      \$0.00      \$10,000.00      \$10,000.00**

	(Acres)	(Ha.)
<b>Total Area:</b>	<b>101.90</b>	<b>41.23</b>

“SCHEDULE F”  
DRAINAGE REPORT FOR THE  
**REALIGNMENT & EXTENSION OF THE  
COTTAM SIDEROAD BRANCH OF THE 7<sup>TH</sup> CONCESSION DRAIN**  
TOWN OF KINGSVILLE

**SPECIAL PROVISIONS - GENERAL**

**1.0 GENERAL SPECIFICATIONS**

The General Specifications attached hereto is part of “Schedule F.” It also forms part of this specification and is to be read with it, but where there is a difference between the requirements of the General Specifications and those of the Special Provisions which follow, the Special Provisions will take precedence.

**2.0 DESCRIPTION OF WORK**

The work to be carried out under this Contract includes, but is not limited to, the supply of all **labour, equipment and materials** to complete the following items:

- Excavation and Leveling of excavated material, as follows:
  - Excavation of the drain bottom from Station 0+000 to Station 0+573, totalling approximately 573 linear meters of drain and approximately 200 m<sup>3</sup> of material. The work shall include levelling the drain spoils within the 9.0 m wide drain corridor on the east side of the drain.
- Strip and remove vegetation and topsoil from the existing drain channel to be filled beyond Station 0+705 up to existing grade with clean native backfill including compaction in maximum 300 mm lifts
- Excavation and trucking of material, as follows:
  - Excavate new open channel along proposed alignment from Station 0+573 to Station 0+705, approximately 132 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.
  - Excavate new open channel along proposed alignment from Station 0+705 to Station 0+747, approximately 42 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.
  - Excavate new open channel along proposed alignment from Station 0+799 to Station 0+858, approximately 59 lineal metres. Any excess soils not required to fill in the original drain alignment shall be hauled off-site under the management of the contractor for the highway improvements.
- Hydroseeding of drain banks on new channel, as follows:
  - Supply and placement of fibre reinforced matrix hydraulic mulch seed on new drain banks from Station 0+573 to Station 0+705, approx. 1,200 m<sup>2</sup>.
- Stone erosion Protection, as follows:
  - Supply and placement of R-50 riprap stone erosion protection 2 m wide on east drain bank around existing 375 mm tile outlet (Station 0+585), minimum 350 mm thickness, complete with filter fabric underlay, approx. 10 m<sup>2</sup>.

- Supply and placement of R-50 riprap stone erosion protection on west drain bank (Station 0+573 to Station 0+595), minimum 350 mm thickness, complete with filter fabric underlay, approx. 90 m<sup>2</sup>.
  - Supply and placement of wired gabion mat protection on west drain bank including filling with R-10 riprap, (Station 0+615 to Station 0+705), 4.0 m wide, minimum 300 mm thickness, complete with filter fabric underlay, approx. 360 m<sup>2</sup>.
  - Supply and placement of R-50 riprap stone erosion protection on full drain channel, (Station 0+705 to Station 0+747), minimum 350 mm thickness, complete with filter fabric underlay, approx. 330 m<sup>2</sup>.
  - Supply and placement of R-50 riprap stone erosion protection of full drain channel, (Station 0+799 to Station 0+858), minimum 350 mm thickness, complete with filter fabric underlay, approx. 470 m<sup>2</sup>.
- Access Culvert removal, as follows;
- Removal and disposal offsite of existing 24.0 m long 1200 mm diameter CSP culvert including end wall materials crossing existing South Talbot Road. Work to include restoration of all disturbed areas.
  - Removal and disposal offsite of 20.0 m long 1390 mm x 910 mm CSPA culvert including end wall materials crossing existing County Road No. 27. Work to include road restoration and traffic control.
- New Culvert Work, as follows:
- Culvert No. 1 (Roll No. 490-01800) – Clean and remove sediment from existing 11 m long, 1200 mm diameter CSP including levelling of sediment within working corridor.
  - Culvert No. 2 (Roll No. 490-01800) – Removal and disposal of existing 13.8 m long, 1200 mm diameter CSP, existing riprap sloping end wall materials and backfill off-site that are not suitable for native backfill. Supply and installation of a new 18.0 m long, 1200 mm diameter CSP aluminium type-II, 2.8 mm thick with 125mm x 25 mm corrugations. Clear stone bedding below the culvert pipe, minimum 150 mm thickness (approximately 20 tonnes), within driveway full Granular ‘A’ (crushed limestone) backfill material from the bottom of the pipe to the top of the driveway surface (approximately 230 tonnes) compacted, clean native or imported clean native backfill material beyond driveway compacted (approximately 20 m<sup>3</sup>). Stone erosion protection (minimum 350 mm thickness) c/w filter cloth underlay to be provided for sloping end walls (approximately 90 m<sup>2</sup>)
  - Culvert No. 3 (King’s Highway No. 3) - Supply and installation of a new 52.0 m long, 3648 mm x 1910 mm precast concrete box culvert, complete with waterproofing membrane and protection board, including a 100 mm concrete mud slab, compacted Granular ‘A’ bedding (min. 300mm thickness), compacted full Granular ‘B’ Type II backfill up to road subgrade with precast concrete headwalls and supply and placement of riverstone (D50 average size) in bottom of new culvert minimum 400 mm thickness. Work to include fine grading, seeding and restoration of all disturbed areas. The work shall also include removal off-site of all excess materials not suitable for bridge backfill.
  - Culvert No. 4 (County Road No. 27) –Supply and installation of a new 32.0 m long, 1200 mm diameter solid high-density polyethylene (HDPE) smooth interior

wall, 320 kPa pipe (Duromaxx or approved equal) with water tight joints. Clear stone bedding below the culvert pipe, minimum 150 mm thickness (approximately 30 tonnes), within roadway full Granular ‘A’ (crushed limestone) backfill material from the bottom of the pipe to the bottom of road surface (approximately 300 tonnes) compacted, clean native or imported clean native backfill material beyond roadway compacted (approximately 70 m<sup>3</sup>) and sloping stone erosion protection R-50 rip rap, minimum 350 mm thickness pipe end treatment, approximately 50 m<sup>2</sup>.

- Temporary silt control measures during construction.
- Supply and installation of a 172.0 m long 750 mm diameter HDPE pipe, 320 kPa, corrugated with smooth interior wall and bell and spigot joints, complete with Granular ‘A’ pipe bedding up to pipe spring line and native backfill except for crossing under South Talbot Road to be full Granular ‘A’ backfill compacted. Work to also include lateral tee connections for existing farm header tiles.
- Supply and installation of a 10.0 m long 250 mm diameter HDPE pipe, 320 kPa, corrugated with smooth interior wall and bell and spigot couplers, complete with Granular ‘A’ pipe bedding up to pipe spring line.
- Supply and installation of two (2) new 600 mm x 1200 mm precast concrete ditch inlet catch basins DICB (OPSD 705.040) and grating (OPSD 403.010) complete with compacted Granular ‘A’ bedding (min. 150 thickness) and compacted full Granular ‘B’ Type-II backfill. Work to include supply and placement of R-50 riprap, minimum 350 mm thickness around perimeter of catch basin approximately (5 m<sup>2</sup>).
- Supply and installation of one (1) new 600 mm x 600 mm precast concrete catch basin CB (OPSD 705.010) and maintenance hole frame and cover (OPSD 401.010) complete with compacted Granular ‘A’ bedding (min. 150 thickness) and compacted full Granular ‘B’ Type-II backfill.

### 3.0 ACCESS TO THE WORK

Access to the drain shall be from the King’s Highway No. 3 and County Road No. 27 right-of-way. The Contractor shall make his/her own arrangements for any additional access for his/her convenience. All grass areas disturbed shall be restored to original conditions at the Contractor’s expense.

### 4.0 WORKING CORRIDORS

For both the construction and future maintenance of the drain the Contractor shall restrict his/her equipment to the working corridors as specified in this Section. Any damage resulting from non-compliance with this Section shall be borne by the Contractor. The working corridor shall be as follows:

<b>FROM STA.</b>	<b>TO STA.</b>	<b>PRIMARY (See Note 1)</b>	<b>SECONDARY (See Note 2)</b>
0+000	0+705	9.0 m wide on the east side of the drain measured off top of east bank	County Road No. 27 right-of-way
0+705	0+858	King’s Highway No. 3 right-of-way	N/A
		<b><u>TILE DRAIN PORTION</u></b>	

<b>FROM STA.</b>	<b>TO STA.</b>	<b>PRIMARY (See Note 1)</b>	<b>SECONDARY (See Note 2)</b>
0+000A	0+144A	6 m wide centered over drain tile on property Roll No. 560-01002	N/A
0+144A	0+172A	South Talbot Road right-of-way	N/A
0+172A	0+182A	6 m wide centered over drain tile on property Roll No. 560-01000	N/A

Note 1: *Primary working corridor* indicates the access corridor along the side of the drain where excavation is recommended (unless noted otherwise below and/or in the Specifications, as well as all purposes listed for Secondary Working Corridors).

Note 2: *Secondary working corridor* indicates the access corridor alongside the drain where construction equipment may travel for the purpose of trucking.

## 5.0 DRAIN REALIGNMENT

### 5.1 New Drain Excavation

Excavation shall be carried out in accordance with the profile shown on the drawings for the drain relocation. In all cases, the Contractor shall use the benchmarks to establish the proposed grade.

All excavated material from the new drain construction (Station 0+573 to Station 0+858), shall be used as backfill for the infilling of the old section of drain. Excess soils beyond that which is required for backfilling the abandoned original drain alignment shall be managed and stockpiled within the King's Highway No. 3 corridor or off-site as required. All roadways and laneways disturbed by the trucking of excavated materials shall be restored to original conditions.

In all cases, the Contractor shall use the benchmarks to establish the proposed grade. However, for convenience, the drawings provide the approximate depth from the surface of the ground and from the existing drain bottom to the proposed grades. **THE CONTRACTOR SHALL NOT EXCAVATE DEEPER THAN THE GRADELINES SHOWN ON THE DRAWINGS.**

Should over excavation of the drain bank occur, the Contractor will not be permitted to repair with native material packed into place by the excavator and reshaped. Should over excavation occur, the Contractor will be required to have a bank repair detail engineered by a Professional Engineer (hired by the Contractor), to ensure long term stability of the bank is maintained. Such repairs shall be subject to approval by the Engineer and will be at no extra cost to the item.

Prior to seeding of the drain, the stripped topsoil shall be placed on the drain banks at 50 mm depth.

Hydraulic Seeding of the newly shaped drain banks shall be completed immediately following drain construction and as specified in Section 7.0.

All excavation work shall be done in such a manner as to not harm any vegetation or trees, not identified in this report or by the Drainage Superintendent for clearing.

The Contractor shall exercise caution around existing tile inlets and shall confirm with the property owners that all tiles have been located and tile ends repaired as specified.

## 6.0 DRAIN INFILLING

Prior to the infilling of the open drain portion to be abandoned within the Highway 3 corridor, the Contractor shall remove all vegetation and organic debris from the existing drain slopes. The native materials used to fill the drain shall be placed in maximum 300 mm loose lifts and compacted with vibratory compaction equipment capable of achieving 95% of the maximum standard proctor density or better.

## 7.0 HYDRAULIC SEEDING OF NEW DRAIN CHANNEL

The newly established drain banks and all existing grassed areas disturbed by construction shall be hydraulic mulch seeded as specified herein. The surface shall be predominantly fine and free from weeds and other unwanted vegetation. All other loose surface litter shall be removed and disposed of.

The Contractor shall apply a fibre reinforced matrix (FRM) hydromulch engineered with pasteurized wood fibers and cross-linked with dispersible synthetic fibers and exclusive soil bonding agents for immediate and effective soil erosion control on newly constructed drain channels where the sideslopes are 2:1 (horizontal : vertical) such as the FlexGuard product by Fibremulch company or approved equal . The hydromulch should be non-toxic and 100% biodegradable with a minimal curing period and up to 12 months longevity. The hydromulch shall be applied at a minimum rate of 3,300 kg of dry product per 10,000 m<sup>2</sup>. It shall be thoroughly mixed with water in a hydraulic seeder and mulcher at a rate of 20 kg of dry product to 225 litres of water. Refer to OPSS.PROV 804 for additional specifications.

Seeding and mulching shall be a one step process in which the seed and hydraulic mulch are applied simultaneously in a water slurry via the hydraulic seeder/mulcher. The materials shall be added to the supply tank while it is being loaded with water. The materials shall be thoroughly mixed into a homogeneous water slurry and shall be distributed uniform, cohesive mat over the prepared surface. The materials shall be measured by mass or by a mass-calibrated volume measurement, acceptable to the Drainage Superintendent.

The hydraulic seeder/mulcher shall be equipped with mechanical agitation equipment capable of mixing the materials into a homogenous state until applied. The discharge pumps and gun nozzles shall be capable of applying the material uniformly. Grass seed shall be MTO roadside seed mixture meeting the requirements as follows:

<i>Creeping Red Fescue</i>	52%
<i>Perennial Ryegrass</i>	35%
<i>Kentucky Bluegrass</i>	10%
<i>White Clover</i>	3%

Bags shall bear the label of the supplier indicating the content by species, grade and mass. Seed shall be applied at a rate of 170 kg per 10,000 m<sup>2</sup>. **The hydraulic seeding shall be deemed "Completed by the Contractor" when the seed has established in all areas to the satisfaction of the Engineer. Re-seeding and/or other methods required to establish the grass will be given consideration to achieve the end result and the costs shall be incidental to the works.**

## 8.0 STONE EROSION PROTECTION

Erosion protection, within the drain channel, shall be constructed of quarry stone rip-rap (R50) as shown on the drawings and as specified herein. The size of the rip-rap shall mostly vary between 150 mm and 250 mm. The rip-rap shall be sloped 1 vertical to 1.5 horizontal, with filter fabric underlay spanning across the entire width of the drain.

The minimum thickness requirement of the erosion stone layer is 350 mm with no portion of the filter fabric to be exposed.

## 9.0 GABION MATS (STA. 0+615 TO STA. 0+705)

Gabion mats shall be manufactured from PVC or HDPE based polymer coated galvanized steel wire mesh. Gabion mats shall be manufactured so that the sides, ends, lid, base, and diaphragms can be readily assembled into rectangular units.

Where the length of the gabion mat exceeds its horizontal width, the gabion mat shall be divided into equal cells by diaphragms. Cell length shall not exceed its horizontal width. Diaphragms shall be made of wire mesh and shall be secured in the proper position on the base section. Gabion

mats shall be manufactured with all components connected at the production facility with the exception of the gabion mat lid. Gabion mats manufactured from PVC coated galvanized wire mesh shall be assembled using stainless steel ring fasteners. Fasteners shall be installed at a maximum spacing of 150 mm with at least one fastener per gabion mesh opening.

Gabion mats shall be according to OPSS 1430 Tables 2, 4 & 5. Gabion stones shall be according to OPSS 1004 and as specified in the Contract Documents. Excavation for gabion mats shall be according to OPSS 206.

Gabions shall be installed at the locations and to the line, grade, and dimensions specified in the Contract Documents. As per Table 2, Mat Size 14 having a length of 30 m, 2 m width and 0.3 m depth is recommended for this application for two mats fastened together to form a 4 m wide gabion mat. Gabions shall be assembled according to the manufacturer's instructions and as specified in the Contract Documents. Gabions shall be assembled so that wire ends do not project outside the units on any exposed surface.

Gabion stones shall be placed in a manner as not to damage the wire mesh or the PVC coating on the wire or cause deformation of the gabion. Gabion stones shall be placed to minimize the voids between the stones. When specified in the Contract Documents, the front face of exposed wall surfaces shall be hand placed gabion stone to ensure a uniform appearance.

Prior to securing the lids on the gabion mat, the gabion mat shall be slightly overfilled by 25 to 50 mm of gabion stone in order to allow for settlement of the stone within the units.

Internal connecting wires shall be installed according to the manufacturer's recommendations. When gabions are used as a channeling revetment, internal connecting wires are not necessary.

When the gabion has been filled, the gabion lid shall be bent over until all lid edges coincide with the front and side edges of the gabion and shall be secured to the front and sides by wire according to manufacturer's instructions and as specified in the Contract Documents.

Geotextile shall be placed uniformly, free of folds, tears or punctures and as specified in the Contract Documents. The geotextile shall be joined so that the material overlaps a minimum of 500 mm and shall be pinned together. Alternatively, the geotextile shall be joined to conform to the seam requirements of OPSS 1860. Geotextile shall be fixed to prevent movement during installation.

## **10.0 TILE DRAIN CONSTRUCTION**

### **10.1 Setting Out**

The Engineer shall provide the Contractor in writing with benchmarks and points of reference. From these benchmarks and points of reference, the contractor will do his own setting out. The setting out by the Contractor shall include but shall not be limited to the preparation of grade sheets, the installation of centerline stakes, grade stakes, offsets, and sight rails. If, during the setting out, the contractor finds an error in the benchmarks or points of reference provided by the Engineer or is uncertain as to the interpretation of the information provided or the work intended, he shall notify the Engineer immediately for additional verification or clarification before proceeding with construction.

The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the work. The Contractor shall be responsible to ensure that the alignment selected results in a minimum depth of cover of 600 mm over the top of the drainage pipe to be installed. If, at any time during the progress of the works, an error shall appear or arise in the position, levels, dimensions or alignment of any part of the works, the Contractor shall, at his own expense, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer.

## 10.2 Profile

The drainage pipe shall be laid so that its invert shall be at the gradeline shown on the profile, which gradeline is governed by the benchmarks. The profile shows, for the convenience of the Contractors and others, the approximate depth of cut from the surface of the ground at 50 metre intervals, to the final invert of the drainage pipe in metres and decimals of a metre. Benchmarks, which have been established along the course of the drain, shall govern the final elevation of the drain. The locations and elevations of the benchmarks are shown on the drawings.

A variation in grade may be tolerated where the actual capacity of the drain exceeds the required capacity. The as-constructed invert of the drainage pipe shall not deviate from the specified gradeline more than 10% of the internal diameter of the drainage pipe. These deviations are allowable, provided they are gradual over a distance of not less than 10 m. No reverse grade shall be allowed.

## 10.3 Location of New Tile Drain

The new tile drain shall be installed as shown on the drawings attached hereto.

## 10.4 Drainage Pipe Materials

### 10.4.1 HDPE Pipe

Tile Drain (Sta. 0+000A to Sta. 0+172A) *New 750 mm (30") diameter solid (non-perforated) corrugated High Density Polyethylene (HDPE) smooth wall interior (Armtex Boss 2000 or approved equivalent) unless otherwise specified conforming to the following specifications: ASTM @3350, CSA B182.8-02 and OPSS 1840. The pipe is to provide a minimum pipe stiffness of 320 kPa.*

*Joined using (water tight) Ultra stab 75 gasketed "bell and spigot" coupler joining system.*

Tile Drain (Sta. 0+172A to Sta. 0+182A) *New 250 mm (10") diameter solid (non-perforated) corrugated High Density Polyethylene (HDPE) smooth wall interior (Armtex Boss 2000 or approved equivalent) unless otherwise specified conforming to the following specifications: ASTM @3350, CSA B182.8-02 and OPSS 1840. The pipe is to provide a minimum pipe stiffness of 320 kPa.*

*Joined using (water tight) Ultra stab 75 gasketed "bell and spigot" coupler joining system*

*Pipe Bedding 150 mm layer clear stone below pipe and Granular 'A' (crushed limestone) conforming to OPSS Division 10 up to pipe spring line compacted to minimum 98% S.P.D.*

*Backfill Above Pipe Spring line (beyond roadways) Dry native material free of topsoil, organic matter, broken concrete, steel, wood and deleterious substance compacted to minimum 95% S.P.D.*

*Backfill Above Pipe Spring line (within roadways) Granular 'A' (crushed limestone) conforming to OPSS Division 10 up to pipe spring line compacted to minimum 98% S.P.D..*

<i>Filter Fabric</i>	<i>“Non-Woven” geotextile filter fabric with a minimum strength equal to or greater than Terrafix 270R, Amoco 4546, Mirafi 140NC or approved equivalent.</i>
<i>Erosion Stone</i>	<i>All stone to be used for erosion protection shall be 125 – 250 mm clear quarried rock or OPSS 1001, minimum 300 mm thickness.</i>

### **10.5 New Ditch Inlet Catch Basins at Station 0+144A & 0+172A (DICB)**

The Contractor shall arrange for the supply and installation of concrete ditch inlet catch basins at the locations and elevations as shown on the drawings.

The Contractor shall install all precast structures plumb and true to line and grade. Precast bases shall be set to the specified grade, shall be level, and shall have uniform overall contact with the underlying soil.

All ditch inlet catch basins installed shall meet the dimensions and locations outlined in the drawings. Precast ditch inlet concrete catch basins shall conform to the requirements of Ontario Provincial Standard Specification (OPSS) 1351 and OSPD 705.04 (Type B). The floor elevation shall be at least 600 mm below the invert of the outlet pipe in the wall of the catch basin.

Pipe placed in the walls for inlet and outlet connections shall extend through the wall a sufficient distance to allow for connections. The pipes shall be trimmed flush with the inside wall and shall be securely sealed into place using concrete grout.

The ditch inlet catch basins shall be supplied with a galvanized steel honeycomb grating as per OPSD 403.01.

### **10.6 New Catch Basin at Station 0+182A (CB)**

The Contractor shall arrange for the supply and installation of concrete catch basins at the locations and elevations as shown on the drawings.

The Contractor shall install all precast structures plumb and true to line and grade. Precast bases shall be set to the specified grade, shall be level, and shall have uniform overall contact with the underlying soil.

All catch basins installed shall meet the dimensions and locations outlined in the drawings. Precast concrete catch basins shall conform to the requirements of Ontario Provincial Standard Specification (OPSS) 1351 and OSPD 705.01. The floor elevation shall be at least 600 mm below the invert of the outlet pipe in the wall of the catch basin.

Pipe placed in the walls for inlet and outlet connections shall extend through the wall a sufficient distance to allow for connections. The pipes shall be trimmed flush with the inside wall and shall be securely sealed into place using concrete grout. The catch basin shall be supplied cast iron square frame & circular closed cover (Type A) as per OPSD 401.010.

## **11.0 CULVERT CONSTRUCTION**

### **11.1 Location**

The new culverts denoted as Culvert No. 1 to 4 herein shall be located and installed as shown on the drawings attached hereto.

### **11.2 Materials**

Materials shall be as follows:

<i>Culvert No. 2</i>	<i>New 18.0 m long, 1200 mm diameter aluminized Type II corrugated steel pipe (CSP) culvert, 125x25 corrugations and 2.8 mm thickness with annular profile ends complete with wide style aluminized steel bolted couplers, 2.0 mm thickness.</i>
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<i>Culvert No. 3</i>	<i>New 52.0 m long, 3648 mm x 1910 mm reinforced precast concrete box culvert per OPSS 1821 or CHBDC CAN/CSA S6-06 standards where applicable.</i>
<i>Culvert No. 4</i>	<i>New 32.0 m long, 1200 mm diameter steel rib reinforced polyethylene pipe, smooth interior wall profile DuroMaxx, as manufactured by Armtec Inc. complete with gasketed bell and spigot joints.</i>
<i>Bedding below culvert pipes</i>	<i>Granular 'A' conforming to OPSS Division 10 or 19 mm clearstone, minimum 150mm thickness.</i>
<i>Bedding below box culverts</i>	<i>Concrete mud matt minimum 100 mm thickness and Granular 'A' conforming to OPSS Division 10, minimum 300 mm thickness</i>
<i>Culvert Backfill</i>	<i>Granular 'A' conforming to OPSS Division 10.</i>
<i>Erosion Stone</i>	<i>All stone to be used for erosion protection shall be R-50 clear quarried rock per OPSS 1004, minimum 350 mm thickness.</i>
<i>Filter Fabric</i>	<i>“Non-Woven” geotextile filter fabric with a minimum strength equal or greater than Terrafix 270R, Amoco 4546, Mirafi 140NC, or approved equivalent.</i>

### **11.3 Culvert Installation**

Suitable dykes shall be constructed in the drain so that the installation of the culvert can be accomplished in the dry. The drain bottom shall be cleaned, prepared, shaped and compacted to suit the new culvert configuration, as shown on the drawings. Granular materials shall be compacted to 100% of their maximum dry density; imported clean native materials shall be supplied, placed and compacted to 95% of their maximum dry density.

### **11.4 Vertical Cast-in-Place End walls (Culvert No. 3)**

The wingwalls shall be designed by the contractor and shall retain a Professional Engineer for which a Professional engineer’s stamped shop drawings shall be submitted to the MTO for review and approval prior to construction.

### **11.5 Sloping stone End walls (Culvert No. 2 and Culvert No. 4)**

Sloping stone end walls shall be constructed of quarry stone riprap (R-50), as shown on the drawings and as specified herein. The riprap shall be sloped 1 vertical to 1.5 horizontal, with filter fabric underlay and spanning across the entire drain. The minimum thickness requirement of the erosion stone layer is 350 mm with no portion of the filter fabric to be exposed.

## **GENERAL SPECIFICATIONS**

### **1.0 AGREEMENT AND GENERAL CONDITIONS**

The part of the Specifications headed "Special Provisions" which is attached hereto forms part of this Specification and is to be read with it. Where there is any difference between the requirements of this General Specification and those of the Special Provisions, the Special Provisions shall govern.

Where the word "Drainage Superintendent" is used in this specification, it shall mean the person or persons appointed by the Council of the Municipality having jurisdiction to superintend the work.

Tenders will be received and contracts awarded only in the form of a lump sum contract for the completion of the whole work or of specified sections thereof. The Tenderer agrees to enter into a formal contract with the Municipality upon acceptance of the tender. The General Conditions of the contract and Form of Agreement shall be those of the Stipulated Price Contract CCDC2-Engineers, 1994 or the most recent revision of this document.

### **2.0 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS**

Each tenderer must visit the site and review the plans and specifications before submitting his/her tender and must satisfy himself/herself as to the extent of the work and local conditions to be met during the construction. Claims made at any time after submission of his/her tender that there was any misunderstanding of the terms and conditions of the contract relating to site conditions, will not be allowed. The Contractor will be at liberty, before bidding to examine any data in the possession of the Municipality or of the Engineer.

The quantities shown or indicated on the drawings or in the report are estimates only and are for the sole purpose of indicating to the tenderers the general magnitude of the work. The tenderer is responsible for checking the quantities for accuracy prior to submitting his/her tender.

### **3.0 MAINTENANCE PERIOD**

The successful Tenderer shall guarantee the work for a period of one (1) year from the date of acceptance thereof from deficiencies that, in the opinion of the Engineer, were caused by faulty workmanship or materials. The successful Tenderer shall, at his/her own expense, make good and repair deficiencies and every part thereof, all to the satisfaction of the Engineer. Should the successful Tenderer for any cause, fail to do so, then the Municipality may do so and employ such other person or persons as the Engineer may deem proper to make such repairs or do such work, and the whole costs, charges and expense so incurred may be deducted from any amount due to the Tenderer or may be collected otherwise by the Municipality from the Tenderer.

### **4.0 GENERAL CO-ORDINATION**

The Contractor shall be responsible for the coordination between the working forces of other organizations and utility companies in connection with this work. The Contractor shall have no cause of action against the Municipality or the Engineer for delays based on the allegation that the site of the work was not made available to him by the Municipality or the Engineer by reason of the acts, omissions, misfeasance or non-feasance of other organizations or utility companies engaged in other work.

### **5.0 RESPONSIBILITY FOR DAMAGES TO UTILITIES**

The Contractor shall note that overhead and underground utilities such as hydro, gas, telephone and water are not necessarily shown on the drawings. It is the Contractor's responsibility to contact utility companies for information regarding utilities, to exercise the necessary care in construction operations and to take other precautions to safeguard the utilities from damage.

All work on or adjacent to any utility, pipeline, railway, etc., is to be carried out in accordance with the requirements of the utility, pipeline, railway, or other, as the case may be, and its specifications for such work are to be followed as if they were part of this specification. The Contractor will be liable for any damage to utilities.

## **6.0 CONTRACTOR'S LIABILITY**

The Contractor, his/her agents and all workmen or persons under his/her control including sub-contractors, shall use due care that no person or property is injured and that no rights are infringed in the prosecution of the work. The Contractor shall be solely responsible for all damages, by whomsoever claimable, in respect to any injury to persons or property of whatever description and in respect of any infringement of any right, privilege or easement whatever, occasioned in the carrying on of the work, or by any neglect on the Contractor's part.

The Contractor, shall indemnify and hold harmless the Municipality and the Engineer, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the contract.

## **7.0 PROPERTY BARS AND SURVEY MONUMENTS**

The Contractor shall be responsible for marking and protecting all property bars and survey monuments during construction. All missing, disturbed or damaged property bars and survey monuments shall be replaced at the Contractor's expense, by an Ontario Land Surveyor.

## **8.0 MAINTENANCE OF FLOW**

The Contractor shall, at his/her own cost and expense, permanently provide for and maintain the flow of all drains, ditches and water courses that may be encountered during the progress of the work.

## **9.0 ONTARIO PROVINCIAL STANDARDS**

Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) shall apply and govern at all times unless otherwise amended or extended in these Specifications or on the Drawing. Access to the electronic version of the Ontario Provincial Standards is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>. Under the title Technical Manuals is a link to the Ontario Provincial Standards. Users require Adobe Acrobat to view all pdf files.

## **10.0 APPROVALS, PERMITS AND NOTICES**

The construction of the works and all operations connected therewith are subject to the approval, inspection, by-laws and regulations of all Municipal, Provincial, Federal and other authorities having jurisdiction in respect to any matters embraced in this Contract. The Contractor shall obtain all approvals and permits and notify the affected authorities when carrying out work in the vicinity of any public utility, power, underground cables, railways, etc.

## **11.0 TRAFFIC CONTROL**

The Contractor will be required to control vehicular and pedestrian traffic along roads at all times and shall, at his/her own expense, provide for placing and maintaining such barricades, signs, flags, lights and flag persons as may be required to ensure public safety. The Contractor will be solely responsible for controlling traffic and shall appoint a representative to maintain the signs and warning lights at night, on weekends and holidays and at all other times that work is not in progress. All traffic control during construction shall be strictly in accordance with the **Occupational Health and Safety Act** and the current version of the **Ontario Traffic Manuals**. Access to the electronic version of the **Ontario Traffic Manual** is available online through the MTO website, free of charge to all users. To access the electronic standards on the Web go to <http://www.mto.gov.on.ca/english/transrd/>, click on "Library Catalogue," under the "Title," enter "Ontario Traffic Manual" as the search. Open the applicable "Manual(s)" by

choosing the "Access Key," once open look for the "Attachment," click the pdf file. Users require Adobe Acrobat to view all pdf files.

**Contractors are reminded of the requirements of the Occupational Health and Safety Act pertaining to Traffic Protection Plans for workers and Traffic Control Plan for Public Safety.**

## **12.0 SITE CLEANUP AND RESTORATION**

As part of the work and upon completion, the Contractor shall remove and dispose of, off-site any loose timber, logs, stumps, large stones, rubber tires, cinder blocks or other debris from the drain bottom and from the side slopes. Where the construction works cross a lawn, the Contractor shall take extreme care to avoid damaging the lawn, shrubs and trees encountered. Upon completion of the work, the Contractor shall completely restore the area by the placement and fine grading of topsoil and seeding or sodding the area as specified by the Engineer or Drainage Superintendent.

## **13.0 UTILITY RELOCATION WORKS**

In accordance with Section 26 of the Drainage Act, if utilities are encountered during the installation of the drainage works that conflict with the placement of the new culvert, the operating utility company shall relocate the utility at their own costs. The Contractor however will be responsible to co-ordinate these required relocations (if any) and their co-ordination work shall be considered incidental to the drainage works.

## **14.0 FINAL INSPECTION**

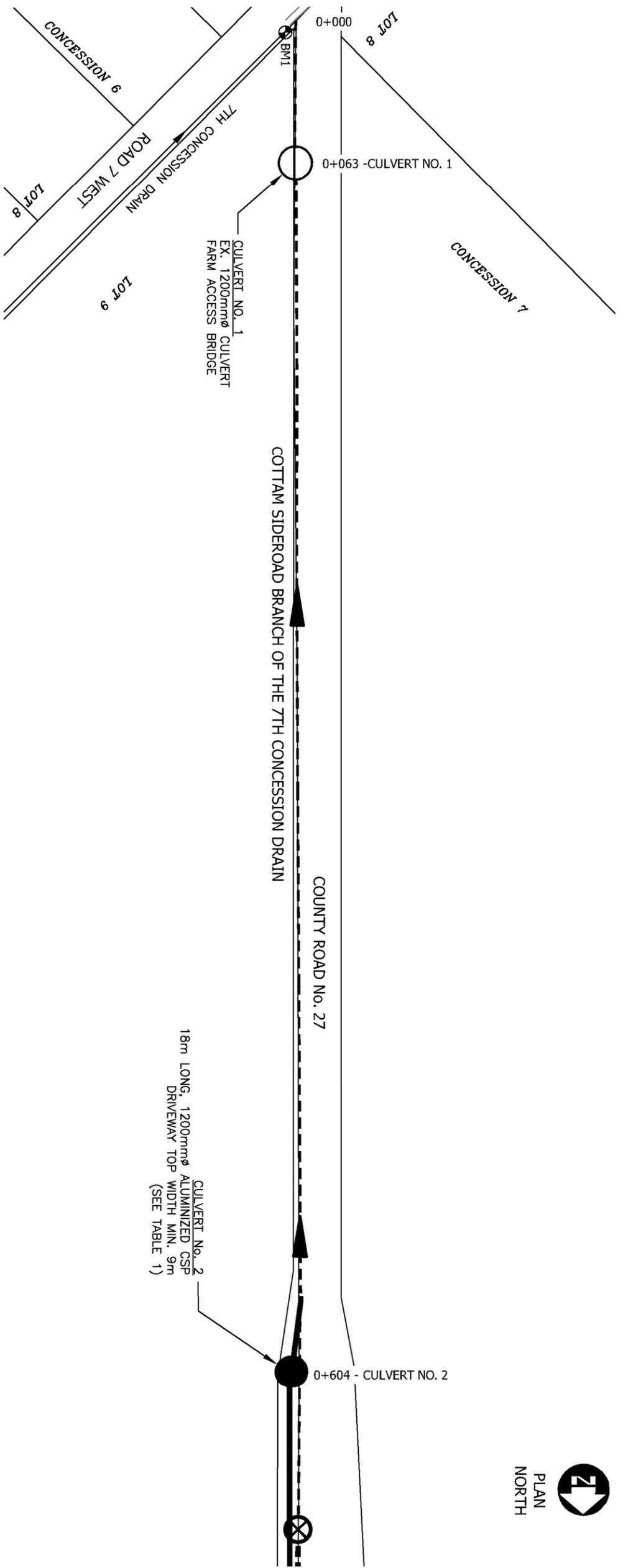
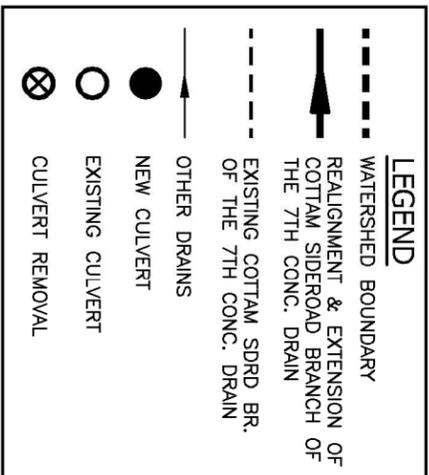
All work shall be carried out to the satisfaction of the Drainage Superintendent for the Municipality, in compliance with the specifications, drawings and the Drainage Act. Upon completion of the project, the work will be inspected by the Engineer and the Drainage Superintendent. Any deficiencies noted during the final inspection shall be immediately rectified by the Contractor.

Final inspection will be made by the Engineer within 20 days after the Drainage Superintendent has received notice in writing from the Contractor that the work is completed, or as soon thereafter as weather conditions permit.

## **15.0 FISHERIES CONCERNS**

Standard practices to be followed to minimize disruption to fish habitat include embedment of the culvert a minimum 10% below grade, constructing the work 'in the dry' and cutting only trees necessary to do the work (no clear-cutting). No in-water work is to occur during the timing window unless otherwise approved by the appropriate authorities.





PLAN 1  
SCALE=1:2,000

TABLE 1 - CULVERT DESIGN INFORMATION

DESCRIPTION	CULVERT No. 2	CULVERT No. 3	CULVERT No. 4
CULVERT LOCATION	STA. 0+804 (E)	STA. 0+773 (E)	STA. 0+858 (E. END)
DRAIN BOTTOM DESIGN ELEVATION (m)	192.76(S) 192.77(N)	192.85(S) 192.88(N)	192.90(W) 192.90(E)
CULVERT INVERT ELEVATION (m) AT CULVERT ENDS	192.64(S) 192.65(N)	192.45(S) 192.48(N)	192.90(W) 192.90(E)
CULVERT SIZE	1200mm $\phi$	3648mm x 1910mm	1200mm $\phi$
CULVERT LENGTH (m)	18.0	52.0	32.0
CULVERT GRADE (%)	0.06	0.06	0.00
CULVERT TYPE	CSP ALUM. TYPE II	CONCRETE BOX	H.D.P.E
CULVERT THICKNESS (mm)	2.8	N/A	N/A
CULVERT CORRUGATIONS (mm)	125x25	N/A	N/A
TOP OF ROADWAY ELEV. (m)	194.70	195.30(EBL)	196.10
CULVERT ENDWALL TYPE	SLOPING STONE	CONCRETE	N/A

SITE BENCHMARKS	BM
BM1-TOP OF EX. CONCRETE CULVERT NORTH END COUNTY ROAD NO. 27 OVER 7TH CONCESSION DRAIN.	ELEVATION=194.57m
BM2-TOP OF EX. KING'S HIGHWAY NO. 3 CONCRETE CULVERT SOUTH END.	ELEVATION=194.20m

**NOTE: CONTRACTOR TO VERIFY BENCHMARKS PRIOR TO CONSTRUCTION.**

Conditions of Use

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
Do not scale dimensions from drawing.  
Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	CLIENT REVIEW	ISSUED FOR	DATE	BY	DESIGN		REVIEWED BY	
					TR0	MDH	TR0	MDH
1	CLIENT REVIEW		JUNE 4/24	TR0				

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PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

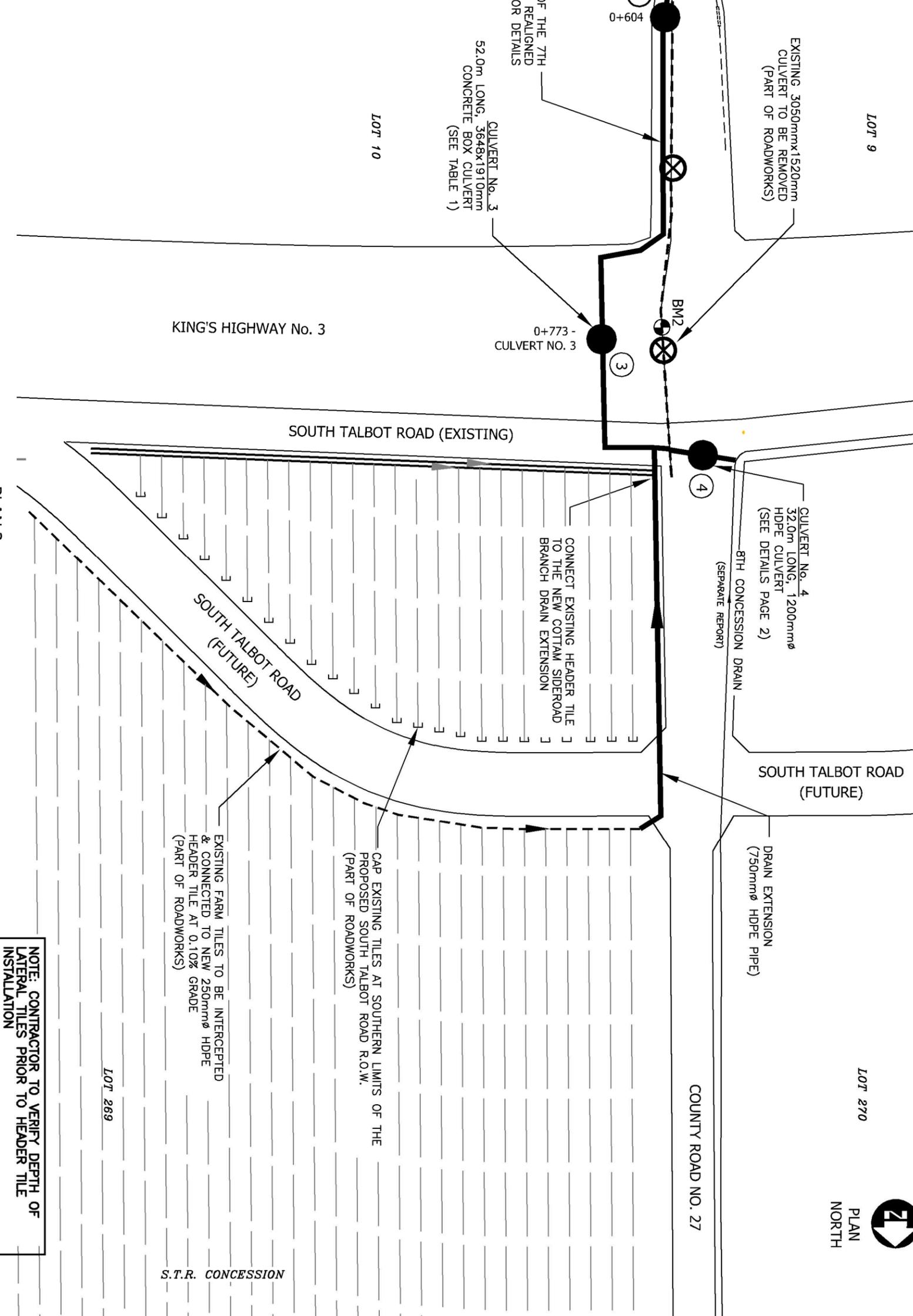
SCHEDULE G:  
Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
Town of Kingsville

SHEET TITLE: PLAN 1  
PAGE NO. 2 OF 10



**LEGEND**

- REALIGNMENT & EXTENSION OF COTTAM SDRD BR. OF THE 7TH CONC. DRAIN
- EX. COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN
- OTHER DRAINS
- NEW CULVERT
- EXISTING CULVERT
- CULVERT REMOVAL



PLAN 2  
SCALE=1:2,000

**NOTE: CONTRACTOR TO VERIFY DEPTH OF LATERAL TILES PRIOR TO HEADER TILE INSTALLATION**

**Conditions of Use**

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1	CLIENT REVIEW	AS SHOWN	JUNE 4/24	TRO	TRO	MDH	AS SHOWN

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PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

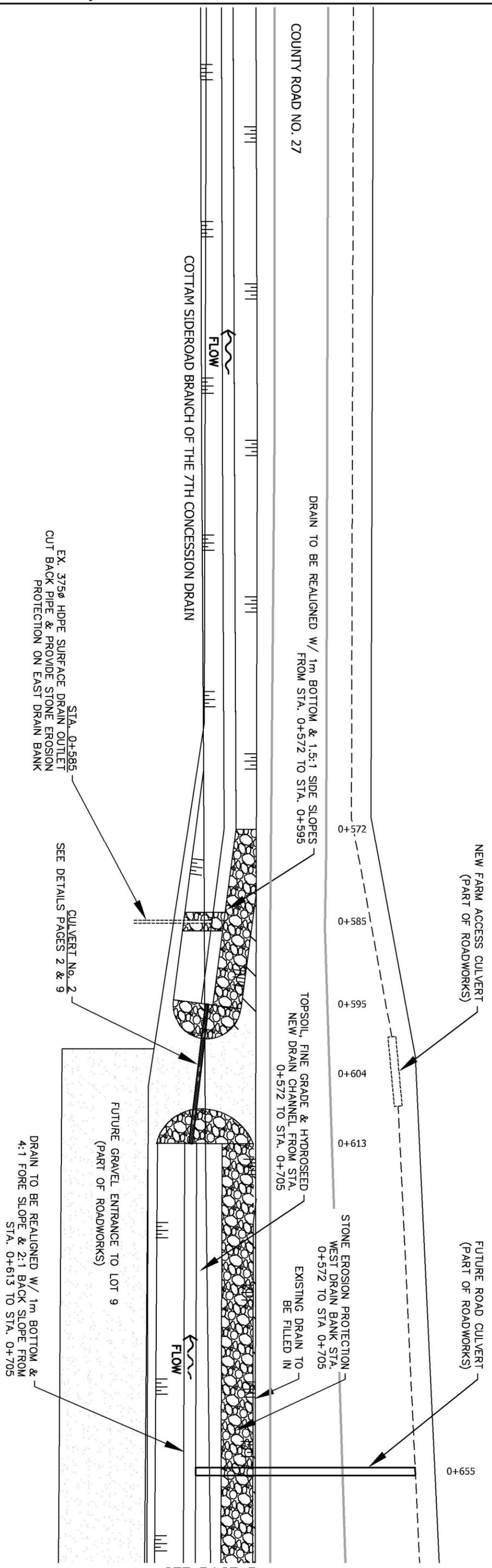
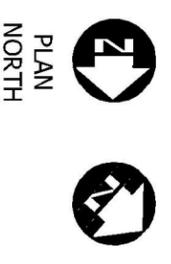
SHEET TITLE: COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
PAGE NO. 3 OF 10

Town of Kingsville





LOT 9  
CONCESSION 7



**DRAIN ENLARGEMENT PLAN 1**  
SCALE=1:500

LOT 9  
CONCESSION 7

**Conditions of Use**

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Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

No.	1	CLIENT REVIEW	ISSUED FOR	DATE	JUNE 4/24	BY	TRO
DESIGN	TRO	REVIEWED BY	MDH	DATE	JUNE 10, 2024	SCALE	AS SHOWN
DRAWN	MTB/WLB	CHECKED BY	TRO				

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PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

SHEET TITLE: DRAIN ENLARGEMENT PLAN 1  
PAGE NO. 4 OF 10

SCHEDULE G: Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
Town of Kingsville

**Conditions of Use**  
 Verify elevations and/or dimensions on drawing prior to use.  
 Report any discrepancies to Dillon Consulting Limited.  
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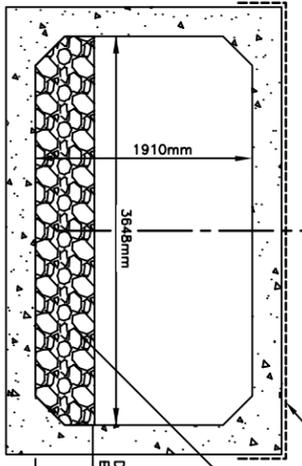
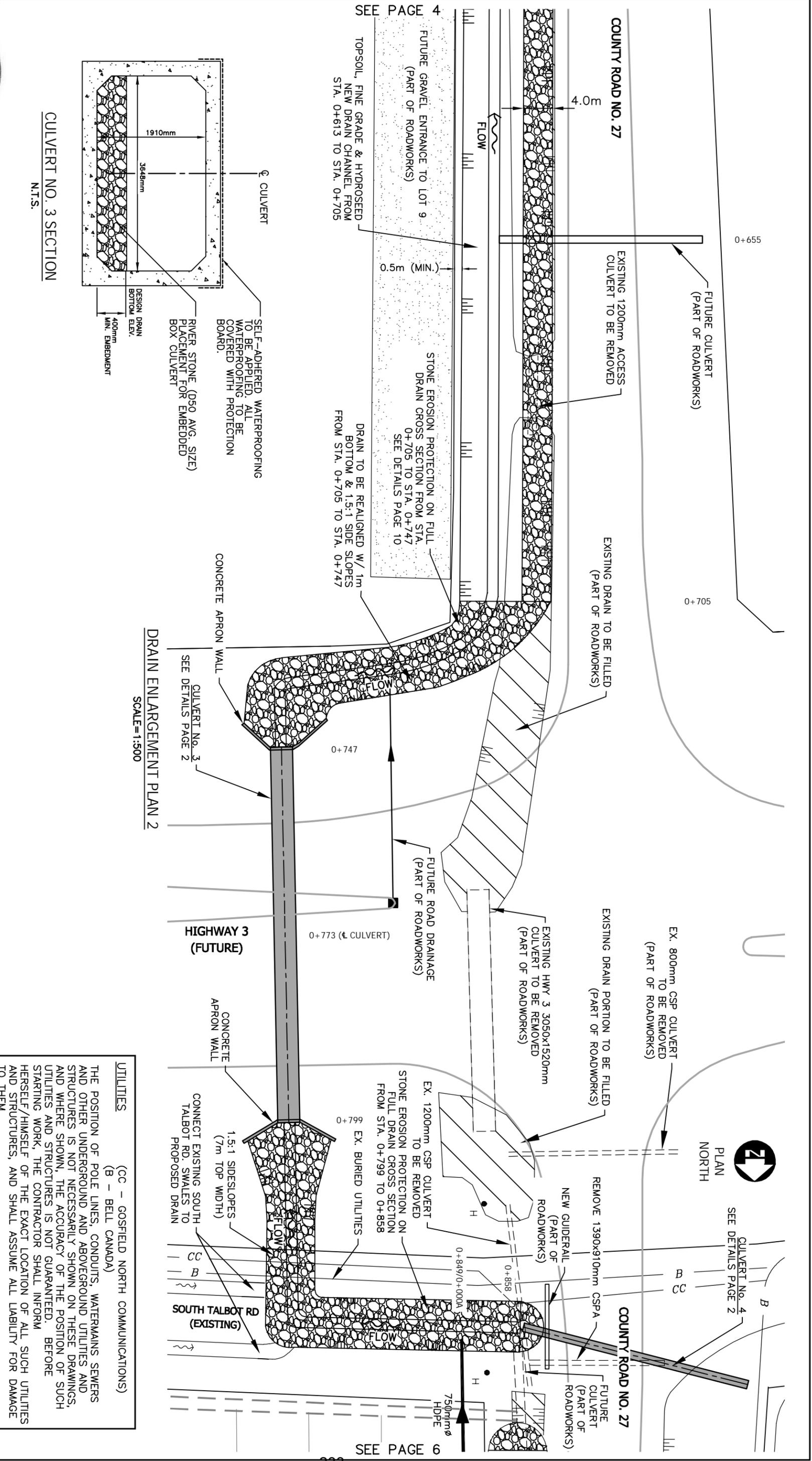
No.	1	CLIENT REVIEW	ISSUED FOR
DESIGN	TRO	REVIEWED BY	MDH
DRAWN	MTB/WLB	CHECKED BY	TRO
DATE	June 10, 2024	SCALE	AS SHOWN
DATE	JUNE 4/24	BY	TRO

PROJECT NO. 21-3142  
 DRAWING SCALES BASED ON A 11" X 17" SHEET

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SHEET TITLE: DRAIN ENLARGEMENT PLAN 2  
 PAGE NO. 5 OF 10

Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
 Town of Kingsville



**DRAIN ENLARGEMENT PLAN 2**  
 SCALE=1:500

**UTILITIES**  
 (CC - GOSFIELD NORTH COMMUNICATIONS)  
 (B - BELL CANADA)

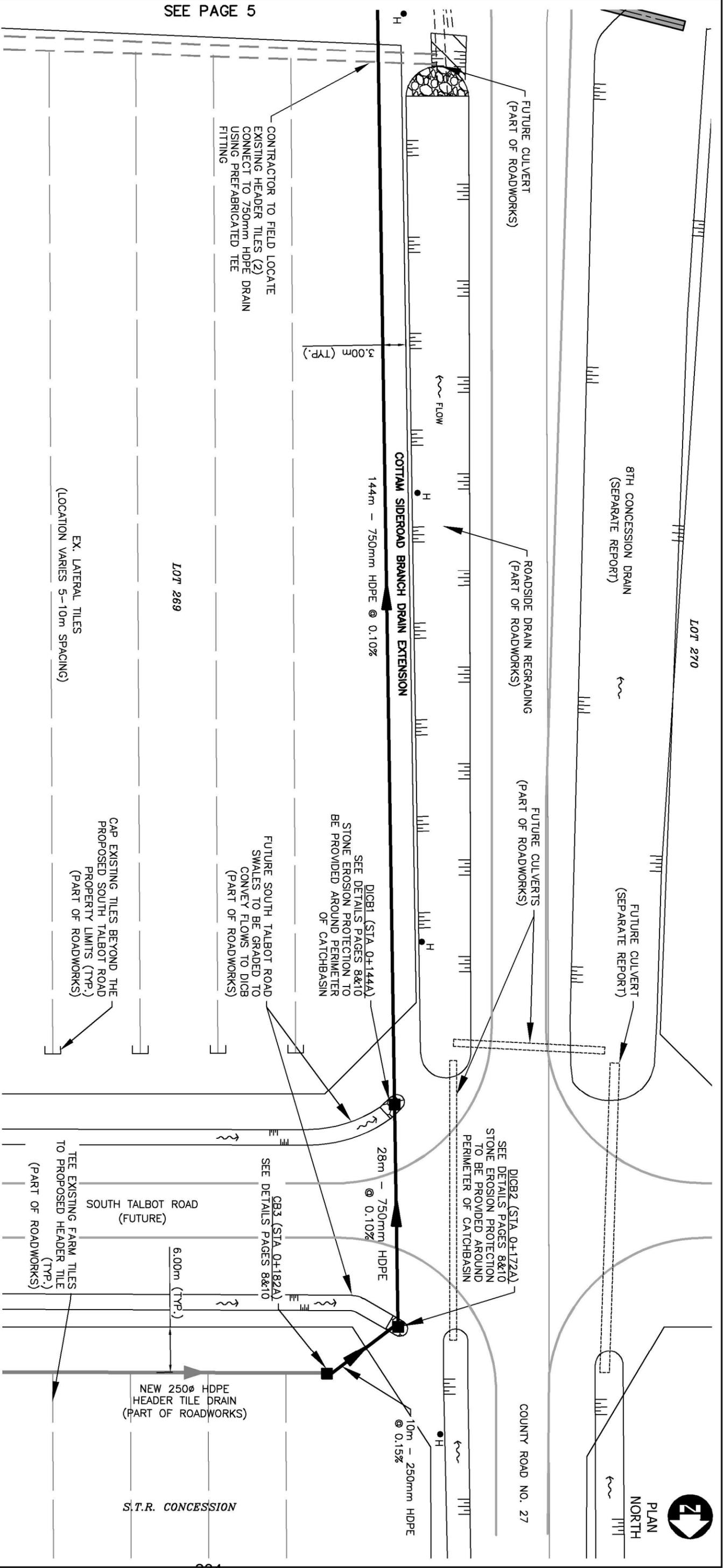
THE POSITION OF POLE LINES, CONDUITS, WATERMANS SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THESE DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HERSELF/HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

SCHEDULE 'C'



**LEGEND**

- PROPOSED PIPED DRAIN
- PROPOSED DICB/CB
- PROPOSED HEADER TILE



**DETAIL**  
SCALE=1:500

**Conditions of Use**

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No.	CLIENT REVIEW	ISSUED FOR	DATE	BY	DESIGN	REVIEWED BY
1	CLIENT REVIEW	ISSUED FOR	JUNE 4/24	TRO	TRO	MDH
					MTB/WLB	CHECKED BY TRO
			JUNE 10, 2024		SCALE AS SHOWN	

**DILLON CONSULTING**

PROJECT NO. 21-3142  
DRAWING SCALES BASED ON A 11" X 17" SHEET

**SCHEDULE G**

Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
Town of Kingsville

SHEET TITLE: DRAIN EXTENSION DETAILS  
PAGE NO. 6 OF 10



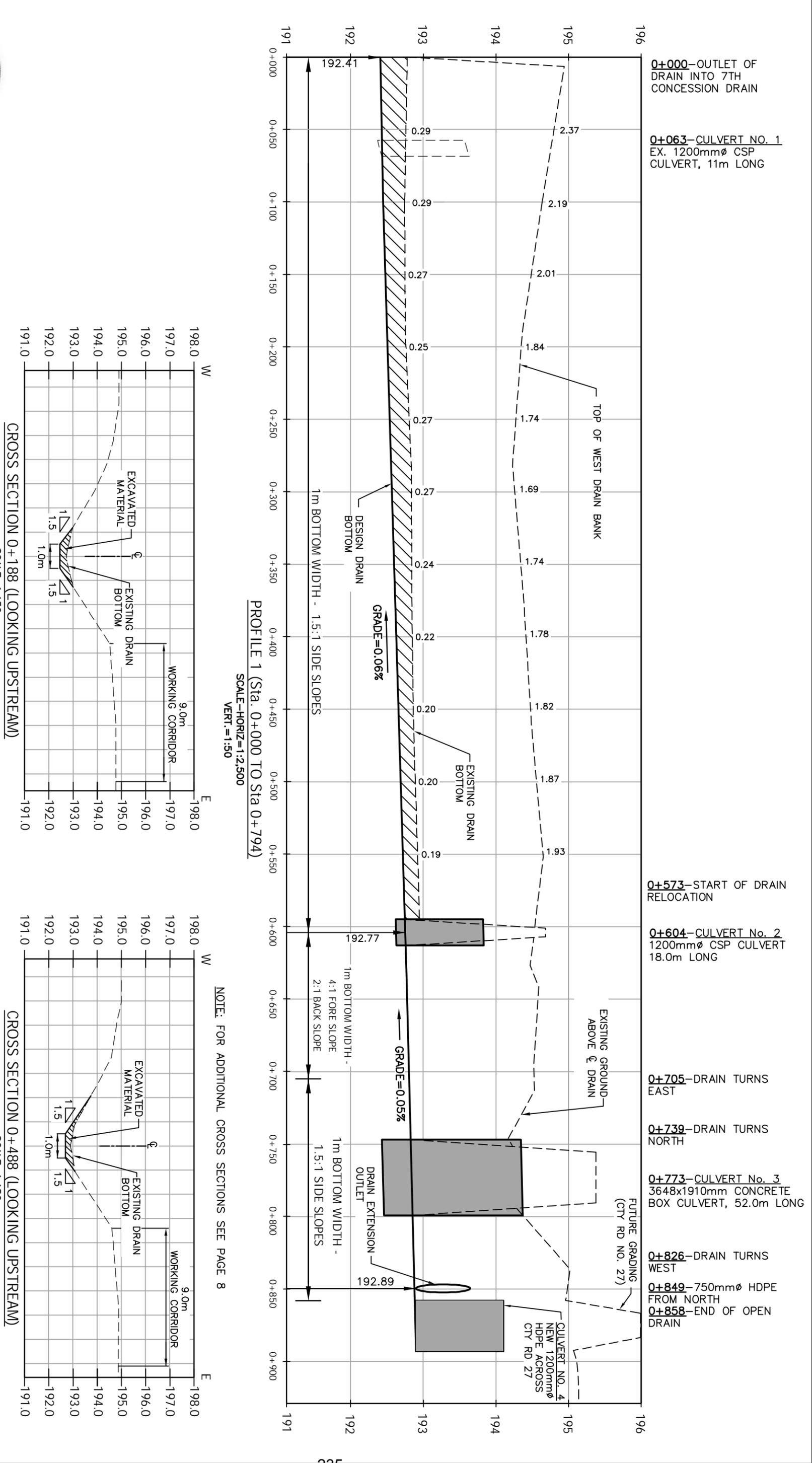
**Conditions of Use**  
 Verify elevations and/or dimensions on drawing prior to use.  
 Report any discrepancies to Dillon Consulting Limited.  
 Do not scale dimensions from drawing.  
 Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.

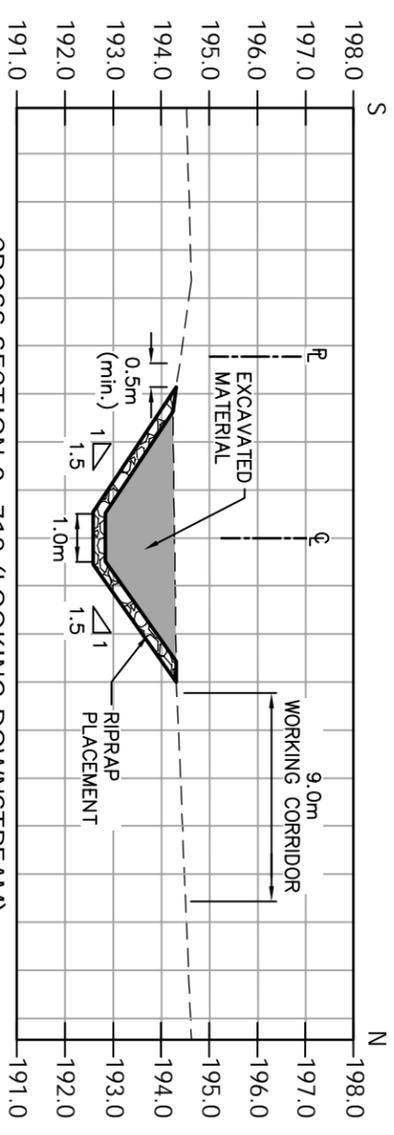
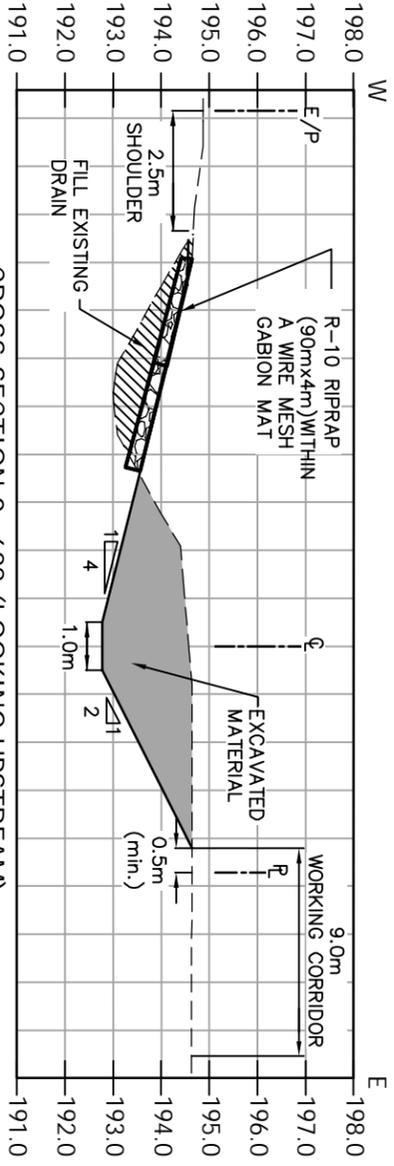
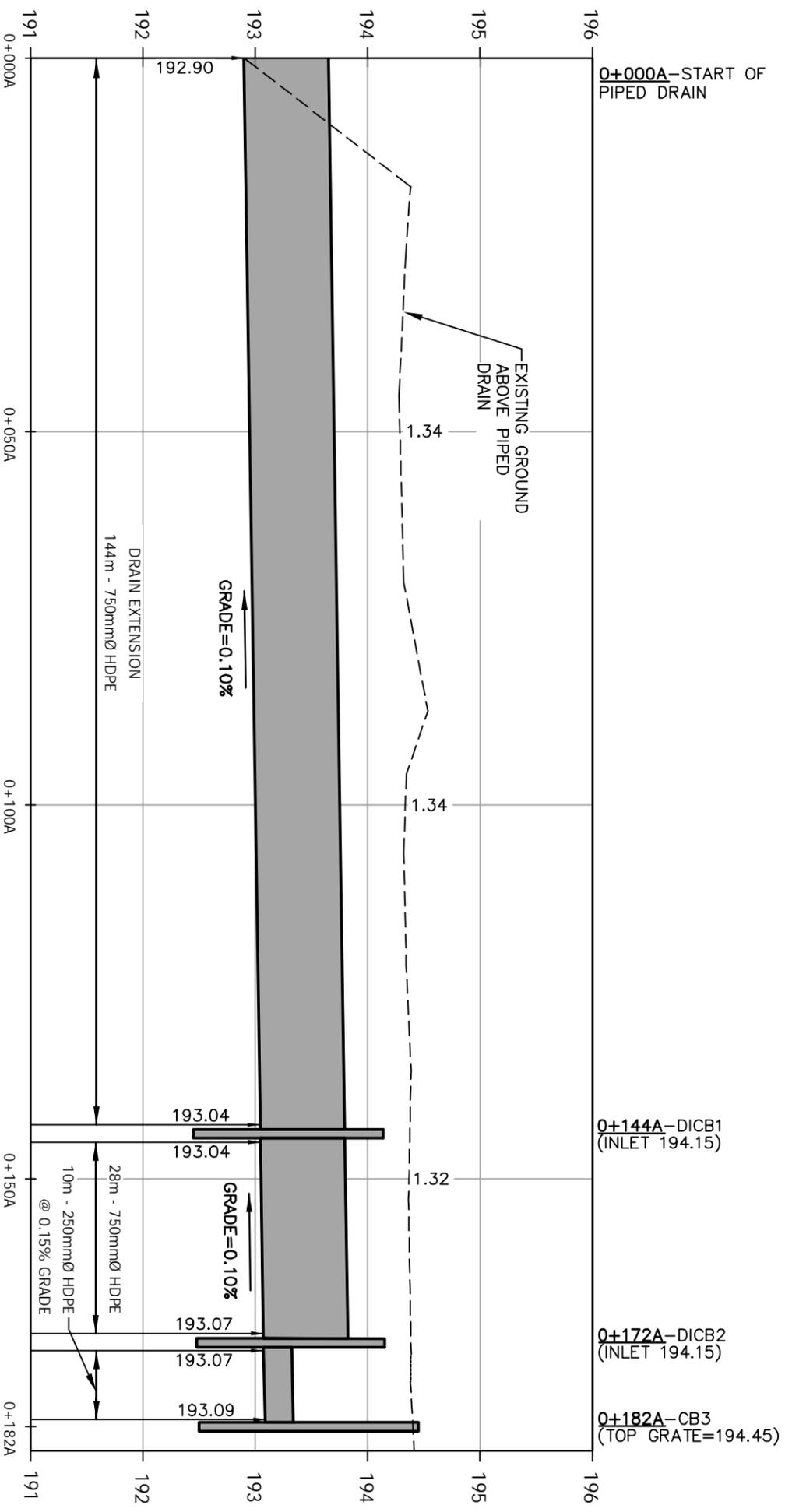
No.	1	CLIENT REVIEW	ISSUED FOR
DATE	JUNE 4/24	TRO	BY

DESIGN	TRO	REVIEWED BY	MDH
DRAWN	MTR/WLB	CHECKED BY	TRO
DATE	June 10, 2024	SCALE	AS SHOWN

PROJECT NO.	21-3142
DRAWING SCALE BASED ON A111 X17 SHEET	

**SCHEDULE G:**  
 Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
 Town of Kingsville  
 SHEET TITLE: PROFILE 1 & CROSS SECTIONS  
 PAGE NO.: 7 OF 10





CROSS SECTION 0+628 (LOOKING UPSTREAM)  
SCALE-1:150

CROSS SECTION 0+718 (LOOKING DOWNSTREAM)  
SCALE-1:150

**Conditions of Use**

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
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No.	CLIENT REVIEW	ISSUED FOR	DATE	BY
1			JUNE 4/24	TRO

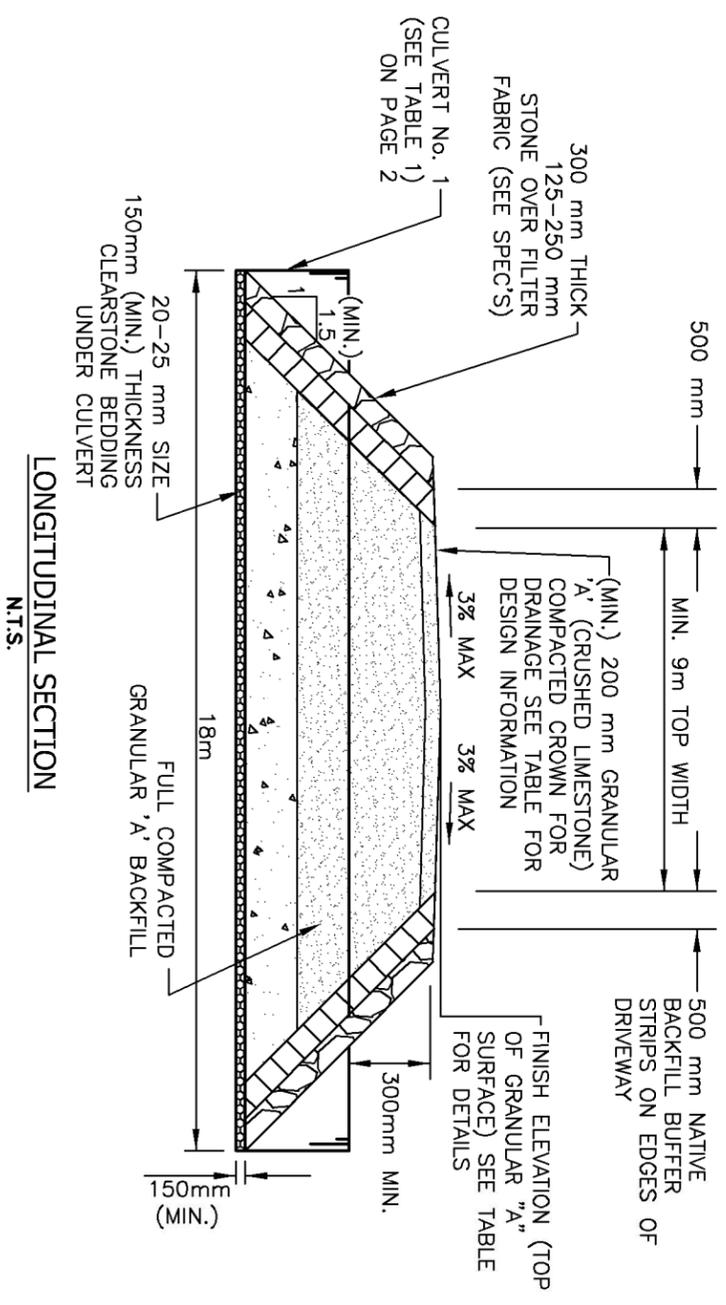
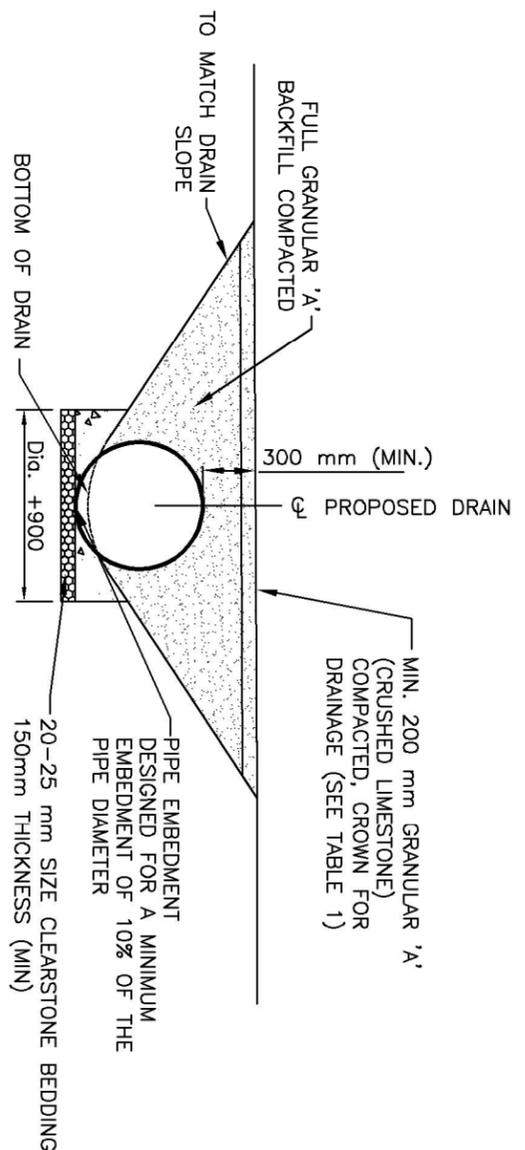
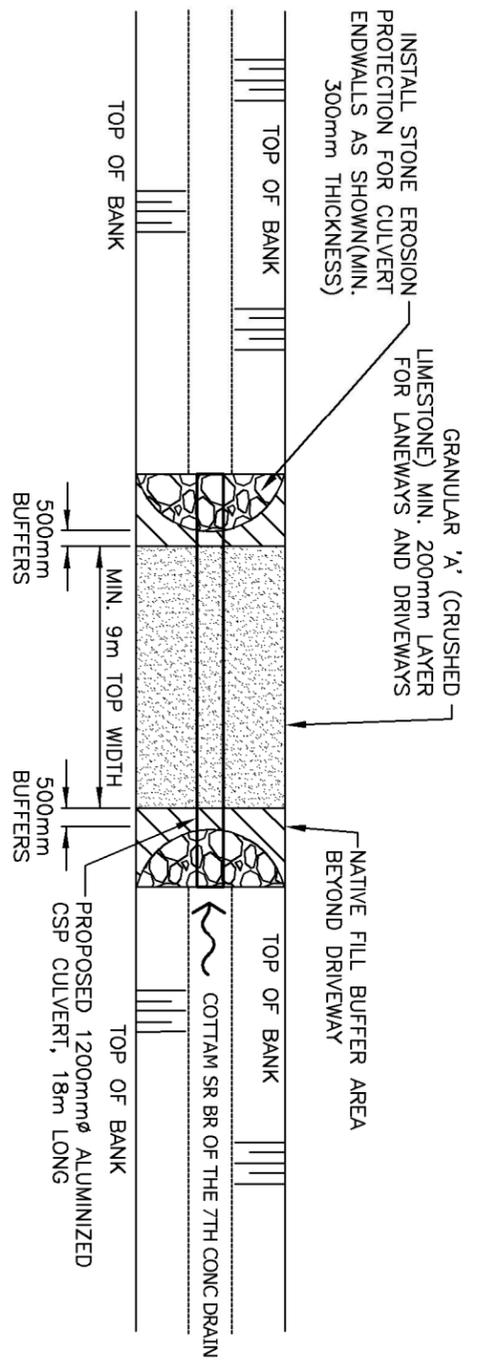
DESIGN	REVIEWED BY
TRO	MDH
DRAWN	CHECKED BY
MTB/WLB	TRO
DATE	SCALE
June 10, 2024	AS SHOWN

PROJECT NO.	21-3142
DRAWING SCALES BASED ON A11 X17 SHEET	

SHEET TITLE: **PROFILE 2 & CROSS SECTIONS**  
 PAGE NO.: **8 OF 10**



Drainage Report for the Realignment and Extension of the **COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN**  
 Town of Kingsville



**Conditions of Use**

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
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No.	1	CLIENT REVIEW	ISSUED FOR
DESIGN	TRO	REVIEWED BY	MDH
DRAWN	MTB/WLB	CHECKED BY	TRO
DATE	June 10, 2024	DATE	June 4/24
SCALE	AS SHOWN	BY	TRO

PROJECT NO.	21-3142
DRAWING SCALES BASED ON A 11 X 17 SHEET	

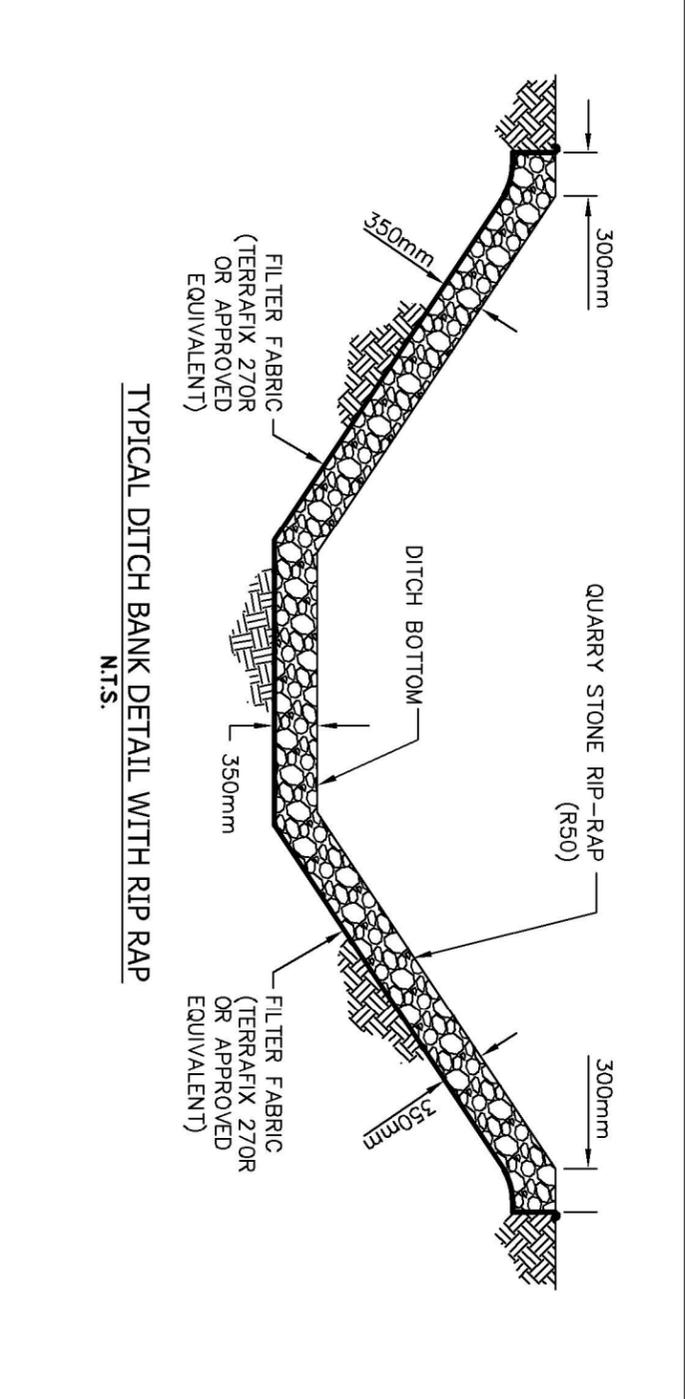
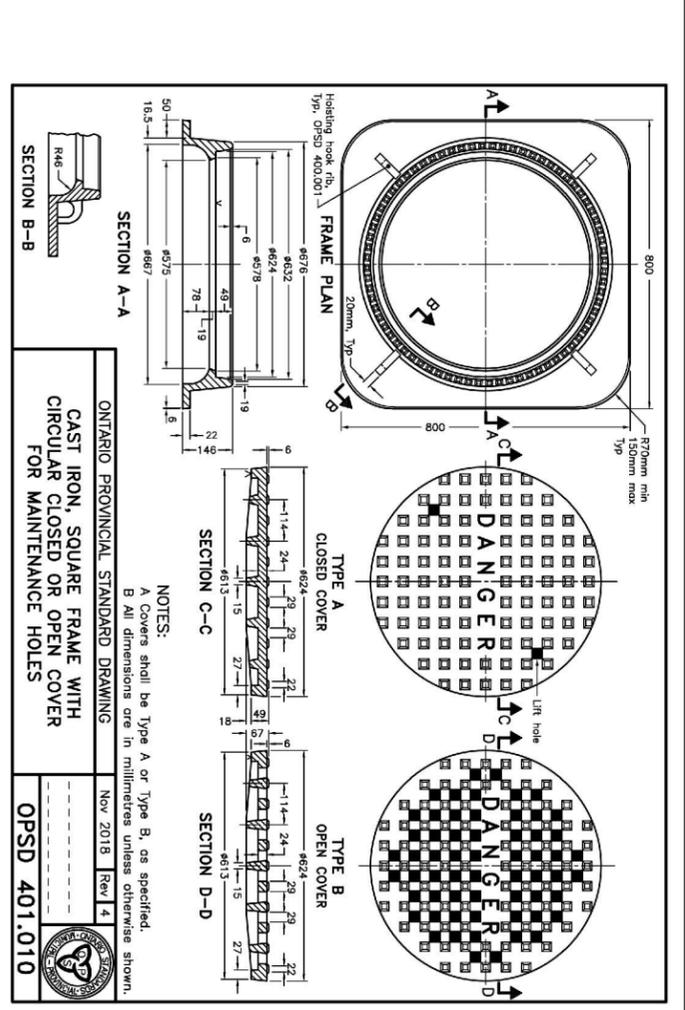
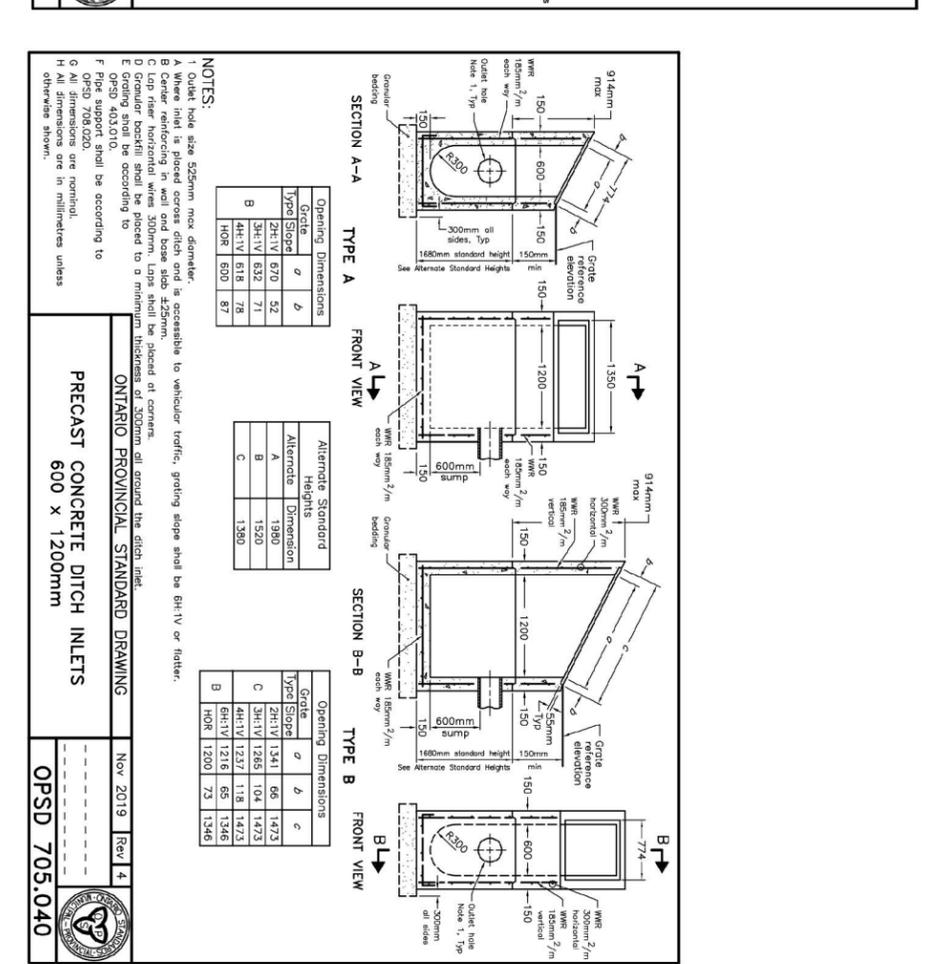
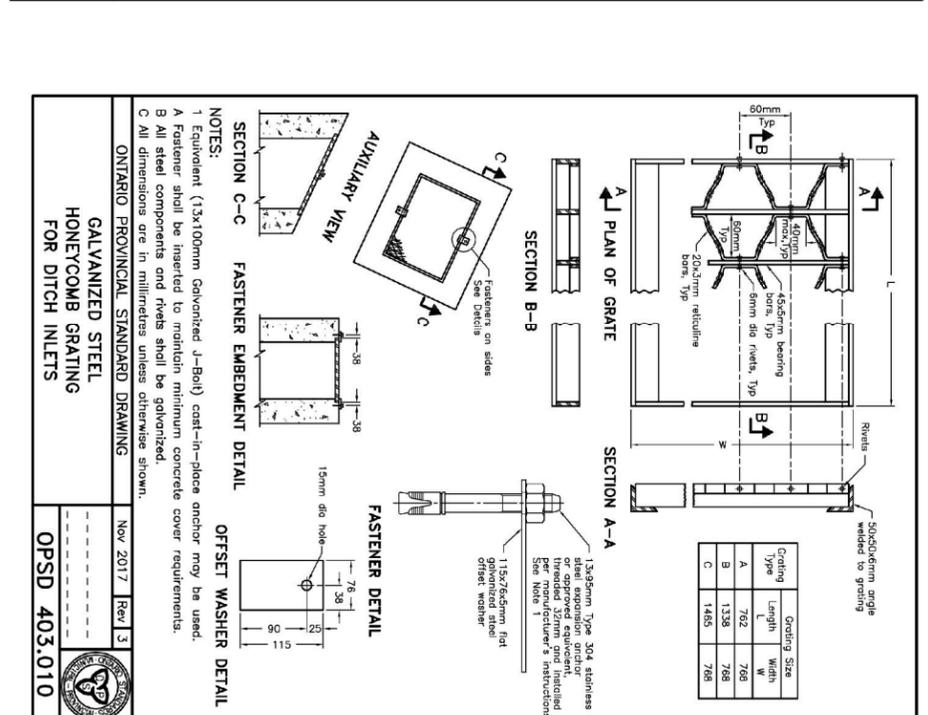
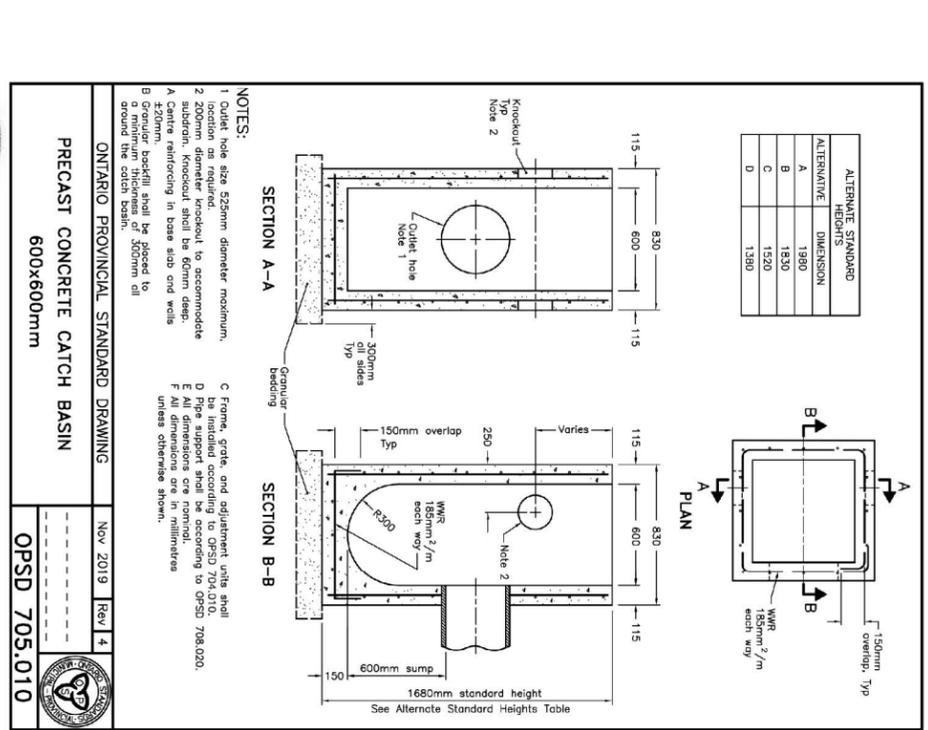


**SCHEDULE G**

Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
Town of Kingsville

**CULVERT No. 2 DETAILS**

PAGE NO. 9 OF 10



**Conditions of Use**  
Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.  
Do not scale dimensions from drawing.  
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No.	CLIENT REVIEW	ISSUED FOR
1	CLIENT REVIEW	ISSUED FOR

DESIGN	TRO	REVIEWED BY	MDH
DRAWN	MTB	CHECKED BY	TRO
DATE	June 10, 2024	SCALE	AS SHOWN

PROJECT NO.	21-3142	SHEET TITLE	TYPICAL DETAILS
DRAWING SCALES BASED ON A 1:1 X 1/4 SHEET		PAGE NO.	10 OF 10

**SCHEDULE G:**  
Drainage Report for the Realignment and Extension of the COTTAM SIDEROAD BRANCH OF THE 7TH CONCESSION DRAIN  
Town of Kingsville



**Date:** July 8, 2024

**To:** Mayor and Council

**Author:** Richard J.H. Wyma CSLA

**RE:** Application for Consent and Zoning By-Law Amendment (B 2024-15 and ZBA 2024-11): Surplus Dwelling Severance at 1738 Arner Townline

---

## RECOMMENDED ACTION

1. That consent application B-2024-15, to sever an existing dwelling, deemed surplus to the needs of the applicants' farming operation with an area of 1.079 ac (0.44 ha) lot shown as Part 1 on the applicants' sketch, known as 1738 Arner Townline, in the Town of Kingsville, **BE APPROVED**, subject to the following conditions:
  - a. That the necessary deed(s), transfer or changes be submitted electronically, signed and fully executed, including a copy of the reference plan, prior to certification.
  - b. That an easement for water service shall be signed and fully executed to the satisfaction of the town, prior to certification
  - c. The conditions imposed above shall be fulfilled by July 8<sup>th</sup>, 2026 or this application shall be deemed to be refused in accordance with Section 53(41) of the Planning Act.
2. And that By-law 49-2024 being a By-law to amend the Comprehensive Zoning By-law 1-2014 for the Town of Kingsville, to amend the zoning on the retained farm parcel municipally known as VL Arner Townline from 'General Agricultural (A1)' to 'Agricultural - Restricted (A2)' and the severed residential parcel known as 1738 Arner Townline from 'General Agricultural (A1)' to 'Rural Residential (RR)' **BE APPROVED**; and the Mayor and Clerk **BE AUTHORIZED** to sign same.

## BACKGROUND

The Town of Kingsville has received the above-noted applications for lands located on the east side of Arner Townline, south of Road 2 West (see location map attached as Appendix A). The subject parcel is designated 'Agricultural' by the Official Plan and is zoned 'General Agricultural (A1)' under the Kingsville Comprehensive Zoning By-law.

The subject parcel is 99.97 acres (40.46 ha) with a frontage of approximately 1,305.5 m (4,283.3 ft) and contains a dwelling. It is proposed that the dwelling deemed surplus to the owner's farming needs be severed on a new lot. The proposed severed parcel is shown as Part 1 on the applicant's survey (attached as Appendix B), the severed parcel has an area of 1.079 ac (0.44 ha).

As a result of the consent, an application to rezone the retained farm parcel from 'General Agricultural (A1)' to 'Agricultural- Restricted (A2)' is submitted in conjunction to prohibit future dwellings on the retained parcel as per Provincial and Town policies.

Additionally, currently, water service is provided to the property from Road 2. As there are no water services available off Arner Townline, an easement through the retained parcel for water services will be required, as shown as Part 2 on the attached survey.

## **DISCUSSION**

### **1) Provincial Policy Statement (PPS), 2020:**

When reviewing a planning application to determine if it represents sound planning, it is imperative that the proposed development is consistent with the Provincial Policy Statement (PPS). Section 2.3.4.1(c) permits, "a residence surplus to a farming operation as a result of farm consolidation," to be severed, "provided that the planning authority ensures that new residential dwellings are prohibited on any vacant remnant parcel of farmland created by the severance."

The application is consistent with the PPS definition of a residence surplus to a farming operation and future dwellings will be prohibited on the retained farm parcel as a condition of consent, in that the retained parcel must be rezoned to "Restricted Agriculture (A2)".

### **2) Town of Kingsville Official Plan**

The Official Plan for the Town of Kingsville designates the severed and retained lands as 'Agriculture'.

The requested consent to sever the surplus dwelling conforms to the policies of Section 7.3.1, Agriculture Land Division, of the Official Plan. The proposed severed parcel is within the recommended size limit of 0.8 ha (1.97 ac.) or less.

The severed parcel, Part 1 has an area of 0.44 ha (1.079 ac.) therefore the application conforms with Section 7.3.1 of the Kingsville Official Plan.

Section 7.3.1.2 c) of the Kingsville Official Plan that was amended on December 1<sup>st</sup>, 2023, states that "c) the surplus residential dwelling must have been in existence prior to the date of the adoption of this plan and in a habitable condition".

### 3) Comprehensive Zoning By-law

The severed parcel, Part 1, has an area of 0.44 ha (1.079 ac.) and frontage of 1,305.5 m (4,283.3 ft.) and will have access and frontage on Arner Townline.

The retained parcel will have access and frontage on Arner Townline and frontage on Road 2 West.

There are no zoning issues created as a result of the creation of the surplus dwelling lot. The retained farm parcel will be rezoned from 'Agricultural (A1)' to 'Agriculture - Restricted (A2)' to prohibit future dwellings as required by the surplus dwelling consent policies.

### FINANCIAL CONSIDERATIONS

The impact to assessment resulting from the severance of the dwelling from the farm parcel is anticipated to be minimal.

### ENVIRONMENTAL CONSIDERATIONS

There are no anticipated environmental impact resulting from the severance of the dwelling from the farm parcel.

### CONSULTATIONS

#### Public Consultations

In accordance to O. Reg 545/06 of the *Planning Act*, property owners within 120m of the subject site boundaries received the Notice of Public Meeting by mail.

#### Agency & Administrative Consultation

In accordance with O. Reg 545/06 of the *Planning Act*, Agencies and Town Administration received the Notice of Public Meeting by mail and/or email. At the time of writing, the following comments have been received from circulated agencies.

- 1) **Essex Region Conservation Authority (ERCA)** No objection to the proposed application (see Appendix C for ERCA comments).
- 2) **Town of Kingsville Technical Advisory Committee**
  - a. Ensure retained parcel and newly created parcel maintains and manages their own storm water
  - b. The Town's Drainage Superintendent is satisfied that there are no drainage issues with the application.

- c. The Building Department is satisfied that the existing septic system on the property that meets Ontario Building Code requirements and setbacks in relation to the revised lot line locations
- d. Easement will be required across retained parcel to surplus farm parcel for water. Alternatives for services off Arner Townline were explored and are not available. Easement is shown on Part 2 of attached survey.

**PREPARED BY:**



---

Richard J.H. Wyma CSLA  
Director of Planning and Development

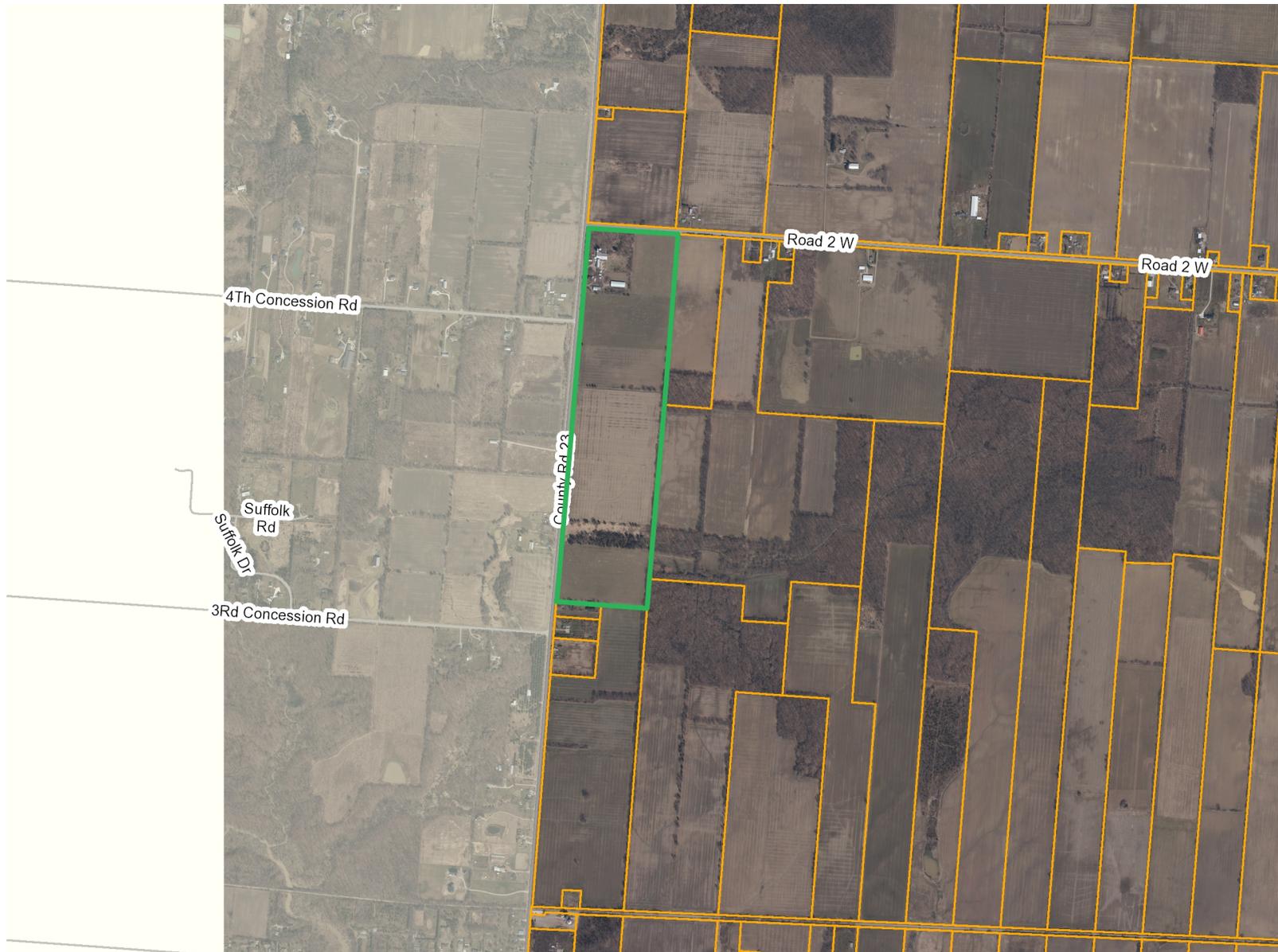
**REVIEWED BY:**



---

John Norton  
CAO

# 1738 Arner Townline



**Legend**

- Essex Municipalities
  - <all other values>
  - Kingsville
- Street
- Kingsville Assessment

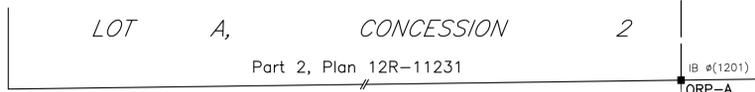
**Notes**

THIS MAP IS NOT TO BE USED FOR NAVIGATION  
 Copyright the Corporation of the County of Essex, 2012. Data herein is provided by the Corporation of the County of Essex on an 'as is' basis. Assessment parcel provided by Teranet Enterprises Inc. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

0 349.12 698.2 Meters

1: 20,945 6/13/2024

PARTS SCHEDULE			
PART	LOT	CONCESSION	AREA
1	PART OF LOT 1	FOURTH SECTION	1.079 ac.
2			0.110 ac.



ROAD ALLOWANCE BETWEEN  
4th SECTION AND CONCESSION 2

PLAN OF SURVEY  
OF  
PART OF LOT 1  
CONCESSION FOURTH SECTION  
GEOGRAPHIC TOWNSHIP OF GOSFIELD SOUTH  
NOW IN THE  
TOWN OF KINGSVILLE  
COUNTY OF ESSEX  
VERHAEGEN LAND SURVEYORS, A DIVISION OF J.D. BARNES LTD.

SCALE : 1"=40'  
0 20.0 40.0 80.0 120.0 FEET 200.0

THE INTENDED PLOT SIZE OF THIS PLAN IS 24" IN WIDTH BY 32" IN HEIGHT WHEN PLOTTED AT A SCALE OF 1"=40'

"IMPERIAL" DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN FEET AND CAN BE CONVERTED TO METRES BY MULTIPLYING BY 0.3048

INTEGRATION DATA

COORDINATES ARE DERIVED FROM GRID OBSERVATIONS USING THE CAN-NET NETWORK SERVICE AND ARE REFERRED TO UTM ZONE 17 (81° WEST LONGITUDE) NAD83 (CSRS) (2010.0). COORDINATE VALUES ARE TO AN URBAN ACCURACY IN ACCORDANCE WITH SECTION 14(2) O.REG. 216/10

POINT ID	NORTHING	EASTING
ORP-A	15280627.72	1146863.05
ORP-B	15276353.78	1145512.27

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

THE RESULTANT TIE BETWEEN ORP-A AND ORP-B IS N17°32'20"E, 4482.96

FOR BEARING COMPARISONS THE FOLLOWING ROTATIONS WERE APPLIED TO CONVERT TO GRID BEARINGS

PLAN	CLOCKWISE ROTATION
P	1°07'00"

LEGEND AND NOTES

BEARINGS ARE UTM GRID DERIVED FROM OBSERVED REFERENCE POINTS 'A' AND 'B' BY REAL TIME NETWORK OBSERVATIONS AND ARE REFERRED TO UTM ZONE 17 (81° WEST LONGITUDE) NAD83 (CSRS) (2010.0).

DISTANCES ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999857

ALL SET SSIB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11(4) OF O.REG. 525/91.

ALL MONUMENTS SHOWN THUSLY □ ARE IRON BARS (IB) UNLESS OTHERWISE NOTED.  
 SIB DENOTES 25mm X 25mm X 1.22m STANDARD IRON BAR  
 SSIB DENOTES 25mm X 25mm X 0.61m SHORT STANDARD IRON BAR  
 IB DENOTES 16mm X 16mm X 0.61m IRON BAR  
 IB φ DENOTES 19mm diameter X 0.61m ROUND IRON BAR  
 CC DENOTES CUT-CROSS  
 CP DENOTES 5mm X 50mm STEEL PIN  
 PB DENOTES PLASTIC BAR  
 ■ DENOTES SURVEY MONUMENT FOUND  
 □ DENOTES SURVEY MONUMENT SET AND MARKED JDB  
 WIT. DENOTES WITNESS  
 (S) DENOTES SET (M) DENOTES MEASURED (D) DENOTES INST. No.  
 ORP DENOTES OBSERVED REFERENCE POINT  
 (N) DENOTES NOT IDENTIFIABLE (OJ) DENOTES ORIGIN UNKNOWN  
 (S/P) DENOTES SET PROPORTIONALLY  
 (P) DENOTES PLAN 12R-15520  
 (P1) DENOTES PLAN OF SURVEY BY (A): Dated: July 6, 1962. Plan File: EC-39  
 (P2) DENOTES PLAN 12R-11231  
 (1744) DENOTES VERHAEGEN SURVEYORS INC., O.L.S.  
 (JDB) DENOTES J.D. BARNES LIMITED, O.L.S.  
 (CTV) DENOTES COUNTY OF ESSEX CONCRETE MONUMENT  
 (1201) DENOTES CLARKE SURVEYORS INC., O.L.S.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
- THIS SURVEY WAS COMPLETED ON THE 16th. DAY OF APRIL, 2024.

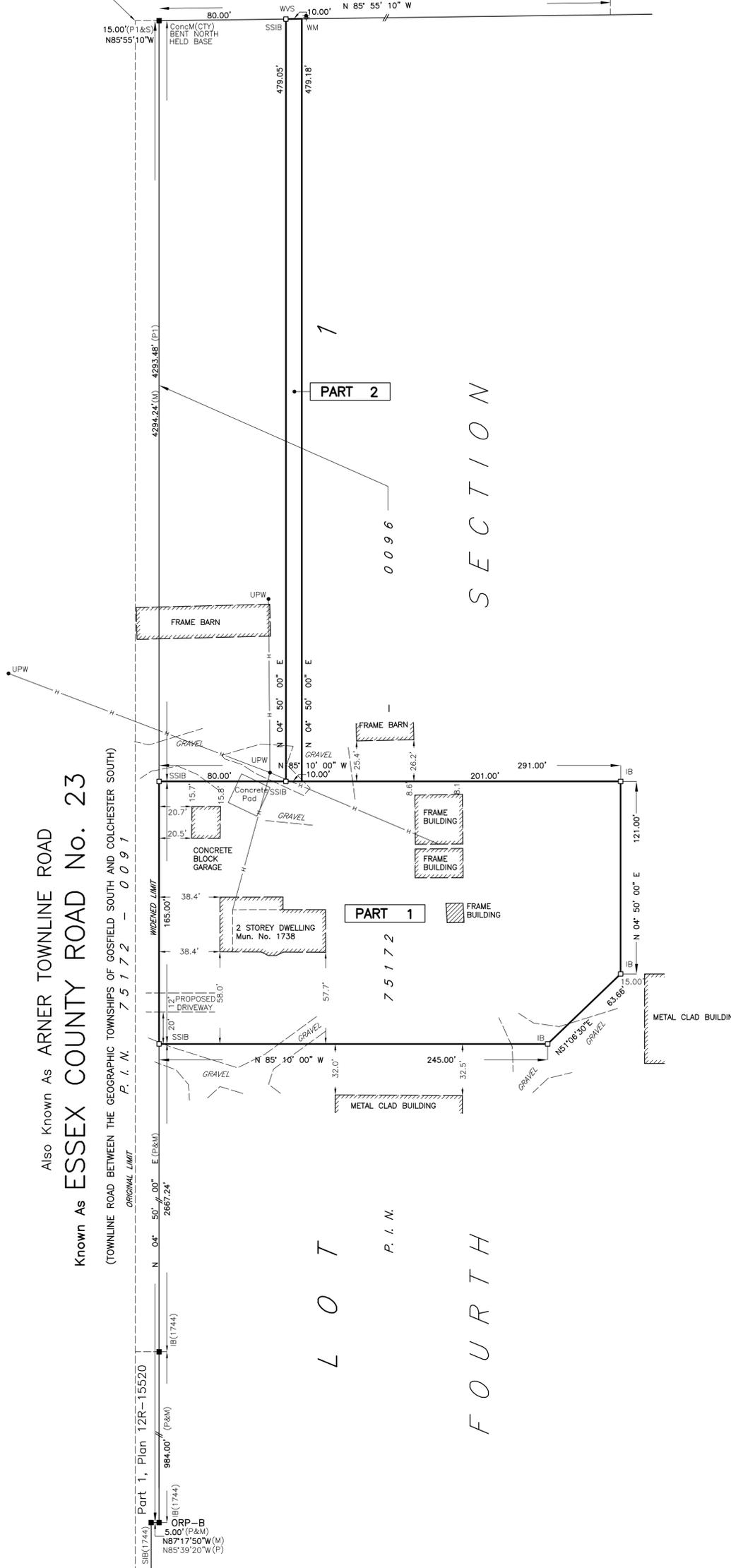
DATE MAY 23, 2024.

*Alec S. Mantha*  
ALEC S. MANTHA  
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER 2217427

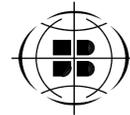


NORTHWEST ANGLE OF LOT 1, FOURTH SECTION



Also Known As ARNER TOWNLINE ROAD  
Known As ESSEX COUNTY ROAD No. 23  
(TOWNLINE ROAD BETWEEN THE GEOGRAPHIC TOWNSHIPS OF GOSFIELD SOUTH AND COLCHESTER SOUTH)  
P. I. N. 7 5 1 7 2 - 0 0 9 1

LOT  
FOURTH  
P. I. N.



**VERHAEGEN**  
LAND SURVEYORS  
A DIVISION OF J.D. BARNES LTD.  
944 OTTAWA STREET, WINDSOR, ON, N8X 2E1  
T: (519) 258-1772 F: (519) 258-1791 www.jdbarnes.com

DRAWN BY: CMW	CHECKED BY: AM	REFERENCE NO.: 24-47-110-00
CAD File: 24-47-110-00A.dwg CAD Date: May 27th, 2024		File: E-GOS.S.-SECTION 4WD-1



planning@erca.org  
P.519.776.5209  
F.519.776.8688  
360 Fairview Avenue West  
Suite 311, Essex, ON N8M 1Y6

June 20, 2024

**Mr. Richard Wyma**

Director of Community and Development Services  
The Corporation of the Town of Kingsville  
2021 Division Road North  
Kingsville, ON N9Y 2Y9

Dear Mr. Richard Wyma:

RE: Application for Consent 1738 ARNER TOWNLINE

ARN 371133000004400; PIN: 751720096

Applicant: HEDGE MARILYN

The Town of Kingsville has received an Application for Consent to sever a surplus farm dwelling on the agricultural subject lands noted above. We understand that the retained agricultural lands will be rezoned to A2 to restrict the future construction of residential dwellings in support of the proposed Consent Application. We understand that no new construction is proposed at this time. The following comments are provided as a result of our review of this proposed development.

**NATURAL HAZARDS AND REGULATORY RESPONSIBILITIES UNDER THE CONSERVATION AUTHORITIES ACT, O. REG 686/21, PPS**

The following comments reflect ERCA's role in protecting people and property from the threats of natural hazards and regulating development hazards lands under Section 28 of the *Conservation Authorities Act*.

The above noted lands are subject to our Regulation under the *Conservation Authorities Act* (Ontario Regulation No. 41/24). The parcel falls within the regulated area of the Henderson Drain.

**FINAL RECOMMENDATION**

Our office has **no objection** to this proposed development.

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Alicia Good  
Watershed Planner  
/ag



# THE CORPORATION OF THE TOWN OF KINGSVILLE

## BY-LAW 49-2024

---

**Being a By-law to amend By-law No. 1-2014,  
the Comprehensive Zoning By-law for the Town of Kingsville**

**WHEREAS** By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

**AND WHEREAS** the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

**AND WHEREAS** the application conforms to the Official Plan of the Town of Kingsville;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. Schedule "A", Map 55 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 0.44 ha (1.079 ac.) portion of land, known municipally as 1738 Arner Townline, Parts of Lot 1 Concession 4 Western District, as shown on Schedule 'A' in diagonal hatch attached hereto from 'General Agricultural (A1)' to 'Rural Residential (RR)'.
2. Schedule "A", Map 55 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 40.46 ha (99.97 ac.) portion of land, known municipally as 1738 Arner Townline, Parts of Lot 1 Concession 4 Western District, as shown on Schedule 'A' in green outline attached hereto from 'General Agricultural (A1)' to 'Restricted Agricultural (A2)'.
3. This by-law shall come into force and take effect from the date of passing by Council and in accordance with Section 34 of the Planning Act.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS  
8<sup>th</sup> DAY OF JULY, 2024.**

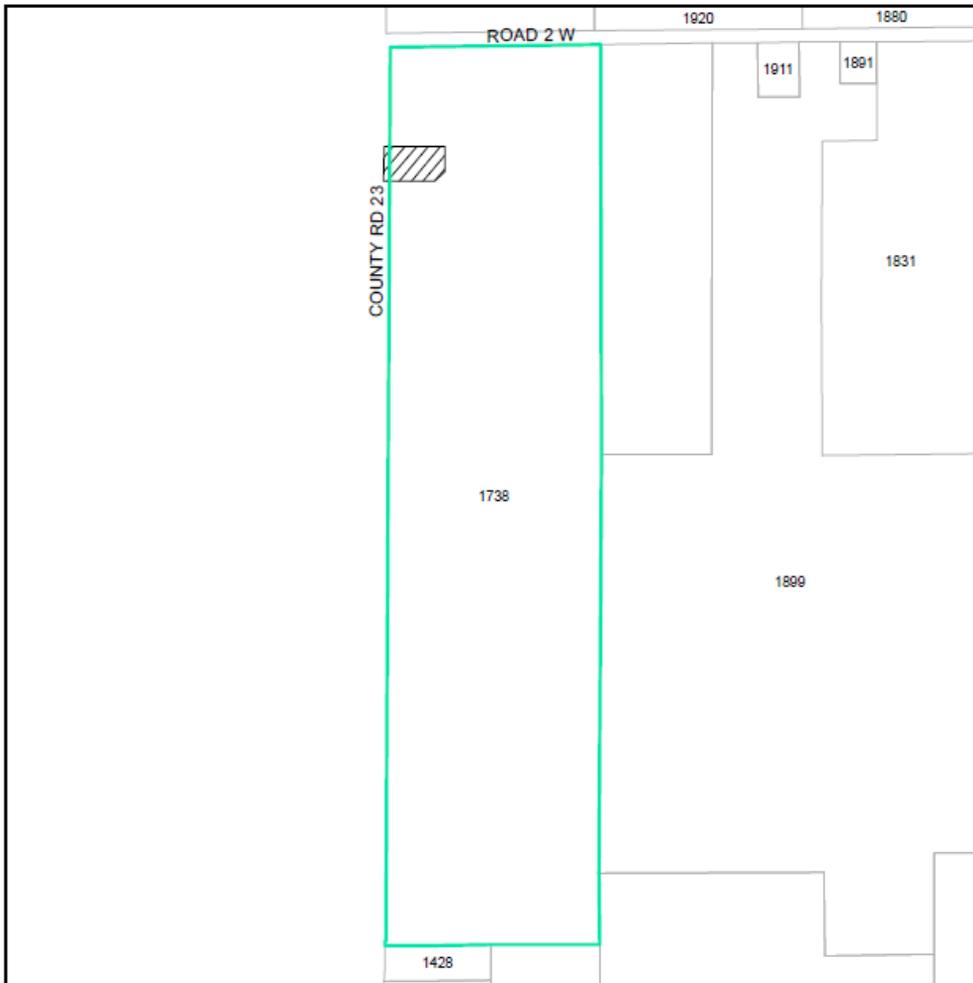
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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

# Schedule 'A'

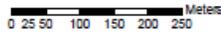


**Plan of Survey of Part of Lot 1 Concession Fourth Section  
1738 Arner Townline  
B-2024-17 & ZBA-2024-10**

 Map 55 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 0.44 ha (1.079 ac.) portion of land from 'General Agricultural (A1)' to 'Rural Residential (RR)'.

 Map 55 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 40.46 ha (99.97 ac.) portion of land from 'General Agricultural (A1)' to 'Restricted Agricultural (A2)'.

1:7,500



June, 2024



**Date:** July 8, 2024

**To:** Mayor and Council

**Author:** Richard J.H. Wyma CSLA

**RE:** Application for Consent and Zoning By-Law Amendment (B 2024-17 and ZBA 2024-10): Surplus Dwelling Severance at 4336 Graham Sideroad

---

## RECOMMENDED ACTION

1. That consent application B-2024-17, to sever an existing dwelling, deemed surplus to the needs of the applicants' farming operation with an area of 1.6 ac (0.65 ha) lot shown as Part 1 on the applicants' sketch, known as 4336 Graham Sideroad, in the Town of Kingsville, **BE APPROVED**, subject to the following conditions:
  - a. Provide confirmation to the satisfaction of the Town of existing septic system on the property that meets Ontario Building Code requirements and setbacks in relation to the revised lot line locations.
  - b. The building must comply with the Ontario Building Code for exposing building face and limiting distance. The applicant must provide calculations, documentation and complete any necessary construction to comply with the OBC.
  - c. Provide proof of drainage, acceptable to the municipality, to serve the lands being conveyed and the lands being retained, with the costs of such drainage being solely at the expense of the applicant. Proof of Drainage shall be submitted to the Municipality a minimum of one month prior to the stamping of the deeds.
  - d. Execute an agreement for drainage apportionment due to lands severance or sale approved by the Municipality for each parcel being severed. Drainage Apportionment Request, 12R plan shall be submitted to the Municipality a minimum of one month prior to the stamping of the deeds.
  - e. That the necessary deed(s), transfer or changes be submitted electronically, signed and fully executed, including a copy of the reference plan, prior to certification.
  - f. The conditions imposed above shall be fulfilled by July 8<sup>th</sup>, 2026 or this

application shall be deemed to be refused in accordance with Section 53(41) of the Planning Act.

2. And that By-law 50-2024 being a By-law to amend the Comprehensive Zoning By-law 1-2014 for the Town of Kingsville, to amend the zoning on the retained farm parcel municipally known as VL Graham Sideroad from 'General Agricultural (A1)' to 'Agricultural - Restricted (A2)' and the severed residential parcel known as 4336 Graham Sideroad from 'General Agricultural (A1)' to 'Rural Residential (RR)' **BE APPROVED**; and the Mayor and Clerk **BE AUTHORIZED** to sign same.

## **BACKGROUND**

The Town of Kingsville has received the above-noted applications for lands located on the east side of Graham Sideroad, south of Road 10 (see location map attached as Appendix A). The subject parcel is designated 'Agricultural' by the Official Plan and is zoned 'General Agricultural (A1)' under the Kingsville Comprehensive Zoning By-law.

The subject parcel is 49.5 acres (20.0 ha) with a frontage of 339.1 m (1,112.5 ft) and contains a dwelling. It is proposed that the dwelling deemed surplus to the owner's farming needs be severed on a new lot. The proposed severed parcel is shown as Part 1 on the applicant's survey (attached as Appendix B), the severed parcel has an area of 1.6 ac (0.65 ha).

As a result of the consent, an application to rezone the retained farm parcel from 'General Agricultural (A1)' to 'Agricultural- Restricted (A2)' is submitted in conjunction to prohibit future dwellings on the retained parcel as per Provincial and Town policies.

## **DISCUSSION**

### **1) Provincial Policy Statement (PPS), 2020:**

When reviewing a planning application to determine if it represents sound planning, it is imperative that the proposed development is consistent with the Provincial Policy Statement (PPS). Section 2.3.4.1(c) permits, "a residence surplus to a farming operation as a result of farm consolidation," to be severed, "provided that the planning authority ensures that new residential dwellings are prohibited on any vacant remnant parcel of farmland created by the severance."

The application is consistent with the PPS definition of a residence surplus to a farming operation and future dwellings will be prohibited on the retained farm parcel as a condition of consent, in that the retained parcel must be rezoned to "Restricted Agriculture (A2)".

## **2) Town of Kingsville Official Plan**

The Official Plan for the Town of Kingsville designates the severed and retained lands as 'Agriculture'.

The requested consent to sever the surplus dwelling conforms to the policies of Section 7.3.1, Agriculture Land Division, of the Official Plan. The proposed severed parcel is within the recommended size limit of 0.8 ha (1.97 ac.) or less.

The severed parcel, Part 1 has an area of 0.65 ha (1.6 ac.) therefore the application conforms with Section 7.3.1 of the Kingsville Official Plan.

Section 7.3.1.2 c) of the Kingsville Official Plan that was amended on December 1<sup>st</sup>, 2023, states that "c) the surplus residential dwelling must have been in existence prior to the date of the adoption of this plan and in a habitable condition".

## **3) Comprehensive Zoning By-law**

The severed parcel, Part 1, has an area of 0.65 ha (1.6 ac.) and frontage of 339.1 m (1,112.5 ft.) and will have access and frontage on North Talbot Road.

The retained parcel will have access and frontage on Graham Sideroad.

There are no zoning issues created as a result of the creation of the surplus dwelling lot. The retained farm parcel will be rezoned from 'Agricultural (A1)' to 'Agriculture - Restricted (A2)' to prohibit future dwellings as required by the surplus dwelling consent policies.

## **FINANCIAL CONSIDERATIONS**

The impact to assessment resulting from the severance of the dwelling from the farm parcel is anticipated to be minimal.

## **ENVIRONMENTAL CONSIDERATIONS**

There are no anticipated environmental impacts resulting from the severance of the dwelling from the farm parcel.

## **CONSULTATIONS**

### **Public Consultations**

In accordance to O. Reg 545/06 of the *Planning Act*, property owners within 120m of the subject site boundaries received the Notice of Public Meeting by mail.

## **Agency & Administrative Consultation**

In accordance with O. Reg 545/06 of the Planning Act, Agencies and Town Administration received the Notice of Public Meeting by mail and/or email. At the time of writing, the following comments have been received from circulated agencies.

- 1) **Essex Region Conservation Authority (ERCA)** No objection to the proposed application (see Appendix C for ERCA comments).
- 2) **Town of Kingsville Technical Advisory Committee**
  - a. Ensure retained parcel and newly created parcel maintains and manages their own storm water on each lot. Ensure that the property has legal access to their assessed drain. This will be confirmed by the Town of Kingsville's Drainage Superintendent.
  - b. Drainage apportionment may be required.
  - c. Confirmation to the satisfaction of the Town, of existing septic system on the property that meets Ontario Building Code requirements and setbacks in relation to the revised lot line locations
  - d. Ensure all services are contained within existing property lines and do not cross over into newly established property lines. The owner and/or consultant is required to provide verification that all services are maintained on the retained parcels and do not cross property lines.

### **PREPARED BY:**



---

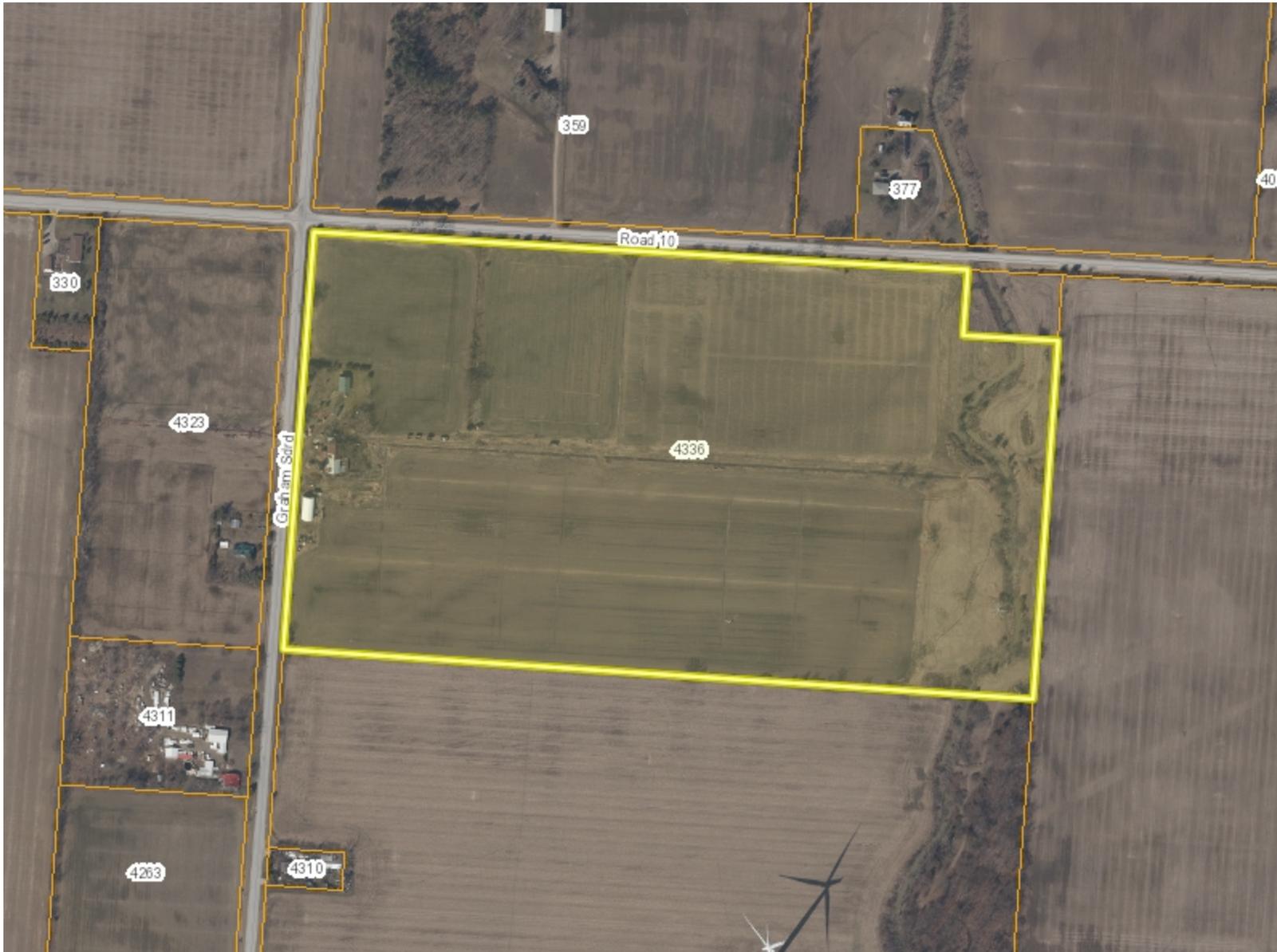
Richard J.H. Wyma CSLA  
Director of Planning and Development

### **REVIEWED BY:**



---

John Norton  
CAO



### Legend

- Essex Municipalities
- <all other values>
- Kingsville
- Street
- Kingsville Assessment

### Notes

Location Map

THIS MAP IS NOT TO BE USED FOR NAVIGATION  
 Copyright the Corporation of the County of Essex, 2012. Data herein is provided by the Corporation of the County of Essex on an 'as is' basis. Assessment parcel provided by Teranet Enterprises Inc. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

0 81.00 162.0 Meters

1: 4,860



4/16/2024

**NOTES**

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

DISTANCES ON THIS PLAN ARE HORIZONTAL GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY THE AVERAGE COMBINED SCALE FACTOR OF 0.99980245.

BEARINGS ARE UTM GRID DERIVED FROM NETWORK RTK GPS OBSERVATIONS (SMARTNET) ON MONUMENTS (A) AND (B) AS SHOWN HEREON, HAVING A GRID BEARING OF N4°08'50"E, NAD83 CSRS (2010.0) AND ARE REFERRED TO THE CENTRAL MERIDIAN OF UTM ZONE 17 (81° W LONGITUDE).

FOR BEARING REFERENCE, THE FOLLOWING ROTATION WAS APPLIED:  
P1 - 0°40'50" CLOCKWISE

DRAWN

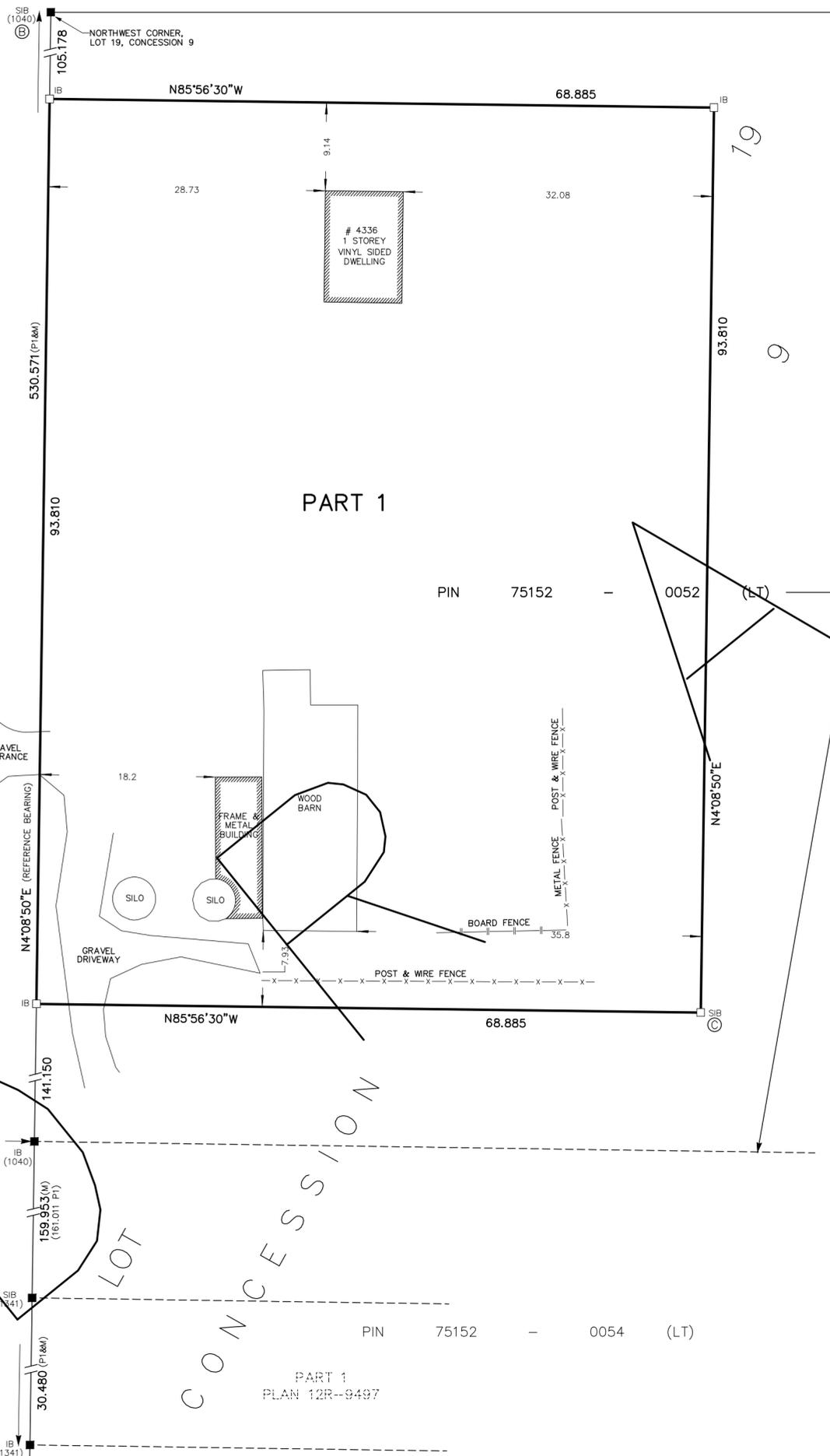
SCHEDULE				
PART	LOT	CONCESSION	PIN	AREA (m <sup>2</sup> )
1	PART OF LOT 19	9	PART OF PIN 75152-0052 (LT)	6462.1
GEOGRAPHIC TOWNSHIP OF GOSFIELD NORTH				

(LOCALLY KNOWN AS) ROAD 10

(ROAD ALLOWANCE BETWEEN CONCESSIONS 9 & 10)

(LOCALLY KNOWN AS) GRAHAM SIDE ROAD

(ROAD ALLOWANCE BETWEEN LOTS 18 & 19) (PIN 75152 - 0050 (LT))



PLAN OF SURVEY OF  
PART OF LOT 19  
CONCESSION 9  
GEOGRAPHIC TOWNSHIP OF GOSFIELD NORTH  
TOWN OF KINGSVILLE  
COUNTY OF ESSEX

SCALE 1 : 400 METRES  
0 2 4 6 8 10 20 30 40  
SURVEYORS ON SITE INC. ©  
THE INTENDED PLOT SIZE OF THIS PLAN IS 558mm IN WIDTH BY 457mm IN HEIGHT WHEN PLOTTED AT A SCALE OF 1:400.

**LEGEND**

■	.....	MONUMENT FOUND
□	.....	MONUMENT PLANTED
SIB	.....	STANDARD IRON BAR
IB	.....	IRON BAR
M	.....	MEASURED
S	.....	SET
P1	.....	PLAN 12R-9497
1341	.....	RICHARD MURRAY O.L.S.
1040	.....	W. SETTERINGTON O.L.S.

**SURVEYOR'S CERTIFICATE**

I CERTIFY THAT:

- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
- THE SURVEY WAS COMPLETED ON THE \_\_\_ DAY OF \_\_\_ 2024.

MAY 29, 2024

ROBERT WANNACK  
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER V-XXXXX.

COORDINATES BELOW ARE DERIVED FROM NETWORK RTK GPS OBSERVATIONS (SMARTNET) AND ARE REFERRED TO UTM ZONE 17, NAD83 (CSRS) (2010.0).

COORDINATES COMPLY WITH THE URBAN ABSOLUTE ACCURACY PER SEC. 14(2) OF O.REG. 216/10.

POINT ID	NORTHING	EASTING
(A)	4667288.12	360459.71
(B)	4667817.20	360498.08
(C)	4667613.90	360552.39

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

3560 WALKER ROAD  
WINDSOR, ONTARIO  
N8W 3S4  
519-818-0767  
www.surveyorsonsite.com

DRAWN BY: KS	CHECKED BY: RW	DATE: MAY 29, 2024	FILE: 2024-167
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planning@erca.org

P.519.776.5209

F.519.776.8688

360 Fairview Avenue West  
Suite 311, Essex, ON N8M 1Y6

June 20, 2024

**Mr. Richard Wyma**

Director of Community and Development Services  
The Corporation of the Town of Kingsville  
2021 Division Road North  
Kingsville, ON N9Y 2Y9

Dear Mr. Richard Wyma:

RE: Application for Consent 4336 GRAHAM SIDE RD

ARN 371154000003600; PIN: 751520052

Applicant: NELSON DOUGLAS GEORGE

The Town of Kingsville has received an Application for Consent to sever a surplus farm dwelling on the agricultural subject lands noted above. We understand that the retained agricultural lands will be rezoned to A2 to restrict the future construction of residential dwellings in support of the proposed Consent Application. We understand that no new construction is proposed at this time. The following comments are provided as a result of our review of this proposed development.

**NATURAL HAZARDS AND REGULATORY RESPONSIBILITIES UNDER THE CONSERVATION AUTHORITIES ACT, O. REG 686/21, PPS**

The following comments reflect ERCA's role in protecting people and property from the threats of natural hazards and regulating development hazards lands under Section 28 of the *Conservation Authorities Act*.

The above noted lands are subject to our Regulation under the *Conservation Authorities Act* (Ontario Regulation No. 41/24). The parcel falls within the regulated area of the Ruscom River and Lawrence Nelson Drain West Branch.

**FINAL RECOMMENDATION**

Our office has **no objection** to this proposed development. If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

Alicia Good  
Watershed Planner  
/ag



# THE CORPORATION OF THE TOWN OF KINGSVILLE

## BY-LAW 50-2024

---

**Being a By-law to amend By-law No. 1-2014,  
the Comprehensive Zoning By-law for the Town of Kingsville**

**WHEREAS** By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

**AND WHEREAS** the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

**AND WHEREAS** the application conforms to the Official Plan of the Town of Kingsville;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. Schedule "A", Map 30 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 0.65 ha (1.6 ac.) portion of land, known municipally as 4336 Graham Sideroad, Parts of Lot 19 Concession 9, as shown on Schedule 'A' in cross-hatch attached hereto from 'General Agricultural (A1)' to 'Rural Residential (RR)'.
2. Schedule "A", Map 30 of By-law 1-2014 is hereby amended by changing the zone symbol on an approximately 19.35 ha (47.9 ac.) portion of land, known municipally as 4336 Graham Sideroad, Parts of Lot 19, Concession 9, as shown on Schedule 'A' in diagonal-hatch attached hereto from 'General Agricultural (A1)' to 'Restricted Agricultural (A2)'.
3. This by-law shall come into force and take effect from the date of passing by Council and in accordance with Section 34 of the Planning Act.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS  
8<sup>th</sup> DAY OF JULY, 2024.**

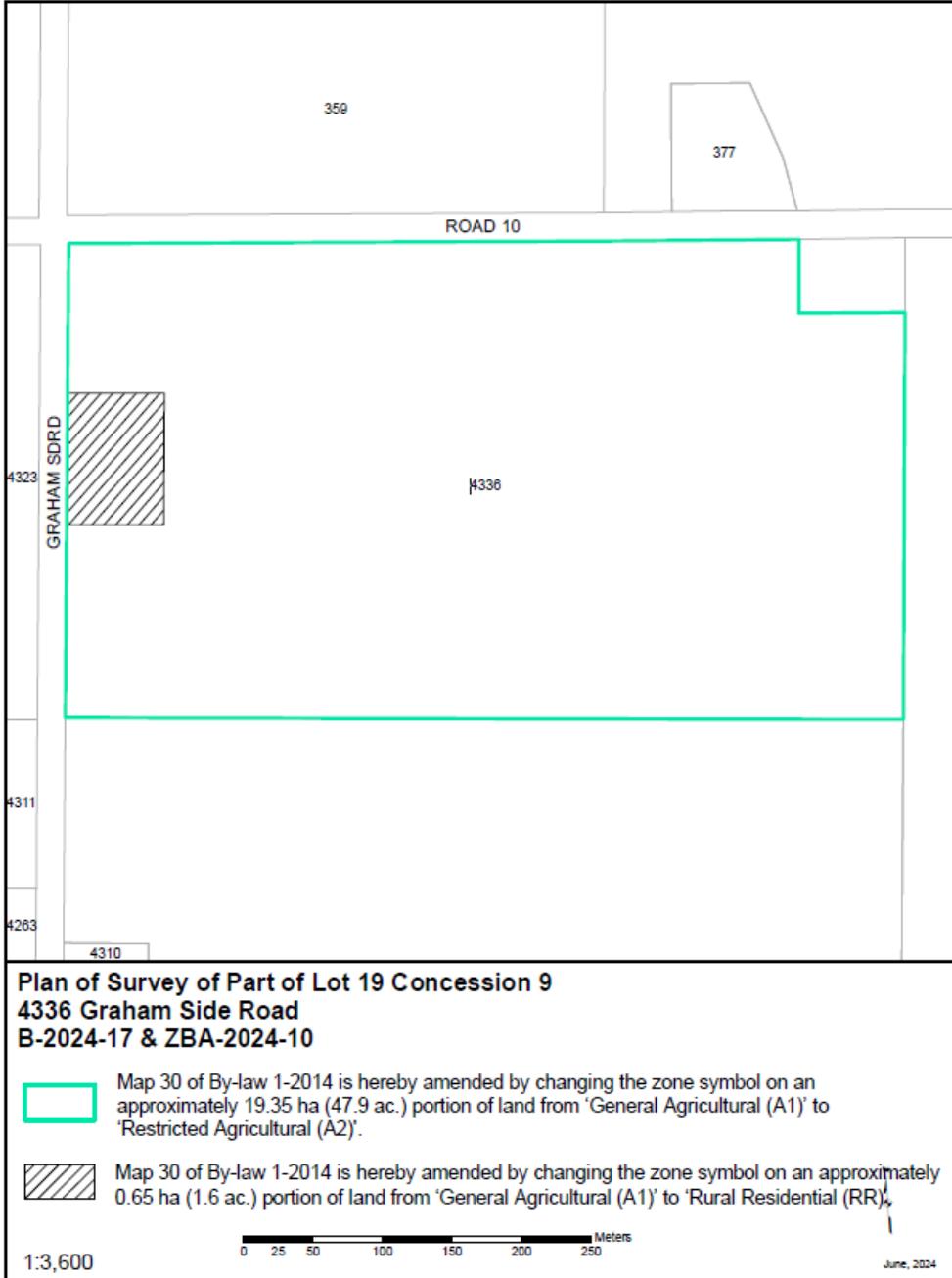
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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

Schedule 'A'



**Date:** June 19, 2024

**To:** Mayor and Council

**Author:** Richard J.H. Wyma CSLA  
Director of Planning and Development

**RE:** Application for Redline Amendment SUB 2022-5 and Application for Rezoning ZBA 2024-12 of Heritage Estates Subdivision by 1552843 Ontario Ltd. (Noah Homes)

---

## RECOMMENDED ACTION

1. A resolution in support of the Redline Amendment of the approved Draft Plan of Subdivision, County File No. 37-T-23003, for a revised total of 29 lots and a mix of 15 single family and 28 semi-detached dwellings (43 residential units total) **BE APPROVED** subject to any additional conditions that may be outlined by the County in its approval, and
2. That Zoning By-law Amendment application ZBA 2024-12 to amend the current Lakeshore Residential West Exception 35 – holding (LR-35 (h)) zoning on the subject parcel in the Town of Kingsville **BE APPROVED** to include the following:
  - a. Lot frontages in Lots 11 – 25 for single family residential use reduced from 18m (59 ft) to 12.5 m (42 feet);
  - b. Minimum lot areas in Lots 11 - 25 for single family residential use reduced from 557 m<sup>2</sup> (5,995 ft<sup>2</sup>) to 440 m<sup>2</sup> (4,736 sq.ft.);
  - c. Maximum lot coverage, where there are no legal Additional Dwelling Units, be increased from 40% to 50%;
  - d. Maximum lot coverage, where there are legal Additional Dwelling Units, be increased from 40% to 60%;
  - e. Front yard depth be reduced from 6, (20 ft.) to 5.5m (18 ft.)
  - f. Interior side yard depth for main buildings with an attached garage be reduced from 1.5m (5 ft) to 1.2 m (4 ft)
3. By-law 51-2024 being a by-law to amend By-law No. 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville be taken as having been read three times and finally passed and the Mayor and Clerk **BE AUTHORIZED** to sign same.
4. The Registered Development Agreement (CE1173875) between the applicant and Town be amended to reflect the Redline Amendment and the associated

rezoning, and to reflect that the development will be completed in one phase;

5. That By-Law 54-2024, being a by-law to amend By-law 1-2014, the Comprehensive Zoning By-law for the Town of Kingsville to remove the Holding symbol (h) on the subject lands be taken as having been read three times and finally passed and the Mayor and Clerk **BE AUTHORIZED** to sign same.

## **BACKGROUND**

On June 12, 2023 Council approved a Draft Plan of Subdivision for Heritage Gardens. The approved Draft Plan included a total of 25 lots for 50 semi-detached dwellings. The subject lands are located on the west side of Heritage Road (County Road 50), south of James Avenue (location map attached as Appendix A). The subject property is designated Lakeshore Residential Exception 35 (LR-35) under the Kingsville Comprehensive Zoning By-law. The Exception allowed for:

- semi-detached dwellings to be permitted as an additional use;
- rear yard setback requirement reduced from 7.5 m (25 ft) to 6 m (19.7 ft);
- exterior side yard setback requirement reduced from 4.5 m (15 ft) to 1.5 m (5 ft);

On May 7, 2024, Kingsville received a request from the County of Essex to bring forward the redline amendment to the approved Draft Plan of Subdivision to Kingsville Council for a resolution of support.

The Redline Amendment (see Appendix A) proposes to eliminate the 11 semi-detached lots (22 units) in Phase two and replace them with 15 single family dwelling units.

To implement this change, the proposed amendment requires changes to the lot and block plan (see Appendix B) in approved zone provisions as follows:

- a. a reduction in lot frontages for single family residential (Lots 11-25) from 18 m (59 ft) to 12.5 m (42 ft). The proposed 12.5 m frontage is on a cul-de-sac, and is the minimum lot frontage shown on the attached redlined draft plan. Lot frontage for the remainder of the lots is 13.72m (45 ft.).
- c. a corresponding reduction in minimum lot area for single family residential (Lots 11-25) from 557 m<sup>2</sup> (5,995 ft<sup>2</sup>) to 440 m<sup>2</sup> (4,736 ft<sup>2</sup>)

Administration has encouraged developers to consider smaller lots as a means of increasing housing affordability.

At the same time, the applicant is requesting amendments to zoning to facilitate the construction or inclusion of Additional Dwelling Units in both Phase 1 and Phase 2, which will require:

- a. an increase in maximum lot coverage for single and semi-detached residential dwellings from 40% to 50% where there are no legal Additional Dwelling Units

- b. an increase in maximum lot coverage for single and semi-detached residential dwellings from 40% to 60% where there are legal Additional Dwelling Units as provided for in provincial legislation
- c. a reduction in front yard depth from 6m (20 ft) to 5.5 m (18 ft); and
- d. a reduction in interior-side yard depth for lots with an attached garage from 1.5m (5 ft.) to 1.2m (4 ft).

These proposed changes will provide opportunity for additional dwelling units to be constructed as part of the initial buildings or would be available only if an ADU is added at a later date (i.e. a single family house without an ADU would be limited to 50% lot coverage, which is typical in Kingsville).

## **DISCUSSION**

The approval of the current Draft Plan of Subdivision and associated zoning was reviewed based on Provincial Policy Statement, County of Essex Official Plan, Town of Kingsville Official Plan, and the Town of Kingsville Comprehensive Zoning By-law. In addition, the development of the Draft Plan of Subdivision included a number of background studies to be completed as part of all subdivision development and including archaeological screening, traffic impact assessment, storm water management planning, and environmental impact screening.

The proposed changes to the Draft Plan of Subdivision and Zoning do not impact that earlier review or change any of the technical studies that were required as part of that approval process, or any of the conditions of County approval, other than the plan of subdivision layout.

The applicant has proposed the changes, in large part, to respond to market changes, a renewed provincial, county and local emphasis on housing affordability, and a renewed interest in providing additional dwelling units as a means of addressing both housing affordability for the homeowner and resident and providing options for mixed generation and/or multi-family housing.

As noted above, administration encourages developers to consider reduced lot sizes and associated with that, smaller homes, to increase affordability. Administration also encourages inclusion of additional dwelling units to provide for a broader suite of housing options for residents.

Administration supports the proposed revisions which reflect earlier discussions regarding zoning changes to address the housing crisis. Those discussions include smaller lot frontages, changes to setbacks, and finding creative ways to facilitate additional dwelling units through lot coverages or other similar zoning incentives.

If approved, the applicant will be required to amend their Functional Servicing Reports to reflect changes in the draft plan of subdivision. That, in turn, will require amendments to the approved Development Agreement related to layout, servicing, and zoning.

## Development Agreement

In December 2023, Council approved the Development Agreement for the subdivision. The Agreement was registered in March 2024. At the owner's request, Section 5, and Schedule B-1 of the Agreement confirms that the owner was to develop the subject lands over two phases. The Agreement also directs that all site servicing plans, designs and drawings, securities and any other requirements deemed necessary by the town be submitted prior to the initiation of each of the phases.

During discussions regarding the Redline Amendment, installation of infrastructure and servicing, it became clear that it would be beneficial to build the development over a single phase rather than two phases.

Town Engineering and Infrastructure have worked with the Owner's to ensure all necessary site servicing plans and drawings are in place; and have accepted securities in full for both phases of development. Administration has no objection to completing the development in one phase, rather than two phases. The Term of the Agreement will remain five-years from the original date of approval of the Agreement.

## Removal of Holding

In 2017, the Town Commissioned Stantec to undertake an assessment of water capacity in the Southwest Service Area. That study identified, at that time, that there was insufficient unreserved capacity to support any future development without having a detrimental impact on the water distribution system, until system improvements can be implemented.

The Study recommended that 150 Heritage Road, which is within the Study Area though serviced through the Tower Service Area, be rerouted to the Southwest Service Area once improvements are implemented. That being the case, the hold on development of this site, can be removed as the property is serviced; and will be rerouted to the Southwest Service Area once improvements are implemented.

## **FINANCIAL CONSIDERATIONS**

As development of the lands begins, there will be an ongoing increase in assessment value. Each lot will also be subject to building permit fees and the collection of development charges.

The Town has received the required securities for the development of the full subdivision.

## **ENVIRONMENTAL CONSIDERATIONS**

The subject parcel is well located within the Town to provide a residential development in close proximity to a wide variety of services that could promote walkability and avoid the need for day-to-day vehicle use for accessing many nearby necessities.

## **CONSULTATIONS**

In accordance with standard practice for review of redline amendments and development agreement applications applicable external agencies and internal departments have been circulated. The following comment has been provided.

### **1) Essex Region Conservation Authority (ERCA)**

ERCA had no objection to the original draft plan of subdivision subject to an acceptable storm water management plan, which was approved.

### **2) Town of Kingsville Technical Advisory Committee**

No additional comments from TAC regarding zoning or changes to draft plan of subdivision. Administration will work with the developer and the developer's on-site engineer to ensure any existing infrastructure that was installed without full municipal oversight as contemplated in the town's Development Manual will be reviewed to ensure it complies fully with development guidelines and requirements.

## **PREPARED BY:**



---

Richard J.H. Wyma, CSLA  
Director of Community and Development Services

## **REVIEWED BY:**



---

John Norton  
CAO





May 7, 2024

County of Essex  
360 Fairview Avenue, West  
Suite 202  
Essex, ON N8M 1Y6

Attn: Rebecca Belanger,  
Manager, Planning Services

**Re: Heritage Gardens Subdivision - File No. 37-T-23003, Town of Kingsville**

Dear Ms. Belanger,

We are writing to inform you of our intention to formally submit this request to consider our proposed redline revision to the Draft Plan of Subdivision for the above noted file. We are requesting these redline amendments in order to create more affordable flexible housing option units/building lots within the community through the creation of a mix of semi-detached/single family dwelling unit lots. Our recent client experiences have shown that both current and the foreseeable future market conditions are now driving a stronger demand for reduced frontage building lots and with a corresponding shortfall in supply, these proposed lots will now better support and fulfill the market needs.

Furthermore, for your reference, the current attached draft Plan of Subdivision summarizes our proposed Redline amendments as follows; current Block 1 to 11 (70' semi-detached lots) revised to 15 - 45' frontage single family lots. The amended legal redline plan is attached for your reference.

As such, we respectfully request your careful consideration of the Redline amendments to the Draft Plan for submission.

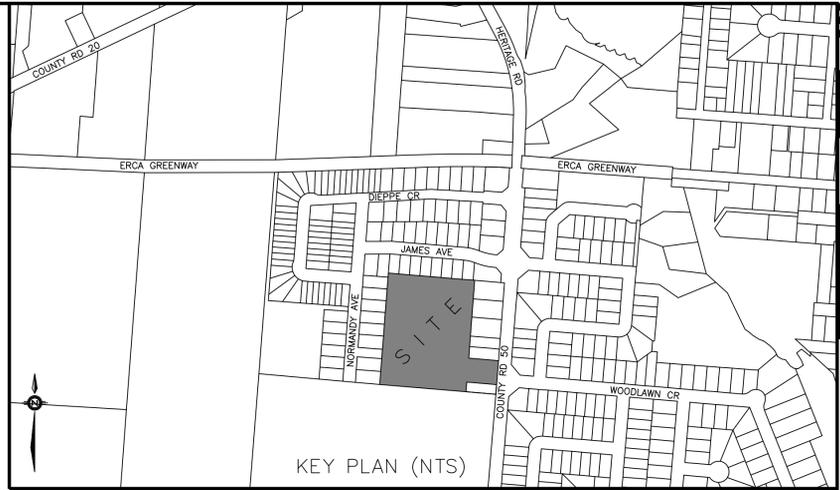
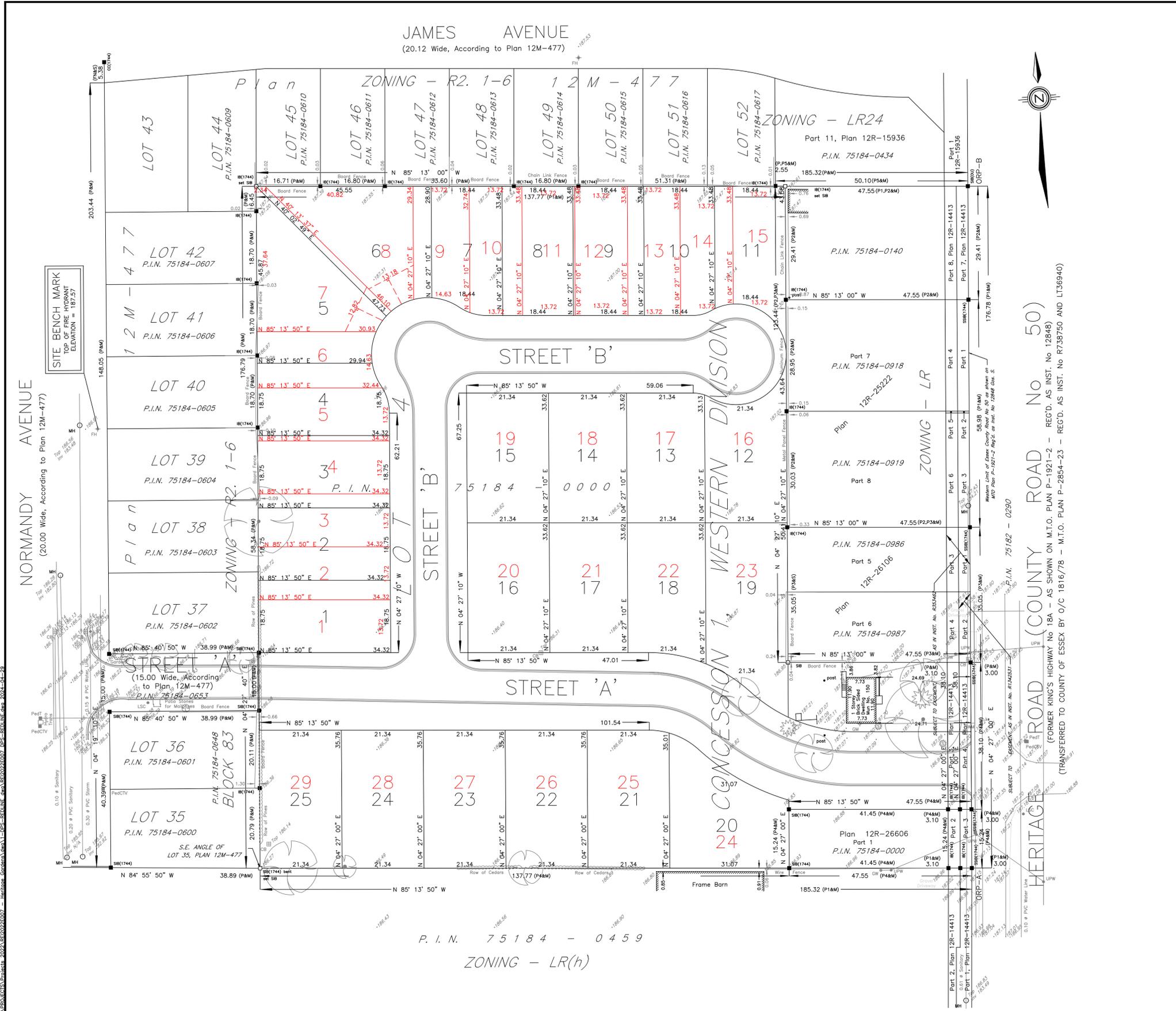
Please reach out to the undersigned, should you require further clarifications in this regard.

Yours truly,

A handwritten signature in black ink, appearing to read "Rob", with a long horizontal flourish extending to the right.

Robert Molliconi, P. Eng.  
Manager, Nevan Developments Inc.  
Attachment:

cc: Sarah Jamshidi, Town of Kingsville, Manager of Planning & Development Services



**OWNER'S CERTIFICATE**

A) SHOWN ON PLAN  
 B) SHOWN ON KEY PLAN  
 C) SHOWN ON PLAN  
 D) RESIDENTIAL  
 E) SHOWN ON PLAN  
 F) SHOWN ON PLAN  
 G) SHOWN ON PLAN  
 H) PIPED MUNICIPAL  
 I) CLAY  
 J) SHOWN ON PLAN  
 K) STORM, SANITARY AND WATER TO BE PROVIDED  
 L) SHOWN ON PLAN

**OWNER'S CERTIFICATE**

WE HEREBY AUTHORIZE THE FILING OF THIS DRAFT PLAN FOR APPROVAL.

DATE: \_\_\_\_\_ SIGNED: \_\_\_\_\_  
 1552843 ONTARIO LTD.

**SURVEYOR'S CERTIFICATE**

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN ON THIS PLAN.

DATE: \_\_\_\_\_ SIGNED: \_\_\_\_\_  
 ONTARIO LAND SURVEYOR

**LAND USE SCHEDULE**

USE	BLOCKS	UNITS	AREA (Ac)
SEMI-DETACHED DWELLING	1-25	50	4.426
SEVERED PARCEL	-	-	0.209
R.O.W.	-	-	1.829
<b>TOTAL</b>	<b>25</b>	<b>50</b>	<b>6.464</b>

**LAND USE SCHEDULE**

USE	BLOCKS	UNITS	AREA (Ac)
SINGLE FAMILY DWELLING	1-15	15	1.841
SEMI-DETACHED DWELLING	16-29	28	2.585
SEVERED PARCEL	-	-	0.209
R.O.W.	-	-	1.829
<b>TOTAL</b>	<b>29</b>	<b>43</b>	<b>6.464</b>

NOTES:  
 ALL DIMENSIONS SHOWN IN METERS UNLESS NOTED OTHERWISE.

**ROOD ENGINEERING INC.**  
 CONSULTING ENGINEERS  
 Leamington, Ontario  
 519-322-1621

**NEVAN DEVELOPMENTS**

No.	REVISION	DATE	BY
8.	REDLINE REVISION	2024-04-29	DM
7.	REVISED LAYOUT FOR COUNTY APPROVAL	2023-07-27	RM
6.	REVISED FOR COUNTY SUBMISSION	2023-02-21	RM
5.	REVISED FOR COUNTY SUBMISSION	2023-02-10	RM
4.	ISSUED FOR REVIEW	2023-01-10	RM
3.	ISSUED FOR FUNCTIONAL SERVICING REPORT	2022-12-05	GR
2.	REVISED AS PER PIC COMMENTS	2022-11-28	RM
1.	ISSUED FOR REVIEW	2022-11-21	RM
No.	ISSUED FOR:	DATE:	BY:

PROJECT No.: REI2022E007  
 SCALE: 1:500  
 SHEET No.: 1 of 1

CURVE SCHEDULE				CURVE SCHEDULE				CURVE SCHEDULE						
CURVE	RADIUS	ARC	CHORD	CHORD BEARING	CURVE	RADIUS	ARC	CHORD	CHORD BEARING	CURVE	RADIUS	ARC	CHORD	CHORD BEARING
C1	39.63	17.34	17.20	N72°40'30"W	C11	9.00	4.76	4.71	N70°03'30"W	C21	19.51	5.22	5.21	N76°56'50"W
C2	12.58	7.54	7.43	N12°14'10"W	C12	13.06	6.14	6.08	N78°06'20"E	C22	19.51	8.93	8.85	N56°09'50"W
C3	14.68	40.33	28.79	N49°47'20"E	C13	13.06	21.25	18.98	N41°49'30"W	C23	9.00	2.98	2.96	N75°44'50"W
C4	12.80	7.27	7.17	N67°46'20"W	C14	13.06	27.43	22.66	N64°56'30"E	C24	9.00	1.79	1.78	N60°35'00"W
C5	12.58	6.85	6.76	N10°39'10"W	C15	39.63	29.16	28.51	N64°07'50"W	C25	14.68	7.58	7.50	N69°01'30"E
C6	12.58	0.69	0.69	N27°49'30"W	C16	39.63	15.37	15.27	N74°06'10"W	C26	14.68	11.45	11.16	N73°50'30"W
C7	14.68	13.72	13.23	N02°08'20"W	C17	39.63	13.80	13.73	N53°01'20"W	C27	12.80	3.14	3.13	N58°31'40"W
C8	14.68	5.78	5.75	N35°55'30"E	C18	39.63	11.82	11.78	N51°35'40"W	C28	12.80	4.13	4.11	N74°48'00"W
C9	9.00	4.73	4.68	N79°42'40"E	C19	59.75	27.07	26.84	N56°01'50"W					
C10	13.06	54.81	22.57	N04°52'20"E	C20	19.51	14.15	13.84	N63°49'50"W					

PLAN 12M-

I CERTIFY THAT THIS PLAN IS REGISTERED IN THE LAND REGISTRY OFFICE FOR THE LAND TITLES DIVISION OF ESSEX (12) AT \_\_\_\_\_ O'CLOCK ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_ AND ENTERED IN THE PARCEL REGISTER FOR PROPERTY IDENTIFIER \_\_\_\_\_ AND REQUIRED CONSENTS ARE REGISTERED AS PLAN DOCUMENT NO. \_\_\_\_\_

REPRESENTATIVE FOR LAND REGISTRAR

THIS PLAN COMPRISES ALL OF THE LAND IDENTIFIED BY P.I.N. 75184-1195  
 STREET A - SUBJECT TO EASEMENT, AS IN INST. No. R353462  
 STREET A - SUBJECT TO EASEMENT, AS IN INST. No. R1342531

PLAN OF SUBDIVISION OF PART OF LOT 4 CONCESSION 1 WESTERN DIVISION GEOGRAPHIC TOWNSHIP OF GOSFIELD SOUTH NOW IN THE TOWN OF KINGSVILLE COUNTY OF ESSEX VERHAEGEN LAND SURVEYORS, A DIVISION OF J.D. BARNES LTD.

SCALE = 1:500

"METRIC" DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

INTEGRATION DATA		
OBSERVED REFERENCE POINTS (ORPs): UTM ZONE 17 NAD83 (CSRS) (2010.0). COORDINATES TO URBAN ACCURACY PER SECTION 14 (2) OF O.REG 216/10.		
POINT ID	NORTHING	EASTING
ORP-A	4654542.28	355129.71
ORP-B	4654718.46	355143.43
COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.		

**LEGEND AND NOTES**  
 BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS)(2010.0).  
 DISTANCES ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999835  
 ALL MONUMENTS SHOWN THUSLY □ ARE IRON BARS (IB) UNLESS OTHERWISE NOTED.  
 □ DENOTES 25mm X 25mm X 1.22m STANDARD IRON BAR  
 □ DENOTES 25mm X 25mm X 0.61m SHORT STANDARD IRON BAR  
 □ DENOTES 18mm X 18mm X 0.61m IRON BAR  
 □ DENOTES 19mm diameter X 0.61m ROUND IRON BAR  
 □ DENOTES CUT-CROSS  
 □ DENOTES 5mm X 50mm STEEL PIN  
 □ DENOTES PLASTIC BAR  
 □ DENOTES SURVEY MONUMENT FOUND  
 □ DENOTES SURVEY MONUMENT SET AND MARKED JDB  
 □ DENOTES WITNESS  
 □ DENOTES PERPENDICULAR  
 □ DENOTES SET PROPORTIONALLY  
 □ DENOTES MEASURED  
 □ DENOTES INST. No.  
 ORP DENOTES OBSERVED REFERENCE POINT  
 ALL SET SSIB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11(4) OF O.REG. 525/91.  
 (N) DENOTES NOT IDENTIFIABLE. (OU) DENOTES ORIGIN UNKNOWN  
 (S/P) DENOTES SET PROPORTIONALLY  
 (P) DENOTES PLAN 12R-29604  
 (1744) DENOTES VERHAEGEN SURVEYORS INC., O.L.S.  
 (JDB) DENOTES J.D. BARNES LIMITED, O.L.S.

**OWNER'S CERTIFICATE**  
 THIS IS TO CERTIFY THAT  
 1. BLOCKS 1 to 10 (Incl.), LOTS 11 to 25 (Incl.), BLOCKS 26 to 29 (Incl.), and the STREETS NAMELY STREET A and STREET B HAVE BEEN LAID OUT IN ACCORDANCE WITH OUR INSTRUCTIONS.  
 2. THE STREETS ARE DEDICATED TO THE CORPORATION OF THE TOWN OF KINGSVILLE AS PUBLIC HIGHWAYS.  
 1552843 ONTARIO LTD.  
 WALTER BRANCO  
 I HAVE AUTHORITY TO BIND THE CORPORATION"

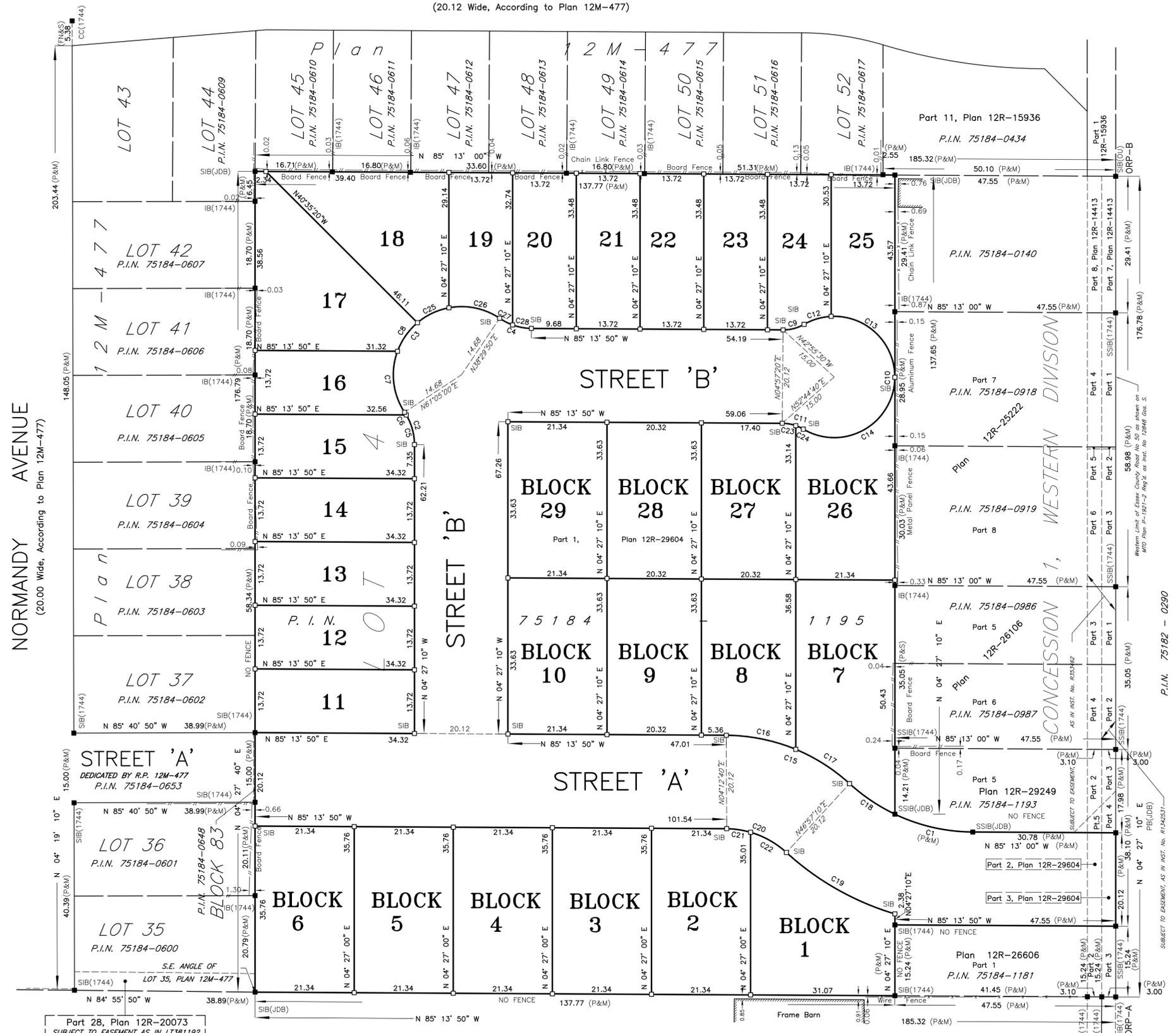
**SURVEYOR'S CERTIFICATE**  
 I CERTIFY THAT:  
 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.  
 2. THIS SURVEY WAS COMPLETED ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_

DATE JUNE 28, 2024.  
 ALEC S. MANTHA  
 ONTARIO LAND SURVEYOR  
 THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER XXXXXX

**VERHAEGEN**  
 LAND SURVEYORS  
 A DIVISION OF J.D. BARNES LTD.  
 944 OTTAWA STREET, WINDSOR, ON, N8X 2E1  
 T: (519) 258-1772 F: (519) 258-1791 www.jdbarnes.com

DRAWN BY: CMW	CHECKED BY: AM	REFERENCE NO.: 22-48-278-01
CAD File: 22-48-278-00.dwg	File: E-GOS.S.-1W.D.-4	CAD Date: June 28th, 2024

JAMES AVENUE  
 (20.12 Wide, According to Plan 12M-477)



NORMANDY AVENUE  
 (20.00 Wide, According to Plan 12M-477)

ESSEX COUNTY ROAD No. 50  
 (FORMER KING'S HIGHWAY No 18A - AS SHOWN ON M.T.O. PLAN P-1921-2 - REG'D. AS INST. No 12846)  
 (TRANSFERRED TO COUNTY OF ESSEX BY O/C 1816/78 - M.T.O. PLAN P-2854-23 - REG'D. AS INST. No R738750 AND L736940)

P. I. N. 7 5 1 8 4 - 0 4 5 9

# THE CORPORATION OF THE TOWN OF KINGSVILLE

## BY-LAW 51-2024

Being a By-law to amend By-law No. 1-2014,  
the Comprehensive Zoning By-law for the Town of Kingsville

**WHEREAS** By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

**AND WHEREAS** the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

**AND WHEREAS** the application conforms to the Official Plan of the Town of Kingsville;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. That Subsection 6.7 e) LAKESHORE RESIDENTIAL (LR-35) EXCEPTIONS is amended with the following:

### **6.7.35 'Lakeshore Residential Exception 35 (LR-35)'**

For lands shown as LR-35 on Map 64 Schedule "A" of this By-law.

a) ***Permitted Uses***

- i) Those uses permitted under Section 6.7 Lakeshore Residential (LR).

b) ***Permitted Buildings and Structures***

- i) Single family residential structures permitted in Part 1 as shown in Appendix A
- ii) those *buildings and structures permitted* in Section 6.7;
- iii) Semi-detached dwelling;
- iv) Semi-detached dwelling unit;
- iii) *Buildings and structures accessory to the permitted uses.*

c) ***Zone Provisions***

- i) All lot and building requirements shall be in accordance with the provisions of the (LR) Section 6.7 for the lands Zoned (LR-35);
- ii) Notwithstanding the Zone provisions of Section 6.7, for lands zoned (LR-35) the following regulations shall apply:

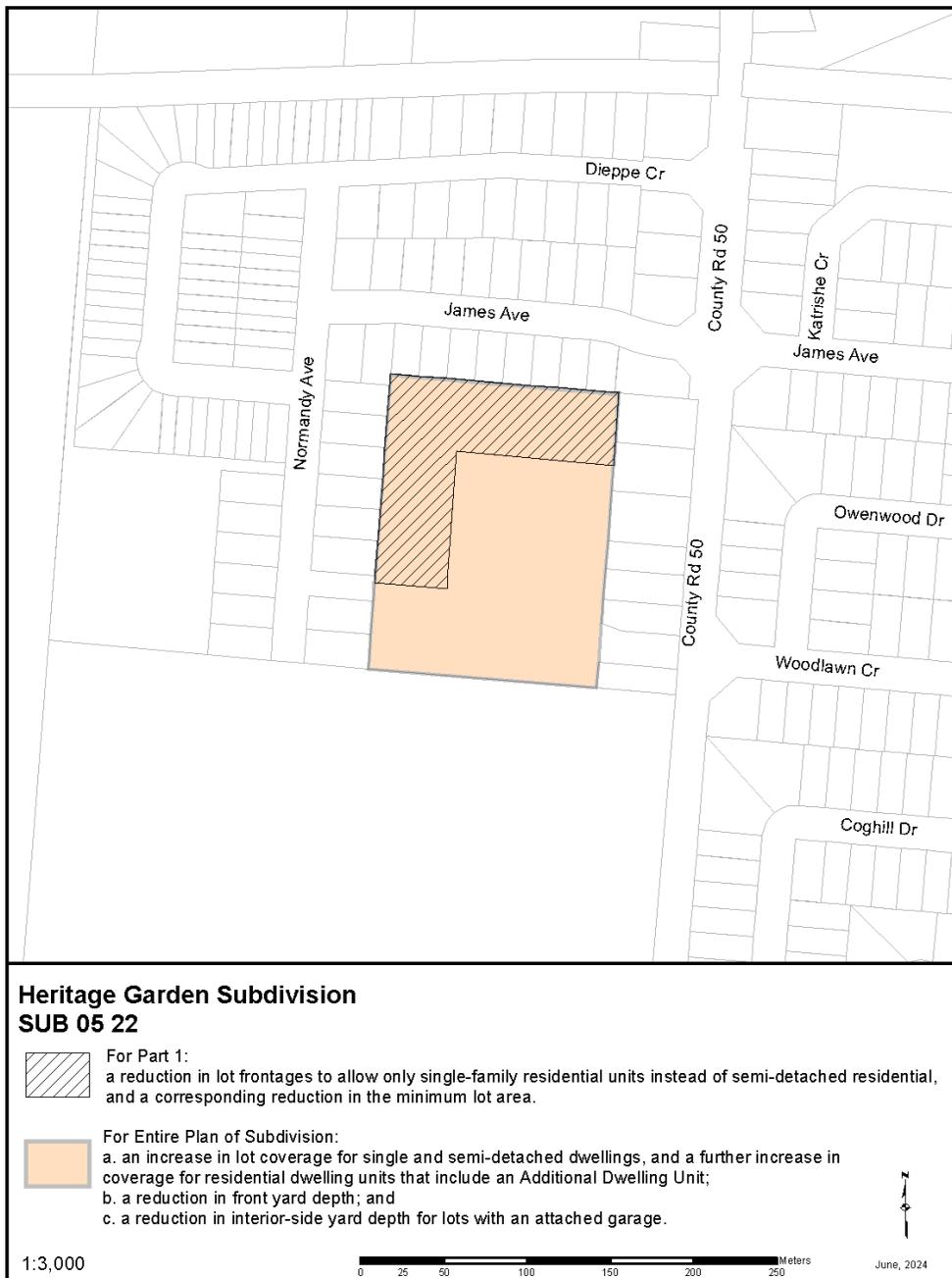
	Single detached dwelling	Semi-detached dwelling	Semi-detached dwelling unit
Lot Area (min)	440 m <sup>2</sup>	532 m <sup>2</sup>	266 m <sup>2</sup>
Lot frontage (min)	12.5 m (42 ft)	18 m (59 ft)	9 m (29.5 ft)
Lot coverage, where there are no legal Additional Dwelling Units (max)	50%		
Lot coverage, where there are legal Additional Dwelling Units (max)	60%		
Building height (max)	11 m (36 ft)		

Front yard (min)	5.5 m (18 ft)
Interior side yard (min)	1.2 m (4ft) for main buildings with an attached garage or carport; or 1.5 m (5 ft) on one side of the main building and 3.0 m (10 ft) on the other side when there is no attached garage or carport.
Exterior side yard (min)	1.5 m (5 ft)
Rear yard (min)	6 m (20 ft)

- This by-law shall come into force and take effect from the date of passing by Council and in accordance with Section 34 of the Planning Act.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 8<sup>th</sup> DAY OF July, 2024.**

### Schedule 'A'



# THE CORPORATION OF THE TOWN OF KINGSVILLE

## BY-LAW 54-2024

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**Being a By-law to amend By-law No. 1-2014,  
the Comprehensive Zoning By-law for the Town of Kingsville**

**WHEREAS** By-law No. 1-2014 is the Town's Comprehensive Zoning By-law to regulate the use of land and the character, location and use of buildings and structures in the Town of Kingsville;

**AND WHEREAS** the Council of the Corporation of the Town of Kingsville deems it expedient and in the best interest of proper planning to further amend By-law No. 1-2014 as herein provided;

**AND WHEREAS** the application conforms to the Official Plan of the Town of Kingsville;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. Schedule "A", Map 64 of By-law 1-2014 are hereby amended by changing the zone symbol on lands, known municipally as, 150 Heritage Road, Lot 4, Concession 1, Western Division, as shown on Schedule 'A' in cross-hatch attached hereto from 'Lakeshore Residential - holding "LR-(h)" to 'Lakeshore Residential Exemption 35 (LR-35)'.
2. This by-law shall come into force and take effect from the date of passing by Council and shall come into force in accordance with Section 36 of the *Planning Act*.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS  
8<sup>th</sup> DAY OF July, 2024.**

New schedule A to be attached



**Date:** July 8, 2024  
**To:** Mayor and Council  
**Author:** Margaret Schroeder, Manager of Finance/Deputy Treasurer  
**RE:** Council and Committee – Conference, Travel and Other Expense Policy Update  
**Report No.:** FS-2024-08

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## **RECOMMENDED ACTION**

1. That the amendments to the Council and Committee – Conference, Travel and other Expense Policy, as recommended by Committee of the Whole and Administration, **BE APPROVED.**

## **BACKGROUND**

The Town of Kingsville is committed to providing Council and Committee Members with opportunities to attend Conferences and Special Events to effectively carry out their responsibilities as elected or appointed officials. This Policy establishes the manner by which Council and Committee conference, travel and other expenses will be reimbursed by the Town.

The existing policy was approved by Council on January 11<sup>th</sup>, 2021.

The existing policy was reviewed by the Committee of the Whole on June 17<sup>th</sup>, 2024.

## **DISCUSSION**

During the June 17<sup>th</sup>, 2024 Committee of the Whole meeting, the Committee directed Administration to update the policy based on a series of directions. These directions are summarized below and have been reflected in the amended policy attached to this report.

1. That Council approve the following:
  - a. increase the annual \$4,200.00 Conference Expense Account Budget, per member of Council, to \$6,500.00 effective in 2025;

**Action – As per the existing policy, Conference Expense Accounts are determined during budget deliberations. The Treasurer will ensure the motion noted above is reflected in the 2025 Draft Budget.**

- b. automatically issue payment to Members of Council for their attendance at eligible meetings or training events;

**Action – See section 6.3.**

- c. amend the definition of "Conference" in the Council and Committee – Conference, Travel, and Other Expense Policy to include weekends;

**Action – See section 6.3.**

- d. not amend the current per diem for attendance at “Special Events” contained in the Council and Committee – Conference, Travel, and Other Expense Policy (i.e. no compensation).

**Action – No action required, refer to section 6.5**

- 2. That Council approve the following amendment to the Council and Committee – Conference, Travel, and Other Expense Policy as such:
  - a. increase the breakfast allowance from \$15.00 to \$20.00;
  - b. increase the lunch allowance from \$20.00 to \$30.00; and,
  - c. increase the dinner allowance from \$40.00 to \$50.00.
  - d. And further, that Administration automatically issue payment to Members of Council for eligible meals.

**Action – See section 6.2 (iii).**

- 3. That Council approve the following amendments to the Council and Committee – Conference, Travel, and Other Expense Policy as such:
  - a. “Councillors may claim mileage to attend Special Events, Committee Meetings, or to perform other duties of Council for which no direct compensation is received.
    - i. For clarity, the following activities are not eligible for mileage;
      - 1. Attendance at Regular or Special Meetings of Council, or
      - 2. Attendance at Committee Meetings for which they receive direct compensation, or
      - 3. If inside of Town boundaries.

Mileage claims are subject to the limits of each Councillor’s Conference Expense Account.”

**Action – See section 6.7**

4. That the Council and Committee – Conference, Travel, and Other Expense Policy BE AMENDED to require a Meeting Expense form to be submitted with receipts for the Mayor's Promotional Account.

**Action – See section 6.6 and Appendix A.**

5. That the Council and Committee – Conference, Travel, and Other Expense Policy BE AMENDED to provide the Mayor with the authority to approve expenses in excess of an individual Councillor's Conference Expense Budget (upon request).

**Action – See section 5.2 (ii)**

6. That the Council and Committee – Conference, Travel, and Other Expense Policy BE AMENDED to require that all expense claims for Councillors and the Deputy Mayor under this Policy require approval.

**Action – See section 5.2 (i)**

Administration is recommending some additional policy language amendments which have been highlighted in the attached policy.

## **FINANCIAL CONSIDERATIONS**

Increasing the individual Council Conference Expense accounts from \$4,200 to \$6,500 annually will result in a \$16,100 increase to the 2025 Council Budget.

## **ENVIRONMENTAL CONSIDERATIONS**

None

## **CONSULTATIONS**

COTW  
CAO

PREPARED BY:



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Margaret Schroeder, CPA  
Manager of Finance/Deputy Treasurer

REVIEWED BY:

A handwritten signature in black ink, appearing to read 'Ry McLeod', with a long horizontal flourish extending to the right.

---

Ryan McLeod, CPA  
Director of Finance and Corporate Services/Treasurer

Policy #: FIN-04

Issued: July 7, 2024

Reviewed/Revised:

Prepared By: R. McLeod

Reviewed By: J. Norton

Approved By: Council

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## 1.0 PURPOSE

The Town of Kingsville (“Town”) is committed to providing Council and Committee Members with opportunities to attend Conferences and Special Events to effectively carry out their responsibilities as elected or appointed officials. This Policy establishes the manner by which Council and Committee conference, travel and other expenses will be reimbursed by the Town.

## 2.0 SCOPE

This Policy applies to all **Town of Kingsville** Council and Committee Members.

## 3.0 DEFINITIONS

“**Committee**” means a committee created by Council;

“**Committee Member**” means a member of a Committee **appointed by Council**;

“**Conferences**” means seminars or meetings for consultation, discussion and/or instruction, workshops or training that are relevant to the function of the Council or Committee Member;

“**Council Member**” means an elected official of the Town of Kingsville.

“**Maximum Conference Expense Account**” means the maximum amount to be paid annually to each Council Member for expenses incurred in connection with his or her attendance at Conferences and Special Events as calculated by dividing the total amount provided for in the approved budget by the number of Council Members.

“**Mileage**” means the automobile allowance rate per kilometer as set by Canada Revenue Agency multiplied by the number of kilometers to the point of destination and return.

“**Normal Business Hours**” means Monday to Friday from 8:30 am – 4:30 pm, excluding Holidays.

“**Special Event**” means a day or evening event or festivity in which an individual is attending as a representative of the Town of Kingsville.

#### 4.0 REFERENCE DOCUMENTS

Annual Budget

Expense Claim Form

#### 5.0 RESPONSIBILITIES

##### 5.1 Council and Committee Members

- i) Shall ensure that all such expenses claimed are legitimate to the business of the Town of Kingsville or enable them to better carry out the duties of their office,
- ii) Shall submit any requests for reimbursement, with valid receipts (where applicable), within 30 days from the date in which the expense was incurred.

##### 5.2 Mayor

- i) Shall approve all expense claims submitted by members of Council.
- ii) May authorize requests for reimbursement that exceed an individual Councillor's Conference Expense Account but are otherwise within the overall Council budget and the guidelines of this policy.

##### 5.3 CAO

- i) Shall approve all expense claims submitted by the Mayor.
- ii) Any significant discrepancies from this policy or budget allocations shall be reported to Council.

##### 5.4 Clerk (or designate)

- i) Requests for payment of expenses incurred shall be submitted to the Clerk using an Expense Claim Form as developed by Administration; and,
- ii) All travel accommodations are to be scheduled by the Clerk's Department.

##### 5.5 Treasurer (or designate)

- ~~i) Review and approve all expense reimbursement claims in accordance with this policy;~~

- ii) Provide a quarterly update to each Councillor on their Conference Expense Account balance, or upon request,
- iii) Prepare an annual statement on remuneration and expenses paid to Council and Committee Members, as required by section 284 of the MUNICIPAL ACT, 2001, S.O. 2001, c. 25, as amended.

## 6.0 PROCEDURE

### 6.1 Approval for Attendance

#### Council Members

Shall use their judgement to attend Conferences or Special Events which they deem to be beneficial to the Town, subject to the limits of their Conference Expense Account.

#### Committee Members

Requests to attend Conferences by Committee Members shall be approved by the Mayor Chair of Committee. Such approvals shall be subject to the Committee's approved budget.

For clarity, if a Councillor is attending a Conference or Special Event, by virtue of their role as a Committee Member, the expenses shall be charged to their respective Committee's budget. If no such budget exists, the Councillor may claim the expense against their Conference Expense Account.

### 6.2 Conference Expenses

Subject to the limits of each Councillor's Conference Expense Account or Committee Budget, the following expenses shall be paid by the Town, in connection with attendance at Conferences:

#### i) Transportation

- a) The lessor of mileage or the actual transportation expense. Mileage will only be paid when travel is required to attend Conferences outside of the boundaries of the Town of Kingsville.
- b) Where possible, Council or Committee members are encouraged to use Town owned pool vehicles and / or car pool.
- c) Where more than one member of Council is travelling in the same vehicle, only the owner of said vehicle is entitled to

- reimbursement for mileage expenses,
- d) Loss or damage to a personal vehicle shall not be the responsibility of the Town of Kingsville. Owners of personal vehicles should ensure the vehicle is properly maintained and is appropriately insured. The owner assumes all liability and risk associated with use of the personal vehicle.
- e) Any traffic violations, including parking tickets, will not be reimbursed by the Town,
- f) Air and rail transportation shall be limited to economy or coach class only, except where business class travel is more economical because of a membership or government discount. Any deviation from this must be approved in advance by the Mayor.

i) **Registration** – the registration fee.

ii) **Accommodation** – The actual cost of accommodation will be provided as follows:

- a) Overnight accommodation will be paid for the duration of the event when required to travel outside Windsor & Essex County, including travel time,
- b) Overnight accommodation should be selected on the basis of practical location and reasonable cost, with preference to establishments offering conference related rates or one which provides a Government rate where possible. Accommodation with relatives or friends will not be reimbursed,
- c) Ancillary charges, including, but not limited to pay-per-view and mini-bar expenses, are the personal responsibility of the traveler and will not be reimbursed,

iii) **Meals** – An allowance for meals will be provided as follows, except when meals are provided as part of the Conference registration.

Breakfast	\$20.00
Lunch	\$30.00
Dinner	\$50.00

Receipts to claim a meal allowance are not required and will be provided to Council automatically based on the Conference or Travel

**itinerary.** In lieu of receipts, the following guideline shall be applied when a claiming meal allowance:

- Breakfast – When the individual is required to leave for a trip before 6 a.m. or is away overnight.
- Lunch – When the individual is required to leave before noon or arrives home after 2 pm.
- Dinner – When the individual could not arrive home before 7 pm or is away overnight.

**If Council members are unable to partake in the meals offered by a Conference vendor, the Mayor may approve additional reimbursements.**

iv) **Incidentals** – personal telephone expenses, taxis, shuttles, parking, gratuities, applicable taxes, etc. to a maximum of \$55.00 per day. Receipts are required to claim incidental expenses.

**6.3 Remuneration (per diems) - Each Council Member shall receive remuneration in the amount of \$200.00 for each full day or \$100.00 for each half day they attend a:**

- Special Meeting of Council during Normal Business Hours,
- Conference (any time)
- Travel time to attend a Conference (any time)

**Eligible remuneration will be issued automatically, where applicable, on the following pay period.**

Such remuneration shall be applied to the Council Member's Conference Expense Account.

#### **6.4 Town Clothing**

A Council Member may request reimbursement for clothing with the Town logo. Such expenses will be applied to the Councillor's Conference Expense Account.

#### **6.5 Attendance at Special Events**

Council members may attend Special Events as a representative of the Town of Kingsville. The cost of their ticket or admission to the Special

Event will be charged to the Councillor's Conference Expense Account. The cost of tickets or admission for guests will not be eligible for reimbursement. No remuneration (per diems) shall be paid to Councillor's for attendance at Special Events.

#### **6.6 Entertaining Business Meeting Expenses**

The Mayor is authorized to make expenditures to **conduct business with** entertain various individuals and groups when the Mayor deems the same to be advantageous to the Town. The expense shall be charged to the "Mayor and Town Promotional Account".

The CAO may make expenditures to **conduct business with** entertain various individuals and groups when the CAO deems the same to be advantageous to the Town. The expense shall be charged to the Administration Miscellaneous Expense Account.

**When the Mayor or CAO hosts a business meeting that incurs expenses, they are required to complete the Meeting Expense Form (Appendix A). The purpose of the meeting and the names of all attendees must accompany the receipt. All expenses for meals are to be kept to a reasonable amount. (Note: gratuities and taxes are to be included)**

**Where deemed appropriate, only the Mayor or CAO may expense alcohol, and in limited circumstances.**

#### **6.7 General Travel/Mileage**

**Councillors may claim mileage to attend Special Events, Committee Meetings, or to perform other duties of Council for which no direct compensation is received.**

**The following activities are not eligible for mileage;**

- i. Attendance at Regular or Special Meetings of Council, or**
- ii. Attendance at Committee Meetings for which they receive direct compensation,**
- iii. Other travel within Municipal Boundaries**

**For clarity, mileage claims are permitted for attendance at Regular or Special Council Meetings and Committee Meetings, when they occur outside of municipal boundaries.**

Mileage claims are subject to limits of each Councillor's Conference Expense Account.

## 7.0 GENERALLY

7.1 Council or Committee Members may request that the payment of certain expenses to be incurred in accordance with this policy be paid directly to the institution, service or transportation provider, hotel, or facility as the case may be, by the Town by way of Town credit card or otherwise.

7.2 Any requests for payment of expenses from a Councillor's Conference Expense Account which are deemed not in accordance with this policy shall require **approval from the Mayor** ~~approved motion of Council.~~

7.3 Upon each new Council term, Administration will review and provide recommendations to Council if there are necessary changes to the Council and Committee – Conference, Travel and Other Expenses Policy.

## 8.0 REVIEW/REVISIONS

No.	Revision Details (incl. provision #)	Revision By	Date
1.	Revision to include more clarity on mileage, meals, meeting expenses, conferences, etc.	M.Schroeder	July 8, 2024
2.			

Questions about this policy can be referred to the Director of Financial & IT Services



**TOWN OF KINGSVILLE**

**~ MEETING EXPENSE ~**

**Employee Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Meeting Subject:** \_\_\_\_\_

**Purpose of Meeting:** \_\_\_\_\_

**Names of Attendees (list):** \_\_\_\_\_

**Total Meeting Claimed (attach receipts):** \$ \_\_\_\_\_ -

**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Authorized By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**\*\* Please return this sheet to Payroll**



**Date:** July 8, 2024

**To:** Mayor and Council

**Author:** Angela Toole, Acting Manager of Municipal Governance & Clerk

**RE:** Essex County Nurse Practitioner-Led Clinic and Physician Recruitment and Retention Grants

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## RECOMMENDED ACTION

1. That Council **APPROVES** a grant for the Essex County Nurse Practitioner-Led Clinic (“ECNPLC”) for the provision of Nurse Practitioner services out of the medical clinic located at 273 Main Street East Kingsville, in the total amount of \$35,000.00 to be paid from the Town’s Health Care Reserve in monthly installments over a 1-year period, subject to certain conditions;
2. The CAO and Director of Finance/Treasurer **BE AUTHORIZED** to enter into the requisite Grant Agreement with the ECNPLC on behalf of the Town;
3. Council **APPROVES** a grant for the TMC Urgent Care Clinic – Kingsville, to assist in their efforts to recruit and retain physicians to practice out of the medical clinic at 273 Main Street East, Kingsville, in the total amount of \$30,000.00, to be paid from the Town’s Health Care Reserve in annual installments of \$6000.00 over a 5-year period, subject to certain conditions;
4. That the CAO and Director of Finance/Treasurer **BE AUTHORIZED** to enter into the requisite Grant Agreement with the TMC Urgent Care Clinic – Kingsville on behalf of the Town; and
5. Council **APPROVES** a policy and practice of not bringing forward for consideration future requests for financial support for medical services or medical practitioners, with an understanding that health care is a provincial responsibility and should be funded and provided to residents without requiring financial support by municipalities which have limited resources and many competing priorities.

## BACKGROUND

In March 2020, the Erie St. Clair Local Health Integration Network (“ESC-LHIN”) designated Kingsville as an “Area of High Physician Need” due to various factors including Kingsville’s rural position in proximity to existing primary care providers and its

diversified population of seniors and Mennonites, and international agricultural workers – groups that are typically unattached to primary care providers. A March 2020 analysis of physician demand found that 23% of Kingsville’s growing population does not have a primary care provider and that primary care provided to Kingsville residents is predominantly provided by the Leamington Family Health Team.

In 2022, the CAO presented a report to Council outlining the primary healthcare access challenges faced by Kingsville residents, and Council directed Administration to request operational funding from the Ministry of Health (“MOH”) for a Nurse Practitioner-Led Clinic (“NPLC”) for Kingsville to help address the identified primary care shortfall.

In February 2024, the Town was notified that it had successfully secured operational funding in partnership with the TMC Urgent Care Clinic and Ontario Health Team in the amount of \$424,525.00 for the expansion of the ECNPLC’s existing primary care services into Kingsville. The ECNPLC (Kingsville location) is now temporarily operating out of the TMC Urgent Care Clinic located at 273 Main Street East. The Kingsville location is the ECNPLC’s 4<sup>th</sup> clinic location in addition to Amherstburg, Windsor (Drouillard), and Essex.

## **DISCUSSION**

Ontario is the first province in Canada to introduce NPLCs as an innovative model for the delivery of comprehensive primary health care. Typically, NPLCs function as interprofessional primary care teams and help to connect vulnerable and marginalized people to a variety of healthcare professionals such as physicians, nurse practitioners, registered and practical nurses, physiotherapists, and social workers who work together to provide timely access to primary care leading to faster diagnosis, treatment and improved health outcomes. NPLCs are important as they have been proven to be effective at relieving the growing pressures faced by emergency departments and walk-in clinics.

In 2023 alone, the ECNPLC saw a total of 9629 individuals of which:

- 4809 patients were visiting for chronic pain issues and management;
- 291 patients were visiting for colon cancer screenings;
- 194 patients were visiting for breast cancer screenings; and,
- 190 patients were visiting for PAP tests.

Further to their effectiveness in relieving pressures on hospitals and walk-in clinics, a recent survey respecting service provision indicates high patient satisfaction: 97% of patients have reported getting an appointment on their preferred date when sick or experiencing health issues, and 98.48% of patients have said they feel involved in decisions about their care and treatment during consultations.

In January 2024, Council adopted its Strategic Plan – A 2040 Vision for Kingsville which identifies “Happy, Healthy Residents” as one of the Town’s four main priorities. The

preceding strategic plans have also identified the need for additional physicians to provide primary care to Kingsville residents. As a result, the previous Council directed Administration to place money into the Town’s Health Care Reserves in anticipation of future costs related to the provision of health care services in Kingsville and as such the current balance of the Town’s Health Care Reserve is \$65,000.00. Given the identified shortfall of primary care for Kingsville residents, Administration recommends that the Town issue a grant from the Town’s Health Care Reserve to help fund the ECNPLC and in exchange, the ECNPLC has committed to register 800 patients to the Kingsville location on or before June 1, 2025.

Further, while the ECNPLC is an important step toward addressing primary care shortfalls, the intent is not to negate the identified need for physicians.

Enticing physicians to practise in smaller communities can be difficult when the physicians have no prior knowledge of the community or incur additional travel expenses. In discussion with TMC Management, they are facing similar challenges in recruiting physicians to practise out of their Kingsville Urgent Care Clinic. To improve resident access to local physicians, Administration recommends issuing a grant from the Town’s Health Care Reserve to assist in TMC’s recruitment and retention efforts.

**FINANCIAL CONSIDERATIONS**

Should Council proceed with the Recommended Action, both grants referred to in this report total \$65,000.00 and will fully exhaust the Town’s Health Care Reserve. See detailed grant breakdown:

<b>Grant Recipient</b>	<b>Amount</b>	<b>Payment Frequency</b>
ECNPLC	\$35,000.00	Paid in monthly installments over a 1-year period
TMC Urgent Care Clinic	\$30,000.00	Paid in annual installments of \$6000.00 over a 5-year period.

**ENVIRONMENTAL CONSIDERATIONS**

None noted.

**CONSULTATIONS**

John Norton, CAO  
 Ryan McLeod, Director of Finance and Treasurer  
 Sue Rice, Economic Development and Tourism Officer

PREPARED BY:



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Angela Toole  
Acting Manager of Municipal Governance & Clerk

REVIEWED BY:



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John Norton  
CAO



**REGULAR MEETING OF COUNCIL**

**MINUTES**

**Monday, June 24, 2024**

**6:00 PM**

**Unico Community Centre**

**37 Beech Street**

**Kingsville, ON N9Y 1A9**

PRESENT Mayor Dennis Rogers  
Deputy Mayor Kimberly DeYong  
Councillor Tony Gaffan  
Councillor Debby Jarvis-Chausse  
Councillor Sheri Lowrie  
Councillor Thomas Neufeld  
Councillor Larry Patterson

Staff Present CAO, John Norton  
Acting Clerk, Angela Toole

**A. CALL TO ORDER**

Mayor Rogers called the Regular Meeting to order at 5:00 p.m.

**B. CLOSED SESSION**

**Moved By** Councillor Jarvis-Chausse

**Seconded By** Councillor Neufeld

That Council enter into Closed Session at 5:00 p.m. pursuant to Section 239 of the *Municipal Act, 2001*, to discuss the following items:

**Item I - Board and Committee Appointments (Communities in Bloom and Joint OPP Detachment Board)** to be heard under Section 239(2)(b) being personal matters about an identifiable individual including municipal employees; and,

**Item II - Status of Crossing Guard Program** to be heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

**CARRIED**

**C. LAND ACKNOWLEDGEMENT**

Mayor Rogers acknowledged the Three Fires Confederacy (Ojibwe, Potawatomie and Odawa) and the Traditional ancestral, unceded territory of Caldwell First Nation; the original people of Point Pelee, Pelee Island and its surrounding waters. We recognize and respect the First Nations who are stewards of the land and waters of Turtle Island and who have embraced this stewardship since time

immemorial. We would also like to acknowledge all the moccasins who have walked lands of Turtle Island.

**D. MOMENT OF SILENT REFLECTION AND NATIONAL ANTHEM**

**E. MAYOR'S WELCOME AND REMARKS**

Mayor Rogers welcomed those in attendance including those viewing online.

On behalf of Town Council and Town of Kingsville Administration and residents, Mayor Rogers extended deepest condolences to all those affected by the tragedy in Harrow Mayor Rogers said that mental illness is something that affects everyone and reminded the public to check in on people they know that are suffering. Mayor Rogers attended the vigil and said that the outpouring of community support was inspiring should instill faith in humanity.

**F. AMENDMENTS TO THE AGENDA**

Mayor Rogers noted that Item M.1- 2023 Financial Statements and Year End Review would be moved up.

Mayor Rogers also indicated that Item Q.1 - Joint OPP Detachment Board would not be heard tonight but would be heard at a later meeting date.

Deputy Mayor DeYong noted that she would have an announcement.

**G. DISCLOSURE OF PECUNIARY INTEREST**

Mayor Rogers reminded Council that any declaration is to be made prior to each item being discussed and to identify the nature of the conflict, if any, as the agenda items come forward.

None noted.

**H. REPORT OUT OF CLOSED SESSION**

**I. DELEGATIONS**

No Delegations.

**J. PRESENTATIONS**

**1. Presentation of 2023 Financial Statement Audit Report - Lindsay latonna, CPA, CA, and Tyler Hicks, CPA, CA, Partners at HMID LLP**

Lindsay latonna, CPA and CA and Tyler Hicks, CPA, CA and Partners at HMID LLP presented a briefing on the auditor's report of the 2023 Financial Statements.

**K. REPORTS - FINANCE AND CORPORATE SERVICES**

**1. 2023 Financial Statements and Year End Review**

**Moved By** Councillor Patterson

**Seconded By** Councillor Gaffan

1. That the Financial Statements for the Corporation of the Town of Kingsville for the year ending December 31, 2023, as audited by HMID LLP, **BE APPROVED**;
2. That the 2023 Treasurer's Statement of Development Charge Reserve Funds, **BE APPROVED**;
3. That the 2023 Statement of Investment Activity, **BE APPROVED**; and

4. That the 2023 general budget surplus of \$933,193, be applied to the Ridgeview Park Community Centre project, **BE APPROVED**.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**L. MATTERS SUBJECT TO NOTICE**

No Matters Subject to Notice.

**M. REPORTS - PLANNING AND DEVELOPMENT SERVICES**

**1. Jasperson Drive Traffic By-law Amendments**

**Moved By** Deputy Mayor DeYong

**Seconded By** Councillor Gaffan

That Council **DIRECTS** Administration to bring a report back to Council on community safety zone options for Jasperson Drive.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**Moved By** Deputy Mayor DeYong

**Seconded By** Councillor Jarvis-Chausse

That Kingsville Traffic By-law 21-2005 **BE AMENDED** to include “No Stopping” signs on Jasperson Drive from 1576 Jasperson Drive to a point 150 metres north of Woodycrest Ave.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**2. West Side Collector Road – Class EA**

**Moved By** Councillor Jarvis-Chausse

**Seconded By** Councillor Lowrie

That Council **ENDORSE** the West Side Collector Road Municipal Class Environmental Assessment Report and **DIRECT** Administration to continue with the requisite detailed engineering and design work.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**3. Part Lot Control Exemption Application (PLC-2024-2) for 7 Lukas Drive**

**Moved By** Councillor Neufeld

**Seconded By** Councillor Gaffan

That Part Lot Control By-law 43-2024 to allow Block 61 on Plan 12M-598 to be exempt from Section 50(5) of the Planning Act **BE APPROVED**.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**N. REPORTS - FIRE RESCUE SERVICES**

No reports at this time.

**O. REPORTS - PUBLIC OPERATIONS**

No reports at this time.

**P. REPORTS - BUILDING AND BY-LAW SERVICES**

No reports at this time.

**Q. REPORTS - CAO's OFFICE**

**1. Joint OPP Detachment Board (South) - Appointment Update**

Mayor Rogers advised that this report would be heard at a later date.

**2. Land Acquisition - Road 2**

**Moved By** Deputy Mayor DeYong

**Seconded By** Councillor Patterson

That Council **APPROVE** entering into an Agreement of Purchase and Sale, on the terms described in this report, with the owner of a portion of land municipally known as 500 Road 2 East, Kingsville and direct Administration to execute any documentation required to acquire said lands; and,

That Council **APPROVE** funding the purchase from the Public Works Capital Reserve (03-000-032-39068) in the amount of approximately \$104,700.00.

**For (7):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Lowrie, Councillor Neufeld, and Councillor Patterson

**CARRIED (7 to 0)**

**3. Crossing Guard Program**

Jennifer Galea, Manager of Human Resources, presented the report on the Town's Crossing Guard Program.

**Moved By** Deputy Mayor DeYong  
**Seconded By** Councillor Patterson

1. As a result of the closure of Kingsville Public School, Council **APPROVES** the removal of the four crossings at the following locations: Water Street and Division Road, King Street and Division Road, King Street and Chestnut Street and Chestnut and Main Street West, effective September 1, 2024;
2. As a result of lunch schedule change for students at John de Brebeuf, Council **APPROVES** the removal of crossing guard services during lunch hour only at the following locations: Division Road South and Mill Street, and Main Street West at Spruce Street, effective September 1, 2024 (for clarity, crossing guards will continue their services at this location before and after school);
3. Council **DIRECTS** Administration to hold a public information meeting to provide information to parents and school board officials on this phase-out change in crossing guard services and the alternative approach of providing pedestrian crossovers (PXOs) by September 2025.

**For (6):** Mayor Rogers, Deputy Mayor DeYong, Councillor Gaffan, Councillor Jarvis-Chausse, Councillor Neufeld, and Councillor Patterson

**Against (1):** Councillor Lowrie

**CARRIED (6 to 1)**

**R. CONSENT AGENDA**

**Moved By** Councillor Neufeld  
**Seconded By** Councillor Gaffan

That Items 1 through 5 on the Consent Agenda, **BE RECEIVED.**

1. Regular Council Meeting Minutes - May 27, 2024
2. Heritage Advisory Committee Minutes - May 7, 2024
3. Communities in Bloom Minutes - May 7, 2024
4. Fantasy of Lights Minutes - April 30, 2024
5. Heritage Advisory Committee Minutes - April 2, 2024

**CARRIED**

**S. CORRESPONDENCE**

No Correspondence.

**T. NOTICES OF MOTION**

No Notices of Motion.

**U. UNFINISHED BUSINESS AND ANNOUNCEMENTS**

Deputy Mayor DeYong made an announcement regarding the newly branded Kingsville-Essex Highland Games. It was held on June 22, 2024, at the Canadian Transportation Museum & Heritage Village and was well attended.**BYLAWS**

**V. BY-LAWS**

**Moved By** Deputy Mayor DeYong  
**Seconded By** Councillor Neufeld

That the following By-laws receive three readings and finally pass:

**By-law 44-2024** being a By-law to Appoint a Member to the Communities in Bloom Committee; and,

**By-law 48-2024** being a By-law authorizing the entering into of a Municipal Funding Agreement between the Association of Municipalities of Ontario and The Corporation of the Town of Kingsville; and,

**By-law 52-2024** being a By-law to confirm the proceedings of The Council of the Corporation of the Town of Kingsville at its June 24, 2024, Regular Meeting of Council.

**CARRIED**

**W. CLOSED SESSION**

**Moved By** Councillor Patterson  
**Seconded By** Councillor Lowrie

That Council enter into Closed Session at 7:07 p.m. pursuant to Section 239 of the *Municipal Act, 2001*, to discuss the following item:

**Item I - Legal Matter** to be heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

**Item II - Procurement Contract Involving the Province of Ontario** to be heard under Section 239(2)(f) being advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and, Section 239(2)(h) being information supplied in confidence to the municipality by another level of government.

**CARRIED**

**X. ADJOURNMENT**

That Council rise from Closed Session and adjourn the Regular Meeting at 7:56 p.m.

**CARRIED**

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MAYOR, Dennis Rogers

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ACTING CLERK, Angela Toole



# COMMITTEE MINUTES

MAY 14, 2024, 6:15PM  
CARNEGIE ARTS & VISITORS CENTER

## A. CALL TO ORDER

Jason Martin called the Meeting to order at 6:15p.m. with the following Members in attendance:

### MEMBERS OF BIA BOARD:

Jason Martin - Chair  
Tony Gaffan – Vice-Chair  
Councillor Sheri Lowrie  
David Debergh  
Maria Edwards  
Amanda Everaert – Late  
Abby Jakob – Late  
Heather Brown

### MEMBERS OF ADMINISTRATION:

Jodie McIntyre

### MEMBER(S) OF TOWN:

Sue Rice – Town Liaison

### ABSENT:

Roberta Weston

### GUESTS:

1. Laura Jacobs – Pinstripes
2. Beth Riddiford – My Cousin’s Closet

## B. LAND ACKNOWLEDGEMENT

Councillor Lowrie read the Land Acknowledgement.

## C. DISCLOSURE OF PECUNIARY INTEREST

Jason Martin reminded the Committee that any declaration is to be made prior to each item being discussed and to identify the nature of the conflict, if any, as the agenda items come forward.

## D. PRESENTATIONS/DELEGATIONS

1. NONE.

## E. AMENDMENTS TO THE AGENDA

- NONE.

## F. ADOPTION OF ACCOUNTS

**BIA-487-2024** Moved to receive the accounts ending APRIL 2024 by Tony Gaffan and seconded by Heather Brown,

**CARRIED**

## G. STAFF REPORTS

BIA Coordinator presented highlights from her report, incorporating the key elements of the KBIA Strategic Plan including:

### 1. Engagement/Support

- Engagement with Members – included attending the ribbon cutting for Mari’s Artisan Gelato & Paletta, meeting with Jenessa, the owner of Fox & Hare, and Melissa from Wrobel Massage Therapy. We participated in Earth Day with the Rotary Club of Kingsville Southshore, attended the ASK AGM as the guest speaker, meet with Troy Loop regarding new business Pie in the Sky opening soon, as well as meet the new owner of Blush & Bloom Rejuvenation also opening soon.
- Town Relations - Attended the Town of Kingsville volunteer dinner as Board support, met with Courtney, Manager of Parks & Rec. to discuss the Carnegie property, attended Staycation with Sue Rice to represent BIA businesses where we gave away a gift basket full of local goodies.
- Website - Met with Allegra to review a list of issues with the website on May 8<sup>th</sup>, continue to fix logo issues in directory and they are working on a fix for our forms.
- MMM - June 4<sup>th</sup> – 5:30pm – 8pm. The intent is to hold it at the Pie in the Sky and if not ready to open The Goose. Rain/weather contingency plan is BGBs – just working out final details and info will go out next week. Libro Credit Union will be sponsoring the appetizers.
- Other - Attended the Leamington Chamber of Commerce AGM, first aid training through First Aid by Anthony, an information session as well as a lunch meeting with the Small Business & Entrepreneurship Centre. Meet with Brandon Zuech from the Kingsville Neighbour magazine and attended the 4-day OBIAA Conference which I will report on next meeting.

## 2. Promotion

- Mother's Day Promotion – May 8th & 9th. Collaborated with DelFrescoPure for a social media promotion giving away a gift basket valued at \$300+. The KBIA but in 2 vouchers for \$50 gift cards to any BIA district business. Facebook: 24 new followers and currently 4,662 followers. Instagram: 17 new followers and currently 2526 followers, (up 282 this year (Jan-May) compared to 88 last year (Aug-Dec,).
- Father's Day Promotion – June 16<sup>th</sup>. Promotion will run June 12th & 13th with a DelFrescoPure collaboration, giving away a gift basket valued at \$300+. Will ask for donations and place 2 vouchers for \$50 to any BIA business.
- BIA Collaboration – July 1st week – Shop Local Canda Day. Collaborate with other Windsor/Essex BIAs for a social media cross promotion event with a Buy Local/Buy Canadian theme. \$300 budget to create a gift basket and will reach out for businesses to donate.

## 3. Policies & Procedures

- No new updates.

## 4. Beautification

- For July 1st, we will be putting the red truck at the Carnegie again; ask FOL if we can borrow their Canadian flag, red & whites bows at the 4 corners & Canadian flags around town. The WFCU has volunteered to help put the flags out if needed.

## 5. Maintenance

- The Red Truck is going to need a little cleaning and some of the doors bent back into their proper place.

**BIA-488-2024** Motion to accept the Coordinator report by David Debergh and seconded by Maria Edwards.

**CARRIED**

## H. BUSINESS/CORRESPONDENCE – ACTION REQUIRED

### 1. Emails - Employees parking on street

- The BIA received several emails from the owner of My Cousin's Closet regarding employees parking on the street not leaving it for customers. The BIA has

addressed this several times in the Newsletter and has sent an email to businesses on Main Street East that have several employees as an additional reminder.

- Recommendation – Draft up a letter, have the Board review it, have the Coordinator hand deliver the letter to as many businesses as possible.

## **2. ASSOCIATE MEMBERSHIP – JOY PARALEGAL SERVICES**

**BIA-489-2024** Motion to approve by Heather Brown, seconded by Amanda Everaert to approve Joy Paralegal Services as an Associate Member.

**CARRIED**

## **3. ASSOCIATE MEMBERSHIP – KINGSVILLE NEIGHBOURS MAGAZINE**

**BIA-490-2024** Motion to approve by Tony Gaffan, seconded by Amanda Everaert to approve Kingsville Neighbours Magazine as an Associate Member.

**CARRIED**

## **4. ASSOCIATE MEMBERSHIP – ROYAL CANADIAN LEGION BR#188**

**BIA-491-2024** Motion to approve by Heather Brown, seconded by Maria Edwards to approve Royal Canadian Legion BR#188 as an Associate Member.

**CARRIED**

## **5. ASSOCIATE MEMBERSHIP – SOMEWHERE ELSE EXPERIENCE INC.**

**BIA-492-2024** Motion to approve by Tony Gaffan, seconded by Abby Jakob to approve Somewhere Else Experience Inc. as an Associate Member.

**CARRIED**

## **6. FACELIFT GRANT – PINSTRIPES**

**BIA-493-2024** Motion to approve by Maria Edwards, seconded by Abby Jakob to approve Pinstripes for \$344.65 (50% of cost).

**CARRIED**

## I. MINUTES OF THE PREVIOUS MEETING

**BIA-494-2024** Motion to receive the minutes by Tony Gaffan, seconded by Heather Brown.

**CARRIED**

## J. NEW AND UNFINISHED BUSINESS

### 1. Loading Zone Update

- A survey was conducted with businesses from Division Street North and South as to whether there was support for loading zones in these areas as well as a look at the Essex and Leamington BIA area loading zones.
- The BIA is in support of moving forward regarding loading zones, working along with the Economic Development team.

**BIA-495-2024** Request the establishment of two additional loading zones with designated loading times. These loading zones will be located on Division Street North and Division Street South. Furthermore, proposing an amendment to the current loading zones on Main Street East and Chestnut Street to include designated loading times. Motioned by Tony Gaffan, seconded by Abby Jakob.

**CARRIED**

### 2. Storage Container

**BIA-496-2024** Motion to approve by David Debergh, seconded by Heather Brown to incur the cost by Coxen to move the storage container to Glen Knight & Sons storage on Settingington Drive and pay the \$60 per month storage fee, contingent on the Town of Kingsville's willingness to drive to this location when décor is required.

**CARRIED**

### 3. Google Scan Plates

- Abby Jakobs discussed the benefits of Google scan plates for businesses as well the SEO service Chris Labatte, from SEOBANK Digital Marketing Agency, offers.
- The Coordinator will confirm that any businesses that are interested in purchasing these will receive a discount. Once confirmed the BIA will go out to the businesses with the information and anyone who is interested can work directly with Chris.

- Also discuss with Chris if he would be interested in speaking and be available at one of our MMM to speak to the other services he offers.

#### 4. Ian Murray

- Ian Murray has opened a new company called Professional EOS Implementer and is offering a 90-minute free seminar that he can tailor to smaller businesses within the BIA. The Town of Kingsville along with Invest Windsor/Essex would also be interested in sponsoring this event.

**BIA-497-2024** Motion to approve by Tony Gaffan, seconded by Amand Everaert to have the BIA Coordinator create a business development event including a seminar with Ian Murray, owner of Professional EOS Implementer, to be held in the first week of October 2024, and present this plan to the Board at the June 11<sup>th</sup> meeting for approval.

**CARRIED**

#### NEW BUSINESS

1. Amanda Everaert spoke about Community Living Essex County is looking for businesses that that are looking for summer students for their Youth in Action Summer Work Experience program. Coordinator to share with membership.

#### K. OTHER REPORTS

1. **FINANCIAL COMMITTEE** – David & Tony
  - No Report.
2. **BEAUTIFICATION COMMITTEE** – Maria & Amanda
  - Met Tuesday, May 15<sup>th</sup> regarding planter locations.
  - We have requested the purchase information from the Town regarding the large planters currently at the 4 corners. Sue Rice to follow up.
  - The BIA purchased larger garland for the 4 corners during covid – could the Town look to see if they are storing them somewhere? Sue Rice to follow up.
  - Weeds are already growing in the tree grids. The Coordinator will submit a request to [requests@kingsville.ca](mailto:requests@kingsville.ca) to have the Town remove them.
  - We'd like to put 8 planters at the 4 corners similar to the Christmas set-up.
    - Coordinator to send an email requesting the Town to be aware where there's a hanging basket, we don't need a planter there as well if

there's a better location, that they place the planters so that people are not hitting their car doors on them.

- Coordinator to request an update of hours.
  - Jason noted some changes for the flowers this summer: no need for a hanging basket in front of The Goose, it just dies under the tree each year, the planter in front of the OPP is another rough spot & in front of BMO & New Designs they usually have a planter under a hanging basket which is not necessary. The coordinator will request to meet with Town staff prior to putting out planters & hanging baskets.
  - Waiting to hear about the My Main Street grant regarding toppers, which would cover all toppers. Coordinator to send street shots to Classic Displays to get some photo shopped photos to show the board. Cost will be approximately \$30k to \$60k and are looking for an all-seasonal look. The BIA will work closely with the Town of Kingsville.
3. **PROMOTIONS COMMITTEE** – Jason & Abby
- No report.
4. **PERSONNEL COMMITTEE** – Roberta & Heather
- No report.
  - Heather Brown and Roberta Weston will be meeting soon.
5. **COUNCIL REPRESENTATIVE** – Sheri Lowrie
- Attended Talking Tourism with Jason & we were a very busy booth. Great event.
  - Working with The Grove for heritage designation.
  - Community of the Whole – moving forward with creating a by-law regarding short term rentals.
6. **TOWN LIASON**– Sue Rice
- Staycation at Devonshire Mall – thank you to the BIA for attending. Had over 400 ballots for the gift basket. Gave out cards with the new Town campaign.
  - Did a video with Abby Jakob & Invest Windsor Small Business Entrepreneurship Centre for economic development week.
  - A lot of ribbon cuttings are coming up.
  - A lot of lawn signs are popping up, if you are concerned contact [request@kingsville.ca](mailto:request@kingsville.ca).
  - Talking Tourism had 53 people show up. Did a follow up email with all the resources to all the businesses including the BIA.

- Would like to do a social media piece on free parking in Kingsville.
- Hogs for Hospice (H4H) is coming through again, the council approved it. The upset BIA member from the 2023 event will be put in direct contact with the H4H people. It is a H4H event. Kingsville is a stop on their website. BIA to assist in communicating liquor service messaging to businesses. It would be nice to have the Town encourage residents to come down and line the streets.
- Waiting for final approval for a pilot project for retail that would require a tiny business buy in, but it will be a great program.
- Heritage walking tour about to launch.

**L. NEXT MEETING DATE**

- Tuesday, June 11th, at 6:15pm.

**M. ADJOURNMENT**

Meeting adjourned at 7:45pm

**BIA-498-2024** Motioned to adjourn by Maria Edwards, seconded by Abby Jakob.

*Jason Martin*

**CHAIR, Jason Martin**

*Jodie McIntyre*

**RECORDING SECRETARY,  
Jodie McIntyre**

**THE CORPORATION OF THE TOWN OF KINGSVILLE**

**BY-LAW #45-2024**

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**Being a By-law to provide for the improvements to the 8<sup>th</sup> Concession Drain and new maintenance schedule for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$1,828,000 in the Town of Kingsville, in the County of Essex**

**WHEREAS** the Council of the Town of Kingsville, in the County of Essex, has procured reports under section 78 of the *Drainage Act*;

**AND WHEREAS** the report has been authored by Tim R. Oliver, P. Eng., Dillon Consulting Limited, under date of June 10, 2024, and the attached reports form part of this by-law;

**AND WHEREAS** \$1,828,000 is the amount to be contributed by the Ministry of Transportation for the drainage works;

**AND WHEREAS** Council is of the opinion that the report for the area is desirable;

**THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE, PURSUANT TO THE DRAINAGE ACT ENACTS AS FOLLOWS:**

**1. AUTHORIZATION**

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

**2. SCHEDULE OF ASSESSMENTS OF LAND AND ROADS**

One hundred percent (100%) of the cost for this report is to be assessed to the Ministry of Transportation.

**3. CITATION**

This by-law comes into force on the passing thereof and may be cited as the “8<sup>th</sup> Concession Drain Realignment – Improvements for MTO & New Maintenance Schedule” By-law.

**READ A FIRST AND SECOND TIME AND PROVISIONALLY ADOPTED THIS 8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**READ A THIRD TIME AND FINALLY PASSED THIS 12<sup>th</sup> DAY OF AUGUST, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**THE CORPORATION OF THE TOWN OF KINGSVILLE**

**BY-LAW #46-2024**

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**Being a By-law to provide for the realignment of the 9<sup>th</sup> Concession Drain and Kings Highway No. 3 Culvert Extension for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$640,000 in the Town of Kingsville, in the County of Essex**

**WHEREAS** the Council of the Town of Kingsville, in the County of Essex, has procured reports under section 78 of the *Drainage Act*;

**AND WHEREAS** the report has been authored by Tim R. Oliver, P. Eng., Dillon Consulting Limited, under date of June 10, 2024, and the attached reports form part of this by-law;

**AND WHEREAS** \$640,000 is the amount to be contributed by the Ministry of Transportation for the drainage works;

**AND WHEREAS** Council is of the opinion that the report for the area is desirable;

**THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE, PURSUANT TO THE DRAINAGE ACT ENACTS AS FOLLOWS:**

**1. AUTHORIZATION**

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

**2. SCHEDULE OF ASSESSMENTS OF LAND AND ROADS**

One hundred percent (100%) of the cost for this report is to be assessed to the Ministry of Transportation.

**3. CITATION**

This by-law comes into force on the passing thereof and may be cited as the “9<sup>th</sup> Concession Drain Realignment and Kings Highway No. 3 Highway Culvert Extension” By-law.

**READ A FIRST AND SECOND TIME AND PROVISIONALLY ADOPTED THIS 8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**READ A THIRD TIME AND FINALLY PASSED THIS 12<sup>th</sup> DAY OF AUGUST, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**THE CORPORATION OF THE TOWN OF KINGSVILLE**

**BY-LAW #47-2024**

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**Being a By-law to provide for the realignment and extension of the Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain for the Ministry of Transportation Highway 3 Widening Project at a total estimated cost of \$1,669,000 in the Town of Kingsville, in the County of Essex**

**WHEREAS** the Council of the Town of Kingsville, in the County of Essex, has procured reports under section 78 of the *Drainage Act*;

**AND WHEREAS** the report has been authored by Tim R. Oliver, P. Eng., Dillon Consulting Limited, under date of June 10, 2024, and the attached reports forms part of this by-law;

**AND WHEREAS** \$1,669,000 is the amount to be contributed by the Ministry of Transportation for the drainage works;

**AND WHEREAS** Council is of the opinion that the report for the area is desirable;

**THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE, PURSUANT TO THE DRAINAGE ACT ENACTS AS FOLLOWS:**

**1. AUTHORIZATION**

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

**2. SCHEDULE OF ASSESSMENTS OF LAND AND ROADS**

One hundred percent (100%) of the cost for this report is to be assessed to the Ministry of Transportation.

**3. CITATION**

This by-law comes into force on the passing thereof and may be cited as the "Cottam Sideroad Branch of the 7<sup>th</sup> Concession Drain Realignment and Extension - MTO Highway 3 Widening" By-law.

**READ A FIRST AND SECOND TIME AND PROVISIONALLY ADOPTED THIS 8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**READ A THIRD TIME AND FINALLY PASSED THIS 12<sup>th</sup> DAY OF AUGUST, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**THE CORPORATION OF THE TOWN OF KINGSVILLE**

**BY-LAW 55-2024**

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**Being a By-law to provide for the improvements to the Moroun Pumping Scheme at a total estimated cost of \$686,257.00 in the Town of Kingsville, in the County of Essex**

**WHEREAS** the Council of the Town of Kingsville, in the County of Essex, has procured reports under section 78 of the *Drainage Act*;

**AND WHEREAS** the report has been authored by Antonio B. Peralta, P. Eng., N.J. Peralta Engineering Ltd., under date of June 21, 2024, and the attached report form part of this by-law;

**AND WHEREAS** \$686,257.00 is the amount to be contributed by the Essex Region Conservation Authority for the drainage works;

**AND WHEREAS** Council is of the opinion that the report for the area is desirable;

**THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE, PURSUANT TO THE DRAINAGE ACT ENACTS AS FOLLOWS:**

**1. AUTHORIZATION**

The attached report is adopted and the drainage works is authorized and shall be completed as specified in the report.

**2. SCHEDULE OF ASSESSMENTS OF LAND AND ROADS**

One hundred percent (100%) of the cost for this report is to be assessed to the Essex Region Conservation Authority.

**3. CITATION**

This by-law comes into force on the passing thereof and may be cited as the “Moroun Pumping Scheme – Improvements for ERCA” By-law.

**READ A FIRST AND SECOND TIME AND PROVISIONALLY ADOPTED THIS 8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**READ A THIRD TIME AND FINALLY PASSED THIS 12<sup>th</sup> DAY OF AUGUST, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

**THE CORPORATION OF THE TOWN OF KINGSVILLE**

**BY-LAW 53 - 2024**

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**Being a By-law to amend By-law 21-2005 as amended, being a By-law to Regulate Traffic and Parking on Highways within the Town of Kingsville**

**WHEREAS** By-law 21-2005, as amended, is a By-law to regulate traffic and parking on highways within the Town of Kingsville;

**AND WHEREAS** pursuant to Section 27 of the *Municipal Act, 2001*, S.O. 2001, c. 25, (the "*Act*") as amended, by-laws may be passed by councils of municipalities to regulate traffic and parking in respect to highways within their jurisdiction;

**AND WHEREAS** pursuant to the *Highway Traffic Act, R.S.O. 1990*, c. H.8, as amended, By-laws may be passed by councils of municipalities regulating traffic on highways that are not inconsistent with the Highway Traffic Act;

**AND WHEREAS** By-law 21-2005, as amended, contains consecutively numbered Schedules forming part of it;

**AND WHEREAS** it is necessary from time to time to amend By-law 21-2005, as amended, including the Schedules thereto.

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. **THAT** Schedule 2 '**No Stopping**' be amended to read as follows:

<b>COLUMN 1 HIGHWAY</b>	<b>COLUMN 2 SIDE</b>	<b>COLUMN 3 BETWEEN</b>	<b>COLUMN 4 PROHIBITED TIMES OF DAY</b>
5. Jasperon Drive	East and West	From 1576 Jasperson Drive to a point 150 metres north of Woodycrest Ave.	Anytime

2. This By-law comes into force and takes effect on the day of the final passing thereof.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**

# THE CORPORATION OF THE TOWN OF KINGSVILLE

## BY-LAW 56 - 2024

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### Being a By-law to confirm the proceedings of the Council of the Corporation of the Town of Kingsville at its July 8, 2024 Regular Meeting of Council

**WHEREAS** sections 8 and 9 of the *Municipal Act, 2001* S.O. 2001 c. 25, as amended, (the “Act”) provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising the authority conferred upon a municipality to govern its affairs as it considers appropriate.

**AND WHEREAS** section 5(3) of the Act provides that such power shall be exercised by by-law, unless the municipality is specifically authorized to do so otherwise.

**AND WHEREAS** it is deemed expedient that the proceedings of the Council of The Corporation of the Town of Kingsville (the “Town”) be confirmed and adopted by by-law.

### **NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF KINGSVILLE ENACTS AS FOLLOWS:**

1. The actions of the Council at its July 8, 2024 Regular Meeting in respect of each report, motion, resolution or other action taken or direction given by the Council at its meeting, is hereby adopted, ratified and confirmed, as if each resolution or other action was adopted, ratified and confirmed by its separate by-law.
2. The Chief Administrative Officer and/or the appropriate officers of the Town are hereby authorized and directed to do all things necessary to give effect to the actions set out in paragraph 1, or obtain approvals, where required, and, except where otherwise provided, the Mayor and the Clerk are hereby directed to execute all documents necessary and to affix the corporate seal to all such documents.
3. This By-Law comes into force and takes effect on the day of the final passing thereof.

**READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS  
8<sup>th</sup> DAY OF JULY, 2024.**

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**MAYOR, Dennis Rogers**

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**ACTING CLERK, Angela Toole**