

Regular Council Meeting Agenda

Date: Tuesday, April 25, 2023, 7:00 pm
Location: Tecumseh Town Hall - Council Chambers
917 Lesperance Road
Tecumseh, Ontario N8N 1W9

Pages

- A. Roll Call**
- B. Order**
- C. Report Out of Closed Meeting**
- D. Moment of Silence**
- E. National Anthem**
- F. Land Acknowledgement**

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Lenni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

- G. Disclosure of Pecuniary Interest**
- H. Minutes**

- 1. Regular Council Meeting - April 11, 2023

9 - 17

2. Special Council Meeting - April 11, 2023 - Tecumseh Hamlet Secondary Plan 18 - 20

Recommendation

Moved by _____

Seconded by _____

That the minutes of the April 11, 2023 Regular Meeting of Council, the minutes of the April 11, 2023 Special Meeting of Council as were duplicated and delivered to the members, **be adopted**.

I. Supplementary Agenda Adoption

J. Delegations

1. Golden Age Club

Re: Dara Pfeifer O'Connor, President, and Aggie Soulliere

Recommendation

Moved by _____

Seconded by _____

That Report CRS-2023-07 Golden Age Club **be brought forward** for discussion and consideration.

2. 2023 Water and Wastewater Rate Study 21 - 42

Re: Director Financial Services, Tom Kitsos and Manager Financial Services, Zora Visekruna

K. Communications - For Information

1. Ministry of Natural Resources and Forestry dated April 5, 2023 43 - 44

Re: Proposed Changes to the OGSRA to regulate projects to test or demonstrate new or innovative activities

2. Essex Region Conservation Authority dated April 6, 2023 45 - 110

Re: Essex Region Conservation Authority 2022 Draft Budget/30 Day Notice To Member Municipalities

3. Minister of the Environment, Conservation and Parks dated April 19, 2023 111 - 111

Re: Provincial Day of Action on Litter

4. CN Rail dated April 12, 2023 112 - 118

Re: Notice of Annual Vegetation Management Program

Recommendation

Moved by _____

Seconded by _____

That Communications - For Information 1 through 4 as listed on the Tuesday, April 25, 2023 Regular Council Agenda, **be received**.

L. Communications - Action Required

M. Committee Minutes

1. Court of Revision - March 28, 2023 Shuttleworth and Sullivan Creek Drains 119 - 125

Recommendation

Moved by _____

Seconded by _____

That the Tuesday, April 11, 2023 minutes of the Court of Revision as were duplicated and delivered to the members, **be adopted**.

2. Policies & Priorities Committee Meeting - April 11, 2023 126 - 131

Recommendation

Moved by _____

Seconded by _____

That the April 11, 2023 minutes of the Policies & Priorities Committee Meeting as were duplicated and delivered to the members, **be adopted**.

3. Tecumseh Accessibility Advisory Committee - April 6, 2023 132 - 134

Recommendation

Moved by _____

Seconded by _____

It is recommended:

That Council give consideration to **support** the following initiatives in honour National AccessAbility Week (May 29th to June 4) to include:

1. flag raising ceremony at the Tecumseh Town Hall on Monday May 29, 2023 at 10 am and that the flag be raised for the duration of the week (May 29 to June 4);
2. Administration in collaboration with TAAC Members develop a social media campaign to raise public awareness on accessibility in the community to be post during the week;
3. Illuminate Town Hall the colour red.

Recommendation

Moved by _____

Seconded by _____

That the April 3, 2023 minutes of the Police Services Board Meeting as were duplicated and delivered to the members, **be accepted**.

N. Reports

1. Community & Recreation Services

a. CRS-2023-06 E-Scooter Pilot Program

Recommendation

Moved by _____

Seconded by _____

That Report CRS-2023-06 E Scooter Pilot Program **be received**;

And that Council **consider for approval** an E Scooter Pilot Program from May – September 2023 with services to be provided by Bird Canada, Inc.;

And further that a by-law to authorize the Mayor and Clerk to execute a Service Agreement between the Town of Tecumseh and Bird Canada, Inc., in a form satisfactory to the Town Solicitor, to provide an E Scooter Pilot Program, **be considered** at the May 9, 2023 Regular Council Meeting.

Recommendation

Moved by _____

Seconded by _____

That Report CRS-2023-07 titled “Golden Age Club Relocation” be received;

And that Council approve the accommodation plan for Golden Age Club activities, existing user groups and rental clients to be temporarily relocated to the St. Clair Beach Community Centre for the period of time required to support the Cada Library use of 12420 Lanoue Street during renovations to the Cada Library building;

And further that Council waive the fees for the Golden Age Club (GAC) for use of the St. Clair Beach Community Centre and that, as part of the accommodation, the Town of Tecumseh honours the GAC fees for existing user groups and rental clients through the temporary relocation period;

And furthermore that the Golden Age Club and all existing user groups and rental clients thereof be subject to Town of Tecumseh User Agreements for facility use going forward;

And furthermore that Council direct Administration to engage in a year-long consultation period with the Golden Age Club in developing a long-term plan to accommodate the programs and activities of the Club to determine future facility location.

2. Development Services

- a. DS-2023-09 Federal Housing Accelerator Fund Planning Consultant for Preparation of Housing Action Plan and Grant Application

154 - 160

Recommendation

Moved by _____

Seconded by _____

That Report DS-2023-09 entitled “Federal Housing Accelerator Fund Program – Funding for a Planning Consultant to Assist in Preparation of a Housing Action Plan and Grant Application” **be received;**

And that the cost of \$30,000 for the hiring of a planning consultant to assist in the preparation of a Housing Action Plan and the submission of an application for funding to the Housing Accelerator Fund in June 2023, in accordance with the program requirements, **be authorized and funded** from the Tax Rate Stabilization Reserve.

3. Legislative & Clerk Services

- a. LCS-2023-15 Revisions to By-Laws 2023-046 and 2023-047

161 - 195

Recommendation

Moved by _____

Seconded by _____

That Report LCS-2023-15 Revisions to By-Laws 2023-046 and 2023-047 **be received** as information;

And that By-Law 2023-046 Outdoor Temporary Patio and Extensions and By-Law 2023-047 Mobile Food Vendors each be considered for first, second, third and final readings;

And further that By-law 2022-099 Fees and Charges for 2023 **be amended in Schedule A** to include the fees of \$350.00 for Mobile Food Vendors, and \$250.00 for Outdoor Temporary Patio and Extensions.

4. Public Works & Engineering Services

- a. PWES-2023-36 Larviciding for the 2023 West Nile Virus Program 196 - 206

Recommendation

Moved by _____

Seconded by _____

That Report PWES-2023-36 Larviciding for the 2023 West Nile Virus Program **be received** for information;

And that correspondence **be forwarded** to the Ministry of the Environment, Conservation and Parks (MECP), and Pestalto Environmental Health Services Inc. through the West Nile Virus program secretary at the Windsor-Essex County Health Unit;

And further that program costs in the amount of \$6,000 **be funded** from the Public Works operating budget as approved in the 2023 Operational Budget.

- b. PWES-2023-35 Tecumseh Hamlet NW Water and Wastewater Infrastructure Project - Award of Engineering Consulting Services 207 - 214

Recommendation

Moved by _____

Seconded by _____

That Council **award** the Consulting Services for the Tecumseh Hamlet Secondary Plan Area – Northwest Water and Wastewater Infrastructure Project in the amount of \$1,155,465 excluding HST to Stantec Consulting Ltd.;

And that By-law 2023-053 **be given** the first, second, third and final reading to authorize the Mayor and Clerk to execute an agreement, satisfactory in form to the Town's Solicitor, with Stantec Consulting Ltd.

O. By-Laws

- | | |
|--|-----------|
| 1. By-Law 2023-045 Tecumseh Fireworks By-Law | 215 - 226 |
| 2. By-Law 2023-046 Temporary Outdoor Patios and Extensions | 227 - 244 |
| 3. By-Law 2023-047 Mobile Food Vendors | 245 - 256 |
| 4. By-Law 2023-052 Amend Fees & Charges - Schedule A | 257 - 259 |
| 5. By-Law 2023-053 Tender Award - Stantec | |
| 6. By-Law 2023-028 Sullivan Creek Drain - Third and Final Readings | 260 - 492 |

P. Unfinished Business

1. April 25, 2023 493 - 493

Q. New Business

R. Motions

1. Confirmatory By-Law 2023-054 494 - 495

Recommendation

Moved by _____

Seconded by _____

That By-Law 2023-054 being a by-law to confirm the proceedings of the Tuesday, April 25, 2023, regular meeting of the Council of The Corporation of the Town of Tecumseh **be given** first, second, third and final reading.

S. Notices of Motion

T. Next Meeting

Monday, May 8, 2023

4:00 pm Special Council Meeting - Strategic Priorities

Tuesday, May 9, 2023

7:00 pm Regular Council meeting

U. Adjournment

Recommendation

Moved by _____

Seconded by _____

That there being no further business, the Tuesday, April 25, 2023 meeting of the Regular Council **be adjourned** at pm.

Regular Meeting of Council

Minutes

Date: Tuesday, April 11, 2023
Time: 7:00 pm
Location: Tecumseh Town Hall - Council Chambers
917 Lesperance Road
Tecumseh, Ontario N8N 1W9

Present:

Mayor, Gary McNamara
Councillor, James Dorner
Councillor, Alicia Higgison
Councillor, Brian Houston
Councillor, Tania Jobin
Councillor, Rick Tonial

Absent:

Deputy Mayor, Joe Bachetti

Also Present:

Chief Administrative Officer, Margaret Misk-Evans
Deputy Clerk & Manager Legislative Services, Jennifer Alexander
Director Public Works & Engineering Services, Phil Bartnik
Director Community Safety & Fire Chief, Wade Bondy
Director Technology & Client Services, Shaun Fuerth
Director Development Services, Brian Hillman
Director Financial Services & Chief Financial Officer, Tom Kitsos
Deputy Clerk - Clerks Services & Policy Advisor, Christina Hebert
Director Legislative Services & Clerk, Robert Auger
Director Community & Recreation Services, Beth Gignac

A. Roll Call

B. Order

The Mayor calls the meeting to order at 7:54 pm.

C. Report Out of Closed Meeting

A closed meeting of Council was held earlier today in accordance with and as permitted by Section 239 (2)(a)(c)(k) of the Municipal Act, 2001. During the meeting, Council Received information on security measures relating to property and provided direction on a special project.

D. Moment of Silence

The Members of Council and Administration observe a moment of silence.

E. National Anthem

The Members of Council and Administration observe the National Anthem of O Canada.

F. Land Acknowledgement

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Lenni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

G. Disclosure of Pecuniary Interest

Councillor Houston declared a pecuniary interest on By-Law 2023-022 being a by-law to provide for the repair and improvement to the Gouin Drain as he is an affected property owner.

H. Minutes

1. Regular Council Meeting - March 28, 2023
2. Public Council Meeting - March 28, 2023 - 11th Concession Drain
3. Special Council Meeting - March 28, 2023 - Procurement Policy and Customer Service Council Workshop

Motion: RCM - 89/23

Moved by Councillor Alicia Higgison

Seconded by Councillor Rick Tonial

That the Tuesday, March 28, 2023 minutes of the Regular Council meeting, the Special Council meeting and the Public Council meeting as were duplicated and delivered to the members, **be adopted**.

Carried

I. Supplementary Agenda Adoption

There are no supplementary agenda items.

J. Delegations

There are no Delegations presented to Council.

K. Communications - For Information

1. Ministry of Accessibility and Seniors dated March 28, 2023
Re: Call for Nominations - 2023 Ontario Senior of the Year
2. Ministry of the Attorney General dated March 24, 2023
Re: Ontario Provincial Offences Act

Motion: RCM - 90/23

Moved by Councillor Alicia Higgison
Seconded by Councillor Tania Jobin

That Communications - For Information 1 and 2 as listed on the Tuesday, April 11, 2023 Regular Council Agenda, **be received**.

Carried

L. Communications - Action Required

There are no Communications-Action Required presented to Council.

M. Committee Minutes

There are no Committee Minutes presented to Council.

N. Reports

1. Community & Recreation Services
 - a. CRS-2023-05 Essex Power Youth in Community Fund

Motion: RCM - 91/23

Moved by Councillor Rick Tonial
Seconded by Councillor James Dorner

That Report CRS-2023-05 regarding the Essex Power Youth in Community Fund, **be received** for information.

Carried

2. Public Works & Engineering Services
 - a. PWES-2023-29 LAS Sewer and Water Line Warranty Program Service Line Warranties of Canada Inc. Agreement Renewal Term

Motion: RCM - 92/23

Moved by Councillor Alicia Higgison
Seconded by Councillor Tania Jobin

That notice **be provided** to Service Line Warranties of Canada Inc. that the Town intends to allow the 'Renewal Term' within section 3(a) of the Agreement to commence, whereby the Agreement will automatically renew for one additional year starting September 27, 2023.

Carried

- b. PWES-2023-31 Municipal Class Environmental Assessment Notice of Amendment

Motion: RCM - 93/23

Moved by Councillor Brian Houston
Seconded by Councillor James Dorner

That Report PWES-2023-31 titled "Municipal Class Environmental Assessment – Notice of Amendment," **be received**.

Carried

- c. PWES-2023-32 Supply of Various Vehicles

Motion: RCM - 94/23

Moved by Councillor James Dorner
Seconded by Councillor Alicia Higgison

That Administration **be authorized** to obtain quotations for the 2023 Supply of Various Vehicles as summarized in Attachment 1 to Report PWES-2023-32;

And that the equipment summarized in Attachment 2 to Report PWES-2023-32 **be declared** surplus and disposed of through Part VI, Disposal of Surplus or Scrap Materials and Equipment of the Town's Purchasing Policy;

And further that Appendix A titled "Town of Tecumseh 2023-2032 Ten Year Fleet Funding and Replacement Schedules" and Appendix B titled "Town of Tecumseh 2023-2032 Ten Year Fire and Rescue Services Apparatus Funding and Replacement Schedules" attached to Report PWES-2023-32, **be adopted** as amended;

And furthermore that funding for the purchase of the 2023 Supply of Various Vehicles outlined in Appendix A in the amount of \$939,500 plus associated costs for outfitting, \$18,000, for a total of 957,500 **be funded** from the Lifecycle Fleet Reserve.

Carried

- d. PWES-2023-33 12th Concession Road Watermain Replacement Project – Tender Award

Motion: RCM - 95/23

Moved by Councillor Brian Houston

Seconded by Councillor Tania Jobin

That the tender for the 12th Concession Road Watermain Replacement Project in the amount of \$195,900 (excluding HST) **be awarded** to SheaRock Construction Group Inc;

And that By-Law 2023-48 be given first, second, third and final reading, **to authorize** the Mayor and Clerk to execute an agreement, satisfactory in form to the Town's Solicitor with SheaRock Construction Group Inc.;

And further that project funding allocations, reflecting a total budget requirement of \$296,000, with a \$16,000 increase to the original allocation, **be accommodated** as follows:

- Watermain Reserve Fund – increase from \$280,000 to \$296,000

Carried

- e. PWES-2023-20 Amendment to the East Townline Drain (St. Clair) Drainage Assessment Schedule

Motion: RCM - 96/23

Moved by Councillor Alicia Higgison

Seconded by Councillor Rick Tonial

That Report PWES-2023-20 regarding a correction to Schedule A of By-law 2022-096, being a by-law which amended the drainage assessments estimated in the engineer's report based on actual costs incurred for the construction of the East Townline Drain (St. Clair Outlet), **be received**;

And that the recommended update to Schedule A of By-law 2022-096 **be approved** through the adoption of Amending By-law 2023-024.

Carried

O. By-Laws

1. By-Law 2023-048 Tender Award for 12th Concession Road Watermain
Being a By-law to authorize the execution of an Agreement between The Corporation of the Town of Tecumseh and Shearock Construction Group Inc., for the 12th Concession Road Watermain Mun. 2737 to Mun. 2773
2. By-Law 2023-049 Provincial Gas Tax Transit Grant
Being a by-law to authorize the execution of a Letter of Agreement between The Corporation of the Town of Tecumseh and Her Majesty the Queen in Right of Ontario as represented by the Minister of Transportation for Ontario relating to funding under the Dedicated Gas Tax Funds for Public Transportation
3. By-Law 2023-050 Appointments By-law - Bylaw Officer
Being a by-law to Appoint a By-Law Enforcement Officer for the Corporation of the Town of Tecumseh
4. By-Law 2023-024 East Townline Drain
Being a by-law to amend By-Law 2022-09, being a by-law to amend drainage assessment estimated in engineer reports based on actual costs incurred for the construction of the East Townline Drain (St. Clair Outlet)
5. By-Law 2023-021 Demonte Drain - 3rd and Final Reading
Being a by-law to provide for the repair and improvements to the Demonte Drain
6. By-Law 2023-022 Gouin Drain 3rd and Final Reading
Being a by-law to provide for the repair and improvements to the Gouin Drain

Councillor Brian Houston having declared a conflict of interest on the Gouin Drain refrains from voting on By-law 2023-022.

Motion: RCM - 97/23

Moved by Councillor Alicia Higgison
Seconded by Councillor Brian Houston

That By-Laws 2023-048 being a by-law to authorize the execution of Agreement between The Corporation of the Town of Tecumseh and Shearock Construction Group Inc, for the 12th Concession Road Watermain Mun. 2737 to Mun. 2773;

That By-Law 2023-049 being a by-law to authorize the execution of a Letter of Agreement between The Corporation of the Town of Tecumseh and Her Majesty the Queen in Right of Ontario as represented by the

Minister of Transportation for Ontario relating to funding under the Dedicated Gas Tax Funds for Public Transportation Program;

That By-Law 2023-50 being a by-law to appoint a By-Law Enforcement Officer for the Corporation of the Town of Tecumseh;

That By-Law 2023-024 being a By-Law to Amend By-Law 2022-096, being a By-law to amend drainage assessments estimated in engineer reports based on actual costs incurred for the construction of the East Townline Drain (St. Clair Outlet).

Be given first and second reading.

Carried

Motion: RCM - 98/23

Moved by Councillor Tania Jobin

Seconded by Councillor James Dorner

That By-Laws 2023-048 being a by-law to authorize the execution of Agreement between The Corporation of the Town of Tecumseh and Shearock Construction Group Inc, for the 12th Concession Road Watermain Mun. 2737 to Mun. 2773;

That By-Law 2023-049 being a by-law to authorize the execution of a Letter of Agreement between The Corporation of the Town of Tecumseh and Her Majesty the Queen in Right of Ontario as represented by the Minister of Transportation for Ontario relating to funding under the Dedicated Gas Tax Funds for Public Transportation Program;

That By-Law 2023-50 being a by-law to appoint a By-Law Enforcement Officer for the Corporation of the Town of Tecumseh;

That By-Law 2023-024 being a By-Law to Amend By-Law 2022-096, being a By-law to amend drainage assessments estimated in engineer reports based on actual costs incurred for the construction of the East Townline Drain (St. Clair Outlet);

That By-Law 2023-021 being a by-law to provide for the repair and improvements to the Demonte Drain .

Be given third and final reading.

Carried

Motion: RCM - 99/23

Moved by Councillor Alicia Higgison
Seconded by Councillor James Dorner

That By-law 2023-22 being a by-law to provide for the repair and improvement to the Demonte Drain.

Be given third and final reading.

Carried

P. Unfinished Business

1. April 11, 2023

The Members receive the Unfinished Business listing for Tuesday, April 11, 2023.

Q. New Business

Wood Carving in Lakewood Park

The Director Community & Recreation Services provides an update on the design of the wood carving depicting Chief Tecumseh.

Motion: RCM - 100/23

Moved by Councillor Rick Tonial
Seconded by Councillor James Dorner

That the verbal report provided by the Director Community & Recreation Services on the wood carving design of Chief Tecumseh **be received**.

Carried

R. Motions

1. Confirmatory By-Law 2023-051

Motion: RCM - 101/23

Moved by Councillor Rick Tonial
Seconded by Councillor Tania Jobin

That By-Law 2023-051 being a by-law to confirm the proceedings of the Tuesday, April 11, 2023, regular meeting of the Council of The Corporation of the Town of Tecumseh **be given** first, second, third and final reading.

Carried

S. Notices of Motion

There are no Notices of Motion presented to Council.

T. Next Meeting

Monday, April 24, 2023

4:00 pm Special Council Meeting - Strategic Priorities

Tuesday, April 25, 2023

4:30 pm Court of Revision - 11th Concession

5:00 pm Public Council Meeting - ZBA 1650 Shawnee Road

5:30 pm Public Council Meeting - New Building Fees By-Law

6:00 pm Special Council Meeting - Turkey Creek Watershed Hydrologic and Modelling Study

7:00 pm Regular Council Meeting

U. Adjournment

Motion: RCM - 102/23

Moved by Councillor Tania Jobin

Seconded by Councillor James Dorner

That there being no further business, the Tuesday, April 11, 2023 meeting of the Regular Council **be adjourned** at 8:35 pm.

Carried

Gary McNamara, Mayor

Jennifer Alexander, Acting Clerk

Special Meeting of Council

Minutes

Date: Tuesday, April 11, 2023
Time: 6:00 pm
Location: Tecumseh Town Hall – Council Chambers
917 Lesperance Road
Tecumseh, ON N8N 1W9

Present:

Mayor, Gary McNamara
Councillor, James Dorner
Councillor, Alicia Higgison
Councillor, Brian Houston
Councillor, Tania Jobin
Councillor, Rick Tonial

Absent:

Deputy Mayor, Joe Bachetti

Also Present:

Chief Administrative Officer, Margaret Misk-Evans
Director Legislative Services & Clerk, Robert Auger
Director Public Works & Engineering Services, Phil Bartnik
Director Technology & Client Services, Shaun Fuerth
Director Community & Recreation Services, Beth Gignac
Director Development Services, Brian Hillman
Director Financial Services & Chief Financial Officer, Tom Kitsos
Deputy Clerk & Manager Legislative Services, Jennifer Alexander
Deputy Clerk - Clerks Services & Policy Advisor, Christina Hebert
Manager Planning Services & Local Economic Development, Chad Jeffery
Development Engineer, Shane McVitty

A. Roll Call

B. Call to Order

The Mayor calls the meeting to order at 6:37 pm.

C. Land Acknowledgement

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Leni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

D. Disclosure of Pecuniary Interest

There is no pecuniary interest declared by a Member of Council.

E. Delegations**1. Tecumseh Hamlet Secondary Plan Update**

Re: Dorsa Jalalian, Senior Urban Designer, DIALOG; Kristine Wilkinson, P. Eng. and Laura Herlehy, Associate, Dillon Consulting

The Director Development Services introduces the Consultants for the Tecumseh Hamlet Secondary Plan (Plan). The Consultants, Dorsa Jalalian of Dialog, is joined by Kristine Wilkinson and Laura Herlehy of Dillon Consulting, and provides an overview and status update of the Plan as appended in the presentation on the agenda.

The Mayor opens the floor for questions from the Members.

A Member inquires on the drainage maintenance schedules with the development given that maintenance for these drains has been recently updated. The Director Public Works & Engineering Services explains that there will be a stormwater network. As development moves forward and drains are enclosed into the swim ponds, various drainage reports will be updated.

A Member raised concern with the Shield Street extension through McAuliffe Park as the Banwell Road area is developed. The Director Development Services responds that there will be a need to carefully consider the design and function of the roadway so that park users are protected.

In response to a pedestrian crossing at the CP railway tracks, the Director Development Services indicates that railways pose mobility challenges between neighbourhoods and that an at-grade crossing is being considered. He notes that it is a priority to have a crossing to provide a walkable community.

A Member raises concerns with the traffic patterns and the potential with the grid design which could encourage motorists speeding. The Director Development Services explains that the grid street pattern promotes the dispersion of traffic and through appropriate street design, including the introduction of side friction, can help communicate to drivers that reduced speeds are required. The Director also noted that grid street patterns create more walkable communities.

The Director Development Services indicates that some development could commence next year.

Motion: SCM - 21/23

Moved By Councillor Rick Tonial
Seconded By Councillor James Dorner

That the PowerPoint presentation entitled "Tecumseh Hamlet Secondary Plan - Update" **be received**.

Carried

F. Communications

There are no Communication items presented to Council.

G. Reports

There are no Reports presented to Council.

H. Adjournment

Motion: SCM - 22/23

Moved By Councillor Brian Houston
Seconded By Councillor Tania Jobin

That there being no further business, the Tuesday, April 11, 2023 meeting of the Special Council Meeting **be adjourned** at 7:45 pm.

Carried

Gary McNamara, Mayor

Robert Auger, Clerk



2023 Water & Wastewater Rate Study

Presentation to Town Council
April 25, 2023



Purpose

- Table Rate Study with Council & Public
- Highlight Key Factors
- Discussion
- Consider Approval May 9th, 2023



Background

- 2021 rate study delayed due to COVID
 - 2021-2023 rate increases consistent with 2015 study and 2018 adjustment
- First Rate Study completed in-house was in 2015
 - Develop staff skills/experience
 - Quality control
 - Reduced cost
- 2010 study by Watson & Associates Economists Ltd
 - Updated in 2011



Guiding Principles

- Financial Sustainability
- Stabilization of Revenue
- Affordability
- Fairness
- Economic Development/Retention
- Conservation



2023 Study Considerations

- Rate Structure
- Types of Users
- Bulk Water Purchase Agreement
- Wastewater Treatment Agreement
- Updated Five-Year Capital Plans



2023 Water & Wastewater Rate Study



Table of Contents

1. Introduction
 2. Approach
 3. Customer Growth Forecast
 4. Volume Forecast
 5. Asset Lifecycle Requirement
 6. Reserve Funds
 7. Capital Budget Forecast
 8. Operating Budget Forecast
 9. Rate Sensitivity Analysis
 10. Proposed Rates
 11. Recommendations
- Appendices



Proposed Rates

Variable rates (volume charges)

- Water

	2023 Approved	2024	2025	2026	2027	2028	2029	2030	2031	2032
Under 10,200 m ³ /month	1.2747	1.3131	1.3524	1.3930	1.4348	1.4779	1.5222	1.5679	1.6149	1.6633
Over 10,200 m ³ /month	0.9214	0.9491	0.9776	1.0069	1.0371	1.0682	1.1003	1.1333	1.1673	1.2023
Annual % Change		3%	3%	3%	3%	3%	3%	3%	3%	3%

- Wastewater

	Approved 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Charge per m ³	1.3355	1.3756	1.4168	1.4593	1.5031	1.5482	1.5947	1.6425	1.6918	1.7425
'Large Consumer' per m ³	0.8902	0.9169	0.9444	0.9727	1.0019	1.0320	1.0629	1.0948	1.1277	1.1615
Annual % Change		3%	3%	3%	3%	3%	3%	3%	3%	3%



Proposed Rates

Fixed Monthly Charges

- Water/Wastewater

	2023 Approved	2024	2025	2026	2027	2028	2029	2030	2031	2032
5/8" and 3/4"	18.98	19.55	20.14	20.74	21.36	22.00	22.66	23.34	24.04	24.76
1"	32.93	33.92	34.94	35.98	37.06	38.17	39.32	40.50	41.71	42.97
1 1/2"	64.65	66.59	68.59	70.64	72.76	74.95	77.20	79.51	81.90	84.35
2"	96.32	99.21	102.19	105.25	108.41	111.66	115.01	118.46	122.02	125.68
3"	161.71	166.56	171.56	176.70	182.01	187.47	193.09	198.88	204.85	210.99
4"	261.02	268.85	276.92	285.22	293.78	302.59	311.67	321.02	330.65	340.57
6"	464.18	478.11	492.45	507.22	522.44	538.11	554.26	570.88	588.01	605.65
Annual % Change		3%	3%	3%	3%	3%	3%	3%	3%	3%



Proposed Rates

Overall % increase by customer type

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Average Household	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Typical Non-Residential	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Large Consumer	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Overall \$ increase by customer type

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Average Household	\$ 32.46	\$ 33.43	\$ 34.44	\$ 35.47	\$ 36.53	\$ 37.63	\$ 38.76	\$ 39.92	\$ 41.12
Typical Non-Residential	\$ 108.28	\$ 111.53	\$ 114.87	\$ 118.32	\$ 121.87	\$ 125.53	\$ 129.29	\$ 133.17	\$ 137.17
Large Consumer	\$ 27,962	\$ 28,801	\$ 29,665	\$ 30,555	\$ 31,471	\$ 32,416	\$ 33,388	\$ 34,390	\$ 35,421

Total Annual Bill (2023 \$1,081.97)

Typical Household	\$1,114.43	\$ 1,147.86	\$ 1,182.30	\$ 1,217.76	\$ 1,254.30	\$ 1,291.93	\$ 1,330.68	\$ 1,370.60	\$ 1,411.72
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Goals

- Full cost recovery
 - Operating and capital cost
 - Provide for asset replacement
- Target ALR \$2.5M - \$3.0M each for Water and Wastewater respectively
- Target annual overall increase 3%-4%
- Target fixed charges at 40% of total revenue



Rate Sensitivity Analysis

Scenario	Fixed		Variable		2024 Impact			2032 Impact		
	Water	Wastewater	Water	Wastewater	Avg Home	Non-Res.	Lrg. User	Avg Home	Non-Res.	Lrg. User
A	+ 3%	+ 3%	+ 3%	+ 3%	\$ 32	\$ 108	\$ 27,962	\$ 41	\$ 137	\$ 35,421
B	+ 4%	+ 4%	+ 4%	+ 4%	\$ 43	\$ 144	\$ 37,283	\$ 59	\$ 198	\$ 51,024
C	+ 3%	+ 2.5%	+ 3%	+ 2.5%	\$ 29	\$ 94	\$ 23,450	\$ 36	\$ 116	\$ 28,615
D	+ 3% yr 1-3; + 2% yr 4 ->	+ 3% yr 1-3; + 2% yr 4 ->	+ 3% yr 1-3; + 2% yr 4 ->	+ 3% yr 1-3; + 2% yr 4 ->	\$ 32	\$ 108	\$ 27,962	\$ 26	\$ 86	\$ 22,272

Scenario A is the recommended approach.



Operating Budget Forecast

Operating Budget 10 Year Summary

Description	Water	Wastewater	Total
<u>Expenditures</u>			
Operating			
Payroll & Benefits	\$ 16,666,106	\$ 3,812,434	\$ 20,478,540
Office	\$ 354,904	\$ 67,162	\$ 422,066
Maintenance	\$ 4,162,605	\$ 1,641,754	\$ 5,804,360
Water Purchases	\$ 17,120,104	\$ -	\$ 17,120,104
Contracts	\$ 1,114,742	\$ 19,907,092	\$ 21,021,834
Other	\$ 1,614,063	\$ 2,380,238	\$ 3,994,302
Administration Charge	\$ 4,925,080	\$ 4,790,652	\$ 9,715,732
	<u>\$ 45,957,605</u>	<u>\$ 32,599,332</u>	<u>\$ 78,556,937</u>
Capital Related			
Debt Payments - Non-Growth	\$ -	\$ -	\$ -
Debt Payments - Landowners	\$ -	\$ 595,500	\$ 595,500
Debt Payments - Growth	\$ -	\$ -	\$ -
Debt Payments - Internal	\$ -	\$ -	\$ -
Transfer to Reserve Funds	\$ 24,880,742	\$ 31,148,294	\$ 56,029,036
	<u>\$ 24,880,742</u>	<u>\$ 31,743,794</u>	<u>\$ 56,624,536</u>
Total Expenditures	<u>\$ 70,838,346</u>	<u>\$ 64,343,126</u>	<u>\$ 135,181,473</u>
<u>Financing</u>			
Fixed Rate Recovery	\$ 26,758,726	\$ 24,095,341	\$ 50,854,068
Variable Rate Recovery	\$ 43,009,375	\$ 39,597,823	\$ 82,607,198
Property Owner Recovery	\$ -	\$ 595,500	\$ 595,500
Transfer from Reserve Funds	\$ -	\$ -	\$ -
Other	\$ 1,070,246	\$ 54,462	\$ 1,124,707
Total Financing	<u>\$ 70,838,346</u>	<u>\$ 64,343,126</u>	<u>\$ 135,181,473</u>



Capital Budget Forecast

Capital Budget 10 Year Summary

Description	Water	Wastewater	Total
<u>Expenditures</u>			
Lifecycle			
Facilities	\$ 3,240,000	\$ 7,165,000	\$ 10,405,000
Vehicles	\$ 515,750	\$ 515,750	\$ 1,031,500
Mains/Sewers	\$ 8,423,000	\$ 2,994,000	\$ 11,417,000
	\$ 12,178,750	\$ 10,674,750	\$ 22,853,500
Capital	\$ 630,250	\$ 1,030,000	\$ 1,660,250
Oldcastle Hamlet Servicing	\$ 1,656,550	\$ 6,587,800	\$ 8,244,350
Sylvestre Industrial	\$ -	\$ 1,167,600	\$ 1,167,600
Growth (DC Study)	\$ 13,595,400	\$ 25,937,900	\$ 39,533,300
Total Expenditures	\$ 28,060,950	\$ 45,398,050	\$ 73,459,000
<u>Financing</u>			
Part XII Charges	\$ -	\$ 6,587,800	\$ 6,587,800
Development Charges	\$ 10,691,875	\$ 20,376,147	\$ 31,068,022
Debentures Issued	\$ -	\$ -	\$ -
Reserve Fund Transfers	\$ 17,369,075	\$ 18,434,103	\$ 35,803,178
	\$ 28,060,950	\$ 45,398,050	\$ 73,459,000



Reserve Funds

Development Charge Reserve Funds

Reserve Fund	Ending Balance 2021 Actual*	Ending Balance 2032 Forecast
Water Development Charges	\$ (487,984)	\$ (5,523,909)
Wastewater Development Charges	\$ (11,097,886)	\$ (14,869,020)

*2022 Actual balance not available at time of report

- Water & Wastewater DC unfunded balance
 - Investment prior to growth
 - Extended funding horizon
 - Legislative impacts (Bill 23)
 - Temporary funding from watermain & wastewater sewers RF



Reserve Funds

Reserve Fund	Ending Balance 2022 Actual	Ending Balance 2033 Forecast
Water:		
Watermains	\$ 6,877,853	\$ 17,702,879
Water Facilities	\$ 7,977,622	\$ 7,295,032
Water Vehicle	\$ -	\$ 104,688
Water Rate Stabilization	\$ 1,019,251	\$ 1,570,953
	<u>\$ 15,874,726</u>	<u>\$ 26,673,553</u>
Wastewater:		
Wastewater Sewers	\$ 2,419,886	\$ 22,692,313
Wastewater Facilities	\$ 3,080,898	\$ 569,326
Wastewater Vehicle	\$ -	\$ 135,750
Wastewater Rate Stabilization	\$ 407,813	\$ 798,616
	<u>\$ 5,908,597</u>	<u>\$ 24,196,005</u>

- Current reserve funds inadequate



Asset Lifecycle

- Best Practice
- Annual contributions to fund asset replacement
- Inflation impact
- Infrastructure Funding Gap (RF S/B versus RF IS)
 - Water \$51M
 - Wastewater \$90M
 - Total \$141M
- Expected useful life



Asset Lifecycle

Summary of Water and Wastewater Infrastructure

Asset Category	Value of Assets			Inflated EUL ²	
	Total Replacement Value	Replaced During Forecast Period ¹	Annual Lifecycle Requirement	EUL ² Lifecycle Requirement	Lifecycle Requirement
Water					
Facilities	9,257,750	3,240,000	213,480	501,620	606,922
Vehicles	565,300	515,750	55,096	98,663	104,488
Watermains	152,757,200	8,423,000	1,917,780	4,136,760	5,895,466
Total Water	162,580,250	12,178,750	2,186,356	4,737,043	6,606,876
Wastewater					
Facilities	7,701,750	7,165,000	294,965	466,786	555,695
Vehicles	565,300	515,750	55,096	98,663	104,488
Sanitary Sewers	160,616,100	2,994,000	2,471,017	6,969,899	8,794,162
Total Wastewater	168,883,150	10,674,750	2,821,077	7,535,348	9,454,345
Total	331,463,400	22,853,500	5,007,433	12,272,391	16,061,221

¹ Lifecycle replacements only, does not factor in assets added due to growth

² EUL = End of useful life



Asset Replacement

- Asset Replacement in inflated dollars

	Watermains	Sanitary Sewer	Total
1-5 Years	\$ 22,000,000	\$ -	\$ 22,000,000
6-10 Years	\$ 2,000,000	\$ -	\$ 2,000,000
11-20 Years	\$ 17,000,000	\$ 102,000,000	\$ 119,000,000
21-30 Years	\$ 16,000,000	\$ 42,000,000	\$ 58,000,000
31-40 Years	\$ 56,000,000	\$ 70,000,000	\$ 126,000,000
41-50 Years	\$ 66,000,000	\$ 19,000,000	\$ 85,000,000
51-60 Years	\$ 117,000,000	\$ 54,000,000	\$ 171,000,000
> 60 Years	\$ 120,000,000	\$ 6,000,000	\$ 126,000,000
Total	\$ 416,000,000	\$ 293,000,000	\$ 709,000,000



Volume Forecast m³

	<u>2023</u>	<u>2032</u>	<u>Inc.</u>
• Water	2,825K	3,126K	11%
• Wastewater	2,424K	2,773K	14%
• Average usage for residential property			
➤ From 242m ³ in 2015 to 220 m ³ in 2022 (9.1% decrease)			



Customer Forecast

Water Customer Forecast

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Existing	9,058	9,058	9,058	9,058	9,058	9,058	9,058	9,058	9,058	9,058
Growth ¹	50	100	150	200	320	420	620	820	1,020	1,420
Total	9,108	9,158	9,208	9,258	9,378	9,478	9,678	9,878	10,078	10,478

¹ Cumulative over forecast period

Wastewater System Customer Forecast

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Existing	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132
Growth for existing ¹	50	100	150	200	320	420	620	820	1,020	1,420
North Talbot Road Outlet Sewer Area ¹	-	-	-	-	-	-	-	-	-	-
8th Concession Rd Outlet Sewer Area ¹	-	109	180	180	180	180	200	200	200	217
Total	8,182	8,341	8,462	8,512	8,632	8,732	8,952	9,152	9,352	9,769

¹ Cumulative over forecast period

- Projections based on PWES Capital Priorities presentation (May 5, 2022)



Next Steps

- Receive feedback
- May 9th RCM
 - Opportunity to adopt the study
- Prepare DWQMS Financial Plan for 2023 Q4



Discussion



**Ministry of Natural Resources and
Forestry**

Resources Planning and Development
Policy Branch
Policy Division
300 Water Street
Peterborough, ON K9J 3C7

**Ministère des Richesses naturelles et
des Forêts**

Direction des politiques de planification et
d'exploitation des ressources
Division de l'élaboration des politiques
300, rue Water
Peterborough (Ontario) K9J 3C7

Notice: Proposed changes to the OGSRA to regulate projects to test or demonstrate new or innovative activities, such as geologic carbon storage, and to safeguard people and the environment

Hello,

I am pleased to inform you that the Ministry of Natural Resources and Forestry is seeking feedback on a proposal that is part of our plan to develop a framework to regulate new technologies, such as geologic carbon storage. This plan is outlined in a Roadmap that was released in November 2022 and can be viewed on our website at: <https://www.ontario.ca/page/geologic-carbon-storage>.

This proposal builds on previous proposals and the feedback we received related to geologic carbon storage, including a discussion paper released in early 2022 and amendments proposed in November that removed the prohibition on carbon storage from the *Oil, Gas and Salt Resources Act* (the Act).

The changes currently being proposed to the Act have been introduced through Bill 91, Less Red Tape, Stronger Economy Act, 2023. These changes, together with regulatory changes that would be proposed in the future, would allow approval to be sought for projects proposed to test or demonstrate new or innovative activities, such as geologic carbon storage. Further changes under other legislation would be required before carbon storage projects could be authorized on Crown land.

If approved, these changes would provide flexibility in authorization processes and requirements to better address technological innovation to support Ontario's changing energy needs, decarbonization efforts, and reduction of greenhouse gas emissions.

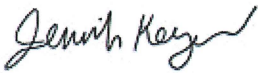
Additional changes proposed would enhance or create new tools to safeguard people and the environment and would apply to all activities regulated under the Act. These tools include new inspector's orders, court orders and clarifying the Minister's ability to consider past non-compliance with the Act in decision-making.

This proposal is available for review on the Ontario Legislative Assembly website: <https://www.ola.org/en/legislative-business/bills/parliament-43/session-1/bill-91>. The

province is also seeking feedback on the proposed changes through the Environmental Registry of Ontario: <https://ero.ontario.ca/notice/019-6752>. A Decision Notice will also be posted soon regarding the removal of the prohibition on carbon storage from the Act. Feedback on the proposed changes can be provided directly to the ministry or through the environmental registry.

If you would like more information or have any questions about the proposed changes, please contact Andrew Ogilvie, Manager of Resources Development Section, at 705-761-5815 or through email: Resources.Development@ontario.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Keyes", with a stylized flourish at the end.

Jennifer Keyes
Director, Resources Planning and Development Policy Branch



admin@erca.org

P.519.776.5209

F.519.776.8688

360 Fairview Avenue West
Suite 311, Essex, ON N8M 1Y6

April 6, 2023

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

Attention: Municipal Council Clerks (for distribution)

**RE: ESSEX REGION CONSERVATION AUTHORITY 2023 DRAFT BUDGET
30 DAY NOTICE TO MEMBER MUNICIPALITIES**

Please find attached the 2023 Draft Budget for the Essex Region Conservation Authority (ERCA). We do not anticipate that there will be changes to this document and the Budget is being presented to the ERCA Board of Directors at the regular meeting on April 13, 2023. Should Administration receive further direction from the Board, revised materials will be circulated at the earliest opportunity.

Ontario Regulation 139/96 requires that participating municipalities receive a minimum a 30-day notice for which a meeting where a weighted and recorded vote will be taken, respecting non-matching levies. The weighted vote will take place on Wednesday, May 10, 2023, at a meeting of the ERCA Board of Directors.

Should you have any questions regarding this 2023 Draft Budget, please feel free to contact Mr. Tim Byrne, tbyrne@erca.org or by phone 519-776-5209 ext. 350.

Thank you,

Tim Byrne
CAO/Secretary-Treasurer

Shelley McMullen
CFO/Director, Finance and Corporate Services

Attachments: ERCA 2023 Draft Budget, Discussion & Analysis



Essex Region Conservation Authority

Board of Directors

BD12/23

From: Shelley McMullen, CFO/Director of Finance & Corporate Services

Date: Monday, April 3, 2023

Subject: 2023 Draft Budget Approval

Compliance Action: [Conservation Authorities Act, R.S.O. 1990, c. C.27](#)
[Regulation 686/21 Mandatory Programs and Services](#)

Recommendation: THAT the 2023 Draft Budget: Details, Discussion & Analysis be received for Members' review and approval; and further,

THAT the Board of Directors support a 6.4% increase in levy (\$227,932) as recommended by the Finance and Audit Advisory Board (Resolution FAAB 02/23); and further,

THAT Administration circulate the 2023 Draft Budget: Details, Discussion & Analysis inclusive of the Appendices, as attached herein, to member municipalities for review; and further,

THAT Administration provide notice under the Conservation Authorities Act of a weighted vote, in accordance with Ontario Regulation 139/96, regarding the 2023 Draft Budget, at the Board of Directors Meeting on May 10, 2023.

Recommendation: THAT Administration update the 2013 Asset Management Plan; and report back to the FAAB for review and consideration.

Background:

Conservation authorities carry out mandatory programs that serve provincial and municipal interests, including:

- natural hazard management/risk mitigation and protection
- flood and erosion control
- management of conservation authority owned land
- drinking water source protection (under the Clean Water Act)
- surface water and groundwater monitoring programs

They also provide advice to municipalities on natural hazard management, planning matters and regulate impacts of development and activities in hazardous lands, (such as floodplains, shorelines or wetlands) natural hazards, and public safety through a permitting process.

Administration has prepared a comprehensive budget document, which forms an integral part of this report, and includes the detailed 2023 draft budget, management's discussion and extensive analysis. The Authority delivers its programs through five service delivery areas, which are also further refined into sub-units and details regarding service-delivery-area budgets and operations, is included in the document, Budget 2023: Details, Discussion & Analysis (**Attachment 1**).

Administration supports the Province's mandate to improve consistency and transparency of the programs and services that conservation authorities deliver, and the budget document responds to that objective.

Executive Summary & Highlights:

- Building on the 2022 Budget content and presentation, Administration has further refined its 2023 budget document and presentation of 2023 projected financial activities, reflecting the construct for the disclosure of mandatory and non-mandatory programs and services, including funding sources, as required by the [Conservation Authorities Act](#) and [Ontario Regulation 686/21: Mandatory Programs and Services](#).
- While the new funding model is not in force until January 1, 2024, Administration is providing 2023 budget information based on the draft segregation of its activities into mandatory and non-mandatory services to facilitate municipal discussions regarding apportionment (funding) agreements for non-mandatory programs and services.
- The significant difference between the program and service inventory, as outlined in the 2022 budget document, is that the financial activities, relating to the John R. Park Homestead Museum, are now included as non-mandatory, due to direction and feedback, provided by the Province, specifically the Ministry of the Environment, Conservation and Parks (MECP). Expenses specific to maintenance of the lands and trails are now included in mandatory conservation of lands. This resulted in re-categorizing ~\$151k of levy that was identified as mandatory levy in the 2022 budget, to non-mandatory levy in the 2023 budget.
- The 2023 draft budget prioritizes repair and replacement of infrastructure in response to preliminary asset condition reports for greenway infrastructure (bridges/culverts) and JRPH museum/heritage buildings. While still preliminary and subject to review and further analysis, these asset condition reports and cost estimates reveal a potential infrastructure deficit that exceeds \$1million at John R Park Homestead and \$1.8million for replacement of Greenway bridges/crossings, required over the next five (5) years.
- The Authority's budget includes mandatory program expenses of nearly \$6.2 million, including conservation areas capital projects, plus an additional \$325,000 in levy-funded transfers to the infrastructure reserve fund, for a total of \$6.5million. Non-mandatory operating expenses of ~\$2.6million are included, plus a transfer to the JRPH preservation reserve fund of \$515,000 for a total adjusted budget of \$9,662,349. Total revenues of \$8,866,849, plus transfers of \$795,500, are projected to provide the required funds of \$9,662,349 for operations and construction/purchase of assets.

- Levy funding of \$2,895,123 is required to fulfil the Authority's mandated obligations in 2023, consistent with the categories of mandated services, as listed in the *Conservation Authorities Act*. Additional levy of \$873,122 is required to maintain other programs and services, which are categorized as non-mandatory. \$318,122 is directed to support on-going programs which operate on a recurrent basis; \$515,000 is allocated to the non-mandatory John R Park Homestead preservation reserve fund; and \$40,000 is allocated to the land acquisition fund. It should be noted that this allocation represents a reduction in land acquisition funding from the customary \$500,000 to \$40,000, to cover residual legal and surveying expenses relating to the 2022 CASO acquisition.
- While the majority of the levy (77%) supports delivery of mandatory programs, mandatory programs are also financed by provincial transfer payments, permit revenues, user fees and internal chargebacks, with total non-levy sources expected to exceed \$1.4million in 2023.
- Over the past six years, the local investment of levy and municipal special project funding, directed to the Authority, has attracted an investment of \$1.06 for every \$1 of municipal investment, for non-Mandatory programs, services and special projects. Between 2017 and 2022, the Authority received municipal funds of \$10,315,527, representing levy and special-project funds, for programs and projects, that are anticipated to be categorized as non-mandatory, under the Act, but during that time, non-municipal funds of \$10,978,866 were received, supporting those very same initiatives. The non-mandatory work relating to the water quality program generated the greatest return, over the past six years, with \$5.31 received from outside funding sources for every CW~GS levy dollar, followed by the tree planting/restoration program which attracted \$3.53 for every CW~GS dollar of investment.
- No new permanent staffing positions are included, and this budget reflects negotiated changes to 2023 wages and benefits as provided for in the collective agreement with CUPE Local 3784, as well as grid increases for applicable staff members, as service hours are completed. Administration has responded to the observed decrease in permit/development applications over the past 4 months and has implemented a temporary reduction in staffing in Watershed Management Services accordingly; staffing levels continue to be monitored however, and are subject to adjustments as revenue trends are observed.
- Budget pressures for mandatory services exceed \$600,000 primarily due to anticipated declines in permit application revenues, vehicle and equipment purchases, an increased transfer to the infrastructure reserve and various inflationary pressures and negotiated wage increases. Mitigating items relating to mandatory services account for \$282,250, for a net levy increase of \$372,235. Levy savings of \$144,303, related to non-mandatory programs are accounted for, reducing the total levy increase to \$227,932. Details are included in Tables 1 and 2, as presented in Attachment 1.
- The greatest threats to the Authority's future financial condition and sustainability are tied directly to the risk of infrastructure and facilities obsolescence and deterioration at three sites (Holiday Beach, John R Park Homestead, and Greenways) due to ownership issues (Holiday Beach), provision of non-mandatory services and asset preservation at JRPH and the magnitude of required repairs/replacements to Greenway bridges and crossings. The Authority does not own the

infrastructure at Holiday Beach and is engaged in discussions with the Ministry of Natural Resources and Forestry, regarding future site asset management.

- As municipal funding for non-mandatory services, will be required in 2024 and beyond, the Authority is required to engage its municipal funders in consultations during 2023, regarding inventory of services, and execute funding (apportionment) agreements no later than January 1, 2024. Although the 2023 budget aligns the historic General levy with mandatory functions and the Clean Water~Green Spaces levy with non-mandatory activities, the total 2023 levy is collectible from the Authority's participating municipalities, once approved by way of the weighted vote on May 10, 2023.

Recommendation:

Administration, with the support of the Finance and Audit Advisory Board, and after consideration of budget pressures and infrastructure demands, is recommending an increase to levy of \$227,932, representing a 6.4% global increase. Participating municipalities will be effectively adjusted by changes to their respective CVA weights, as detailed in **Appendix B**.

Approved By:



Tim Byrne
CAO/Secretary Treasurer

Attachments:

- Attachment 1 - Budget 2023: Details, Discussion & Analysis.

Appendices:

- Appendix A – 2023 Draft Detailed Statement of Financial Activities
- Appendix B – Draft 2023 Municipal Levies
- Appendix C – Schedule of Projected Reserves
- Appendix D – Funding Sources by Service Delivery Area
- Appendix E – Where Does Your Levy Go?

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CONSERVATION AUTHORITIES AND LEGISLATIVE BACKGROUND

In Ontario, conservation authorities develop and deliver local, watershed-based resource management programs on behalf of the province and municipalities. Conservation authorities are public sector organizations established by the Province and governed by the Conservation Authorities Act (Act), which is administered by the Ministry of Natural Resources and Forestry. Some legislative provisions, including those related to natural hazard management, are the responsibility of the Ministry of Northern Development, Mines, Natural Resources and Forestry.

Conservation authorities carry out mandatory programs that serve provincial and municipal interests, including:

- natural hazard management / risk mitigation and protection
- flood and erosion control
- management of conservation authority owned land
- drinking water source protection (under the *Clean Water Act*)
- surface water and groundwater monitoring programs

They also provide advice to municipalities on natural hazard management, planning matters, as related to hazards, and regulate impacts of development and activities in hazardous lands, (such as floodplains, shorelines or wetlands) natural hazards, and public safety through a permitting process.

Since its establishment by the Province in 1973, the Essex Region Conservation Authority (ERCA) has been serving its local participating municipalities by providing programs, leadership, the coordination across municipal boundaries, and the management of local natural resources. The recent changes to the Act allow municipalities to continue to work with local conservation authorities to: develop and deliver additional local natural resource programs and services; and have more control over funding of non-mandatory programs and services. ERCA is committed to delivering the non-mandatory local natural resource programs and services, in consultation with its municipal funders.

While the municipal levy funding requirements for mandatory services and municipal agreements, for the funding of levy-supported non-mandatory services, are not in force until January 1, 2024, Administration is presenting 2023 budget information based on the draft segregation of its activities into mandatory and non-mandatory services. In accordance with the requirements of the Transition Plan, Administration continues to refine its inventory of programs and services, including costing and funding information, for review by the Province and the Authority's participating municipalities.

The significant difference between the program and service inventory, as highlighted in the 2022 budget document, is that the financial activities relating to the John R. Park Homestead Museum are now included as non-mandatory, due to direction and feedback, provided by the Province , specifically the MECP. Activities specific to maintenance of the lands and trails are now included in mandatory conservation areas maintenance. This resulted in re-categorizing ~\$151k of levy that was identified as mandatory levy in the 2022 budget, to non-mandatory levy in the 2023 budget.

Municipal special studies and Water and Erosion Control Infrastructure projects (WECI) relating to risks of natural hazards have been transferred to the mandatory category in Watershed Management Services, and historically are not funded with levies. Periodically, municipalities engage the Authority as project manager for special studies related to flooding/erosion and these are included as municipal fee-for-service revenues.

While the Authority delivers its programs through five service delivery areas, they are also further refined into sub-units, as presented in the Programs & Services charts below.

PRIMARY SERVICE DELIVERY AREAS

- 1. Watershed Management Services** are identified as Mandatory and ensure that development in the region progresses in a sustainable manner. Within this business unit, Development Services, Watershed/Water Resources Engineering, Flood Management/Flood Forecasting and Warning, and Watershed Planning are all identified as Mandatory services.
- 2. Conservation Services** protects, restores, and manages natural heritage systems within ERCA's watersheds. Conservation lands management, passive recreation at conservation areas, and tree planting and restoration on conservation lands, are identified as Mandatory services. Conservation Services identified as Non-Mandatory include tree planting and restoration on private or municipal lands, and Holiday Beach Conservation Area operations.
- 3. Water Quality Services** strives to improve the health of local watercourses. Source Water Protection is identified as a Mandatory service and ensures local sources of drinking water are protected through the implementation of policies in the Source Protection Plan. Water quality monitoring to support the Provincial Water Quality Monitoring Network is also identified as Mandatory, while other watershed science programs such as the more extensive and informative water quality monitoring and agricultural Best Management Practices fall under the Non-Mandatory category.
- 4. Community Outreach Services** supports all business units of the Authority, through design and provision of all communications collateral including videos, signage, brochures and website content. Corporate communications, supporting Mandatory activities, are identified as Mandatory, while curriculum-based outdoor education, museum operations at the John R. Park Homestead and most outreach activities are Non-Mandatory. Community Outreach Services provide an essential linkage to external stakeholders through curriculum based outdoor education programs, on-the-ground community restoration events including Earth Day Tree Planting; corporate engagement/team building; volunteer management as well as celebrating and disseminating the work of ERCA's Board and team members, via various traditional and social media platforms. Fundraising support is also provided to the Foundation.
- 5. Corporate Services** provides leadership and management in the delivery of all programs and services. Administration

and oversight are central to the successful functioning of the entire organization, through the office of the CAO, and services are categorized as Mandatory. Corporate Services is organized into four program areas: Governance & Risk; Financial Services; Human Resources; and Information Management/Technology. Team members work collectively to ensure corporate compliance with multiple pieces of legislation and also provide support to the Foundation.

In preparation for the required municipal consultations, regarding the inventory of Mandatory and Non-Mandatory services, the following table indicates Administration's initial construct and categorization:

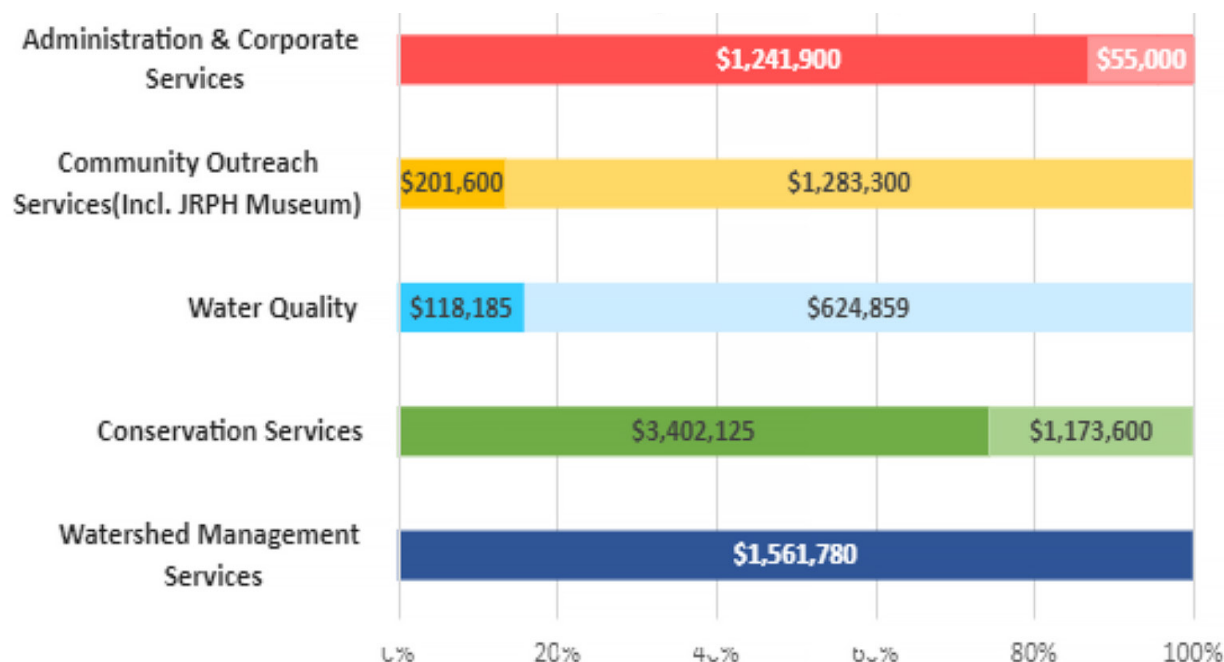
Conservation Authorities Act 21.1 - Mandatory Programs & Services			
Risks of Natural Hazards	Conservation and Management of Lands Owned /Controlled	Water Quality/DWSP	Administration & Corporate Services
<p>S.28 Regulations/ Permits</p> <p>Protection of new development and maintenance, upgrades and repairs to existing development</p> <p>S.39 Flood/Erosion Program</p> <p>Maintaining a regional flood forecasting contingency plan</p> <p>Watershed Engineering</p> <p>Stormwater Management reviews, hazards modelling and mapping, project management services to municipalities</p>	<p>CA Lands & Infrastructure Management (Forest Mgmt, Biodiversity, Long Range Plans & Land Strategies).</p> <p>CA Lands & Infrastructure Maintenance (Operational day to day).</p> <p>CA Lands -Restoration of Natural Areas (Tree replacement, wetlands, etc.)</p>	<p>Drinking Water Source Protection Authority under the Clean Water Act (2006)</p> <p>Provincial surface and ground water monitoring program</p>	<p>Corporate Governance, Board of Directors, CAO</p> <p>Risk Management & Legislative Compliance</p> <p>Finance, Budgets, Financial Statements</p> <p>Human Resources</p> <p>Information Systems/ Records/ Technology</p>
<p>Planning – Risk of Hazards</p> <p>Review and input on long-range planning instruments (OPs, OPAs), coordination of watershed-scale studies</p>	<p>Climate Change – Risk of Hazards</p> <p>Consider impacts with respect to regulatory, engineering, and planning related decisions with respect to natural hazards</p>	<p>Municipal Water & Erosion Control (WECl) Projects</p> <p>(50% Municipal / 50% Province)</p> <p>Other municipal technical studies or infrastructure projects</p> <p>(100% municipally funded)</p>	<p>Corporate Communications</p>
TRANSFERS TO INFRASTRUCTURE RESERVES – CONSERVATION AREAS ASSET REPLACEMENT			
TRANSFERS TO CORPORATE (ADMINISTRATIVE) RESERVES – LEGAL, HR, IT, ETC.			

Conservation Authorities Act 21.1 - Non-Mandatory Programs & Services			
Watershed Management Services	Conservation Services	Water Quality	Community & Outreach Services
	<p>Land Securement & Acquisition</p> <p>Restoration - Non ERCA lands (fee for service or grant subsidized)</p> <p>Holiday Beach Management - Agreement 2001-2031</p> <p>Landowner Stewardship/ Extension Services</p> <p>Essex Soil and Crop Improvement Association Supports</p> <p>Demonstration/ Research Farm</p>	<p>Water Quality & Monitoring</p> <p>Special grant/term-limited research projects & studies</p> <p>Municipal Services provided through agreement (Risk Management Services Part IV CWA) Conservation Authorities Act 21.1.1</p>	<p>Educational programming - various CA locations</p> <p>General outreach, events and partnership engagement</p> <p>Other externally-funded community engagement projects</p> <p>John R Park Homestead museum operations and programming</p>
			Essex Region Conservation Foundation

To enhance the reader's understanding of the Authority's programs and current funding mechanisms, and to respond to the Province's demand for funding transparency, ERCA Administration has provided additional analysis, relating to Non-Mandatory programming through the identification of activities which require a degree of levy support and those that are specific to term-limited special projects or fee-for-service activities and are not levy-dependent.

This revised detailed budget presentation (**Appendix A**) includes sub-sections for each service delivery area, noted as (1) Mandatory Programs & Services, (2) Non-Mandatory Ongoing/Recurring Programs & Services and (3) Non-Mandatory Municipal and Term-limited projects with special grants and fixed term funding. The budget includes ~\$17,000 in municipal services, relating to Part IV (Clean Water Act) compliance activities and is included in the third category for presentation purposes, since it is immaterial to the total budget.

2023 Budget by Service Delivery Area and by Mandatory / Non-Mandatory Functions - \$9.7M



Darker colours represent mandatory services, and lighter colours represent non-mandatory services

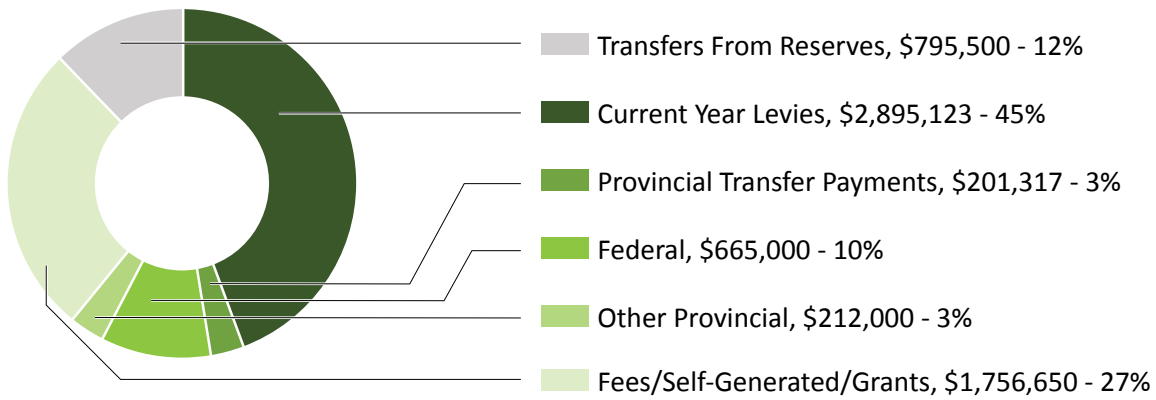
2023 Overview and Analysis

- Administration, in consultation with the Finance and Audit Advisory Board on March 23, 2023, is recommending an increase of \$227,932 (6.4%) to levies, for total levy funding of \$3,768,235 which converts to \$24.33 per household, with assessed value of \$300,000. This is a small increase of \$1.17 per household.
- The 2023 draft budget prioritizes repair and replacement of infrastructure in response to preliminary asset condition reports for greenway infrastructure (bridges/culverts) and JRP Museum/heritage buildings. While still preliminary and subject to review and further analysis, these asset condition reports and cost estimates reveal a potential infrastructure deficit that exceeds \$1million at John R Park Homestead and \$1.8million for replacement of Greenway bridges/crossings, required over the next five (5) years.
- The Authority's budget includes Mandatory program expenses of nearly \$6.2 million, including conservation areas capital projects, plus an additional \$325,000 in levy-funded transfers to the infrastructure reserve fund, for a total of \$6.5million. Non-Mandatory operating expenses of ~\$2.6million are included, plus a transfer

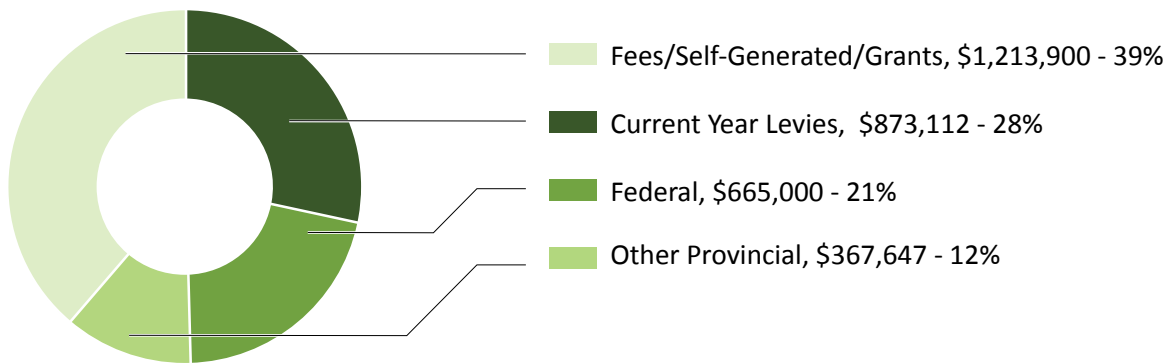
to the JRPH preservation reserve fund of \$515,000 for a total adjusted budget of \$9,662,349. Total revenues of \$8,866,849, plus transfers of \$795,500, are projected to provide the required funds of \$9,662,349 for operations and construction/purchase of assets.

- Levy funding of \$2,895,123 is required to fulfil the Authority's mandated obligations in 2023, consistent with the categories of mandated services, as listed in the Conservation Authorities Act. Additional levy of \$873,122 is required to maintain other programs and services, which are categorized as non-mandatory. \$318,122 is directed to support programs which operate recurrently annually; \$515,000 is allocated to the non-mandatory John R Park Homestead preservation reserve fund and \$40,000 to the land acquisition fund. It should be noted that this allocation represents a reduction in land acquisition funding from the customary \$500,000 to \$40,000, to cover nominal legal and surveying expenses related to the 2022 CASO acquisition.
- While the majority of the levy (77%) supports delivery of mandatory programs, mandatory programs are also financed by provincial transfer payments, permit revenues, user fees and internal chargebacks, with total non-levy sources expected to exceed \$1.4million in 2023.
- Historically, the local investment of levy and municipal special project funding, directed to the Authority has attracted investment of \$1.06 for every \$1 of municipal investment, for Non-Mandatory programs, services and special projects. Between 2017 and 2022, the Authority received municipal funds of \$10,315,527, representing levy and special-project funds, for programs and projects, that are anticipated to be categorized as Non-Mandatory, under the Act, but during that time, non-municipal funds of \$10,978,866 were received, supporting those very same initiatives. The Non-Mandatory work relating to the water quality program generated the greatest return, over the past six years with \$5.31 received from outside funding sources for every CW~GS levy dollar, followed by the tree planting/restoration program which attracted \$3.53 for every CW~GS dollar of investment.
- No new permanent staffing positions are included, and this budget reflects negotiated changes to 2023 wages and benefits as provided for in the collective agreement with CUPE Local 3784, as well as grid increases for applicable staff members, as service hours are completed. Administration has responded to the observed decrease in permit/development applications and has implemented a temporary reduction in staffing in Watershed Management Services accordingly, which continues to be monitored.
- Budget pressures for mandatory services exceed \$600,000 primarily due to anticipated declines in revenues, vehicle and equipment purchases, an increased transfer to the infrastructure reserve and various inflationary pressures and typical wage increases. Mitigating items relating to mandatory services account for \$282,250, for a net levy increase of \$372,235. Levy savings of \$144,303, related to non-mandatory programs are accounted for, reducing the total levy increase to \$227,932. Details are included in Table 1.
- The greatest threats to the Authority's financial condition and future sustainability primarily relate to risk of infrastructure and facilities obsolescence and deterioration at three sites (Holiday Beach, John R Park Homestead, and Greenways) due to ownership issues (HBCA), provision of non-mandatory services and asset preservation at JRPH and the magnitude of required repairs/replacements to Greenway bridges and crossings. The Authority does not own the infrastructure at Holiday Beach and is engaged in discussions with the Ministry of Natural Resources and Forestry, regarding asset management.

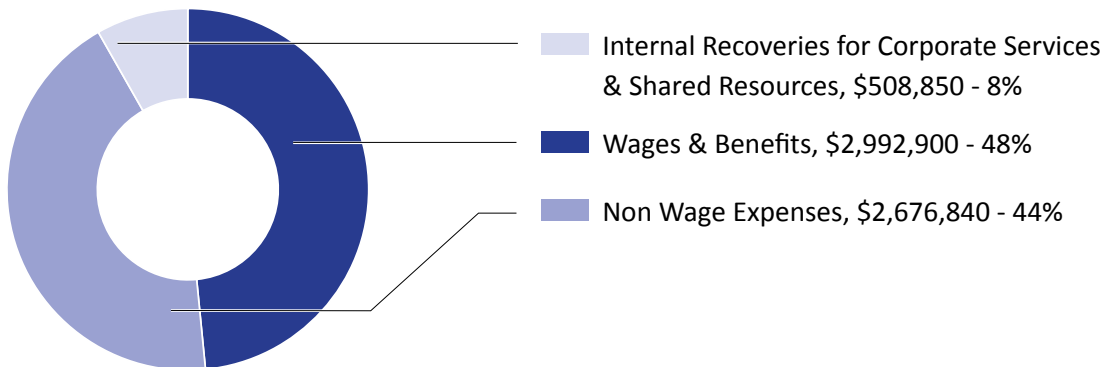
2023 Projected Revenues - Mandatory Programs & Services



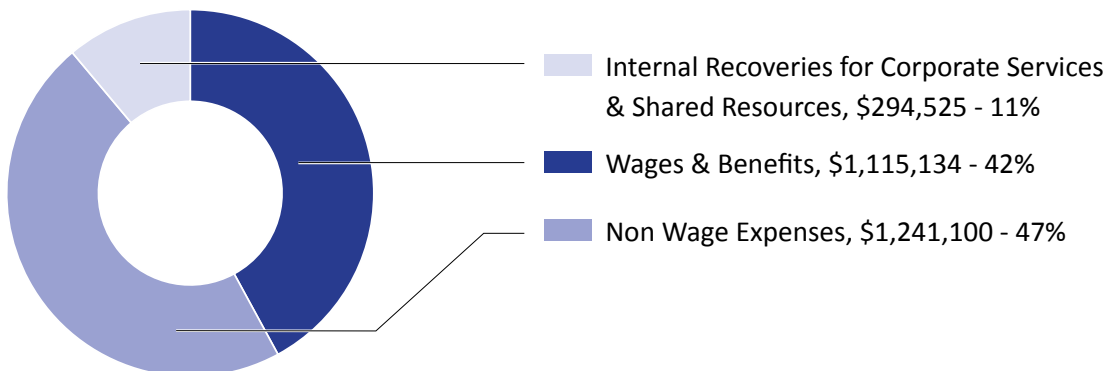
2023 Projected Revenues By Source - Non-Mandatory (Annual / Recurring) Services (Excludes Deferred Revenue / Reserve Transfers)



2023 Expenses - Mandatory Programs & Services



2023 Expenses - Non-Mandatory Programs & Services



YEAR OVER YEAR BUDGET PRESSURES AND MITIGATING MEASURES

Financial Pressures and Cost Drivers

- Based on 4+months of 2022/2023 data, fees associated with permits, clearances, property inquiries and surveying have been conservatively reduced by 25%.
- Insurance premiums have risen 47% from the 2022 budget and as a result, an additional \$56k has been included for premiums to reflect actual premiums.
- Two FTEs are included for a full year but were approved by the Board in 2022 and partially included in 2023.
- Assumes resumption of educational programming that has been partially curtailed during Covid.
- Includes negotiated increases for union members and grid increases for all affected staff.
- Includes additional operating expenses related to the vehicle fleet, due to increased fuel /repair & maintenance costs.
- Includes return to work of staff members on legislated/authorized leaves.
- Includes several inflationary increases, as currently being experienced for some services (e.g., waste removal, utilities etc.), as the timeline for lifting of additional fees, as levied by vendors, is unknown.
- Includes provision to replace one tractor and two heavy-duty trucks.

Mitigating Measures

- Positive financial results of the expanded Maple Festival are included in non-mandatory self-generated revenues and additional gross proceeds have been estimated at \$52k (excludes cost of goods sold).
- Due to the increase in interest rates, additional interest revenues of \$75k have been included.
- Administration will consider the feasibility of adjusting the vehicle fleet to reduce costs and to increase utilization of available vehicles but with an expanded property portfolio and an increase in the conservation areas maintenance staffing complement (CASO/Collavino), it is likely that the fleet/equipment pool will need to be increased rather than decreased.
- The vehicle/equipment reserve will be utilized to address fleet and equipment replacements.
- Temporary staff layoffs have been instituted in Watershed Management Services to address the observed decline in fee-for-service revenues.
- Deferred revenues from prior years, relating to levies allocated to specific initiatives deferred to 2023, are included.

Table 1 - Budget Pressures and Mitigating Items - Mandatory Programs & Services

Budget Pressures- Mandatory Programs/ Services	Category	\$ Impact on Levy Increase	Comment
Permit/clearance revenues	Self-Generated/ Grants	\$ 224,500	Projected economic impact/Bill 23-assumes ~25% decline
ERCF transfers/other grants	Self-Generated/ Grants	16,200	Conservation Services
Increased transfer to infrastructure reserve	Asset replacement	75,000	To address 2023 and future capital projects (Greenway infrastructure)
Insurance, legal & audit	Indemnification/ audit requirement	60,721	Insurance costs comprise the bulk of this increase
Conservation areas maintenance, restoration, fencing, taxes	Lands management	34,614	Increased costs related to Collavino CA, inflationary increases, transfer of JRPH grounds maintenance
Wages and benefits	Compensation	43,550	Net impact of grid/negotiated increases, full year of wages for previously approved staff capacity, slight increase to seasonal staff hours/ rates, return of permanent staff on approved leave-offset by FTE reductions in WMS, related to projected decrease in revenues, noted above
Fleet/equipment operations and replacement	Asset replacement	149,900	\$125k replacements + inflationary factors (fuel, repairs & maintenance)
Transfer from fleet/ equipment reserve to address above	Asset replacement	(110,000)	To address increased fleet replacement and 2023 tractor acquisition
Deferred revenues	Prior year levies allocated to specific initiatives	(73,750)	Prior year levies related to 2023 deferred expenses
Increased interest revenues	Unrestricted revenues	(75,000)	Estimated impact of higher interest rates
Transfer from infrastructure levy	Infrastructure emergency repairs (conservation areas)	(23,500)	Utilize infrastructure reserve to address this item, in lieu of operating levy
Net impact on levy associated with mandatory programs & services		\$372,235	

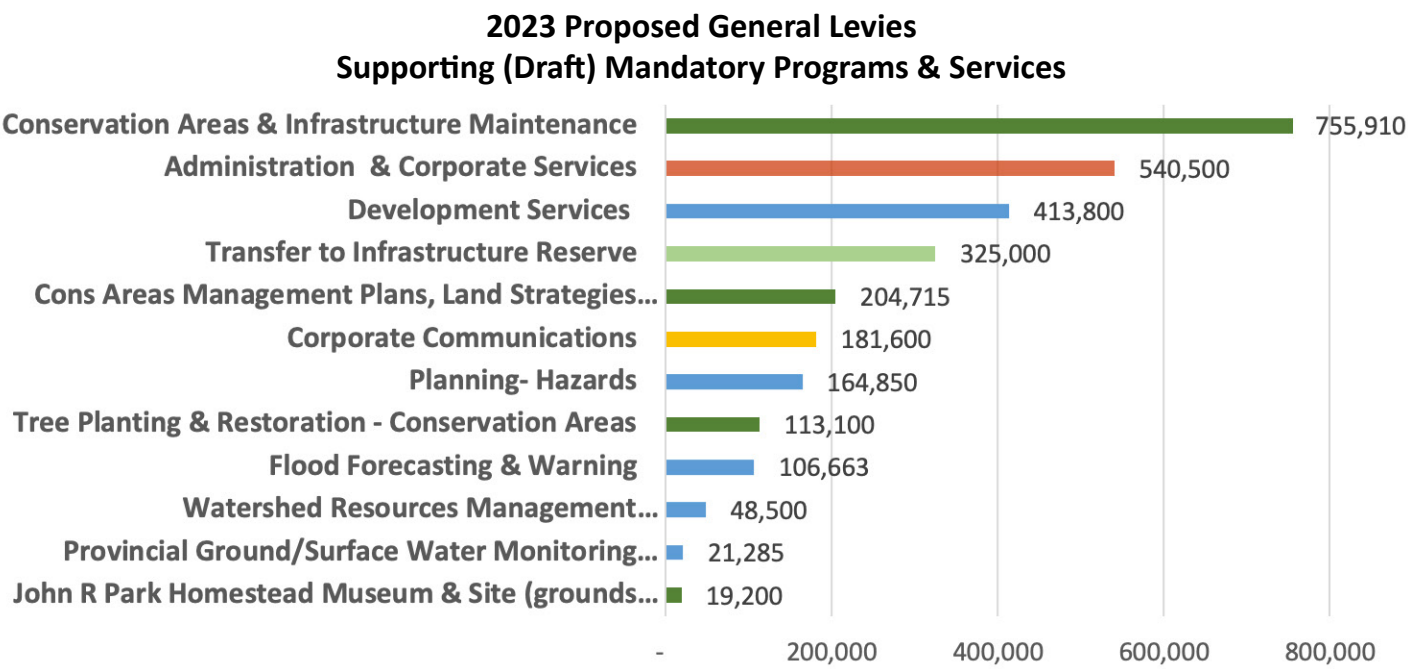
Table 2 - Budget Pressures and Mitigating Items - Non-Mandatory Programs & Services

Budget Pressures- Non-Mandatory Programs/ Services	Category	\$ Impact on Levy Increase	Comment
Transfers to JRPH Preservation Reserve Fund	Reserves	\$ 500,000	To address deterioration of JRPH Museum and heritage buildings
Decline in self-generated revenues for tree-planting/restoration and education	Self-generated/fees	89,000	
Various operating costs including maintenance, HBCA supplies & repairs, insurance, taxes, allocated shared services, etc.	Operating costs	22,077	Inflationary increases, including insurance as well as budget adjustment for operating costs of the JRPH visitor's centre (Fox Creek Conservation Centre)
Reduction in transfer to land acquisition fund	Land acquisition fund	(453,000)	
JRPH/Holiday Beach	Admissions, rentals, sale of goods, offset by supplies	(67,280)	
Transfer from tree planting/restoration stabilization fund	Deferred revenues	(81,400)	
Increased grants for restoration/wetlands on private properties (CFN, etc.)	Federal/Provincial grants	(4,200)	Net of increased costs related to construction/plant material
Deferred revenues	Prior Year levies allocated to water quality and outreach	(55,200)	
Demo Farm/Stewardship	Federal/Provincial grants/Crop sales	(35,400)	
Transfer from ERCF funds for education and special initiatives	Deferred revenues	(37,000)	
Net wage savings	Compensation	(21,900)	Reallocation of some WMS staff to mandatory services due to termination of natural heritage supports to municipalities and transfer of wages associated with property maintenance at JRPH, to mandatory services
Net impact on levy associated with mandatory programs & services		\$ (144,303)	

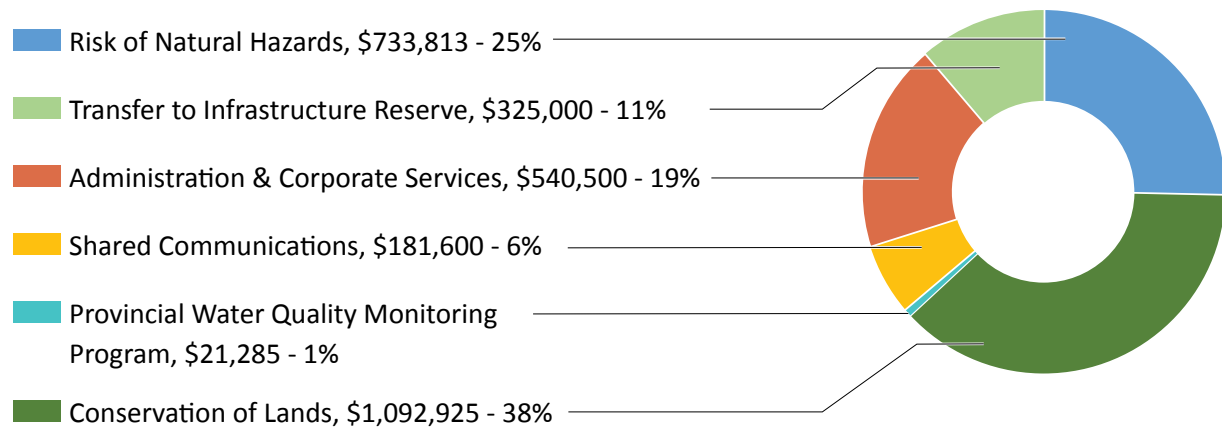
After consideration of mitigating items described above, the required additional levy contribution, to sustain mandatory programs and services is \$372,235, offset by a reduction in levy of \$144,303, supporting the ongoing non-mandatory programs, resulting in a net increase in levy of \$227,932 (6.4%)

LEVIES ANALYSIS AND DRAFT ALLOCATION

After determining operating costs and infrastructure requirements, Administration has calculated required Levy funding of \$2,895,123 to fulfil the Authority’s mandated obligations, as shown below. If municipal funding for non-mandatory services is required in 2024 and beyond, the Authority is obligated to engage its municipal funders in consultations regarding the inventory of programs/services and execute apportionment agreements in 2023. The 2023 budget aligns the previous categories of ‘General’ and ‘Clean Water ~ Green Spaces’ levy with mandatory and non-mandatory programs and services, respectively.



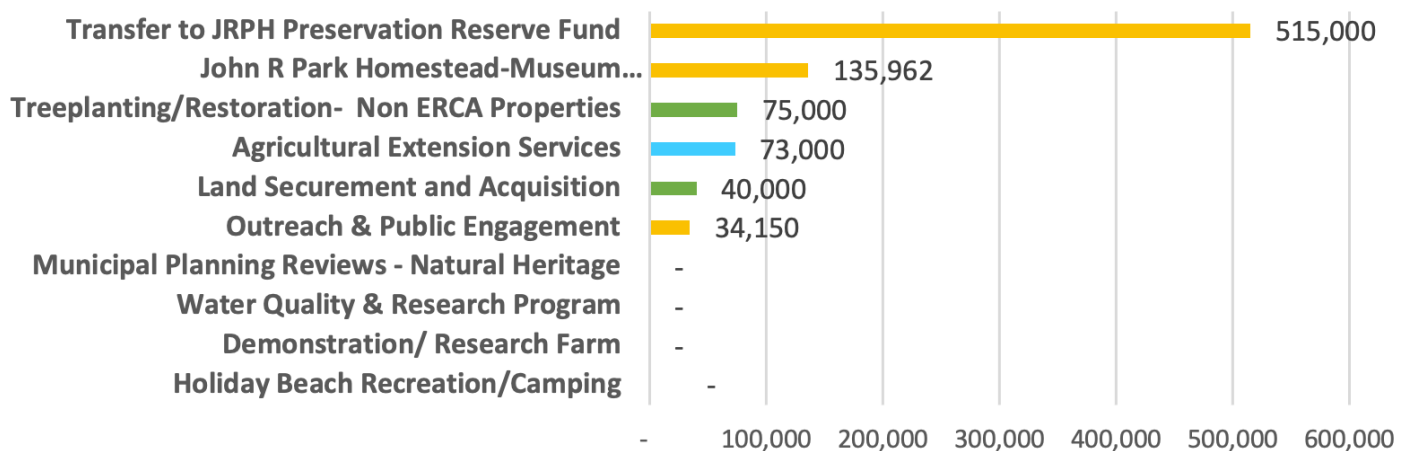
2023 Levy Allocation \$2,895,123 - Mandatory Programs & Services



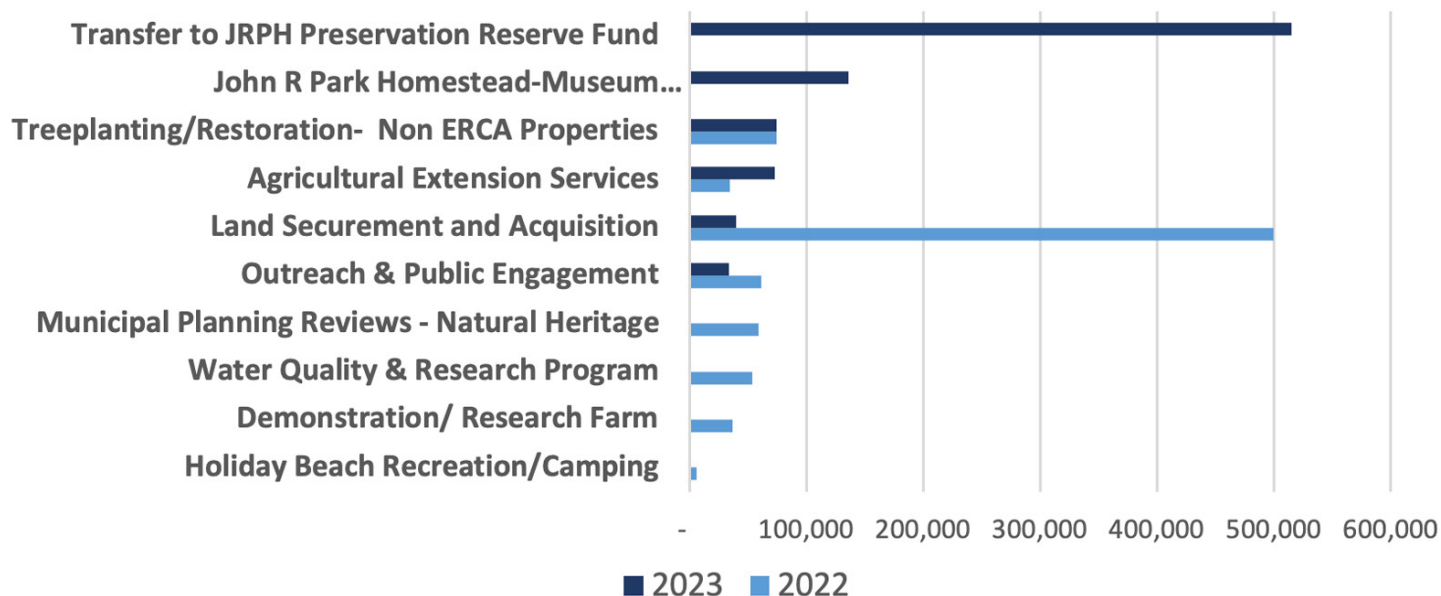
Levies associated with Non-Mandatory services total \$873,112. While Non-Mandatory levy is not insignificant, and approaches \$900,000, **the majority of the allocation supports the \$515,000 transfer to the John R Park Homestead preservation reserve fund.** The remainder ~\$358,000 attracts significant support from other levels of government and NGOs, including the Essex Region Conservation Foundation. Levy supports, on average, **25-30% of the costs to deliver ongoing core watershed programming**, varying annually with successful grant applications and self-generated revenues.

Note that approximately \$956,000 is included in the 2023 budget, for term-limited projects, financed by a third party and/or government funding, or fee-for-service contracts. The decrease in activity is largely attributable to the culmination of the Peche Island project but is partially offset by the new Maple Expansion grant (\$329,000). These projects do not require levy nor do they require municipal agreements in 2024.

2023 Proposed CW~GS Levies (Draft) Supporting Non Mandatory Programs & Services



Levies Supporting Non-Mandatory Programs & Services - YoY Comparison



INFRASTRUCTURE RISK AND REQUIRED FUNDING FOR REPAIRS / REPLACEMENT / PRESERVATION OF ASSETS

The threats to the Authority's financial condition and future sustainability primarily relate to risk of infrastructure and facilities obsolescence and deterioration at three sites (John R Park Homestead CA, Greenways and Holiday Beach CA). The Greenways' infrastructure represents the lowest financial risk due to the fact that the infrastructure is associated with passive recreation and maintenance of same, is eligible for mandatory levy. Conversely the JRPH museum and other heritage buildings are associated with the provision of non-mandatory services and the Authority is precluded from levying for preservation of these heritage assets. This is despite the fact that the transfer of the property from the Province in 2008, contained a number of restrictive covenants and obligations, regarding operations and preservation/maintenance of the assets.

While the risk of infrastructure and facilities failure and obsolescence is an on-going concern at Holiday Beach, the Authority does not have ownership nor an easement over the property and is operating the property by way of a management agreement that expires in 2031. Significant investments have been made at this conservation area over the past 10 years, utilizing the infrastructure reserve, however that opportunity will cease at the end of this budget cycle, as operations there are fully non-mandatory. Administration is currently in discussions with MNRF (Ministry of Natural Resources and Forestry) regarding this property and the management agreement. This budget does not include any provision for a maintenance reserve for this site and the operating budget includes an allocation for certain minimal repairs (meters etc.), that are required before camping season begins.

As a result of the bi-furcation of programs and services into mandatory and non-mandatory and the consequential categorization of those respective assets which support the two-stream service delivery model, Administration engaged consultants in 2022, to undertake asset condition reports for both the JRPH museum and heritage buildings and the infrastructure located within Greenways, such as bridges and culverts. Being aware of the costs

to maintain and replace assets is essential to the municipal discussions regarding the funding of non-mandatory services, specifically the costs to preserve the John R. Park homestead museum and buildings in perpetuity.

In June 2022, the Authority received a preliminary asset condition report, for the John R Park Homestead, which provided an estimate of \$977,476 to remediate twelve (12) buildings. More recently, it was determined that interior structural repairs are required to the main roof of the house, before other repairs can be initiated. A preliminary estimate of approximately \$160,000 was provided by the Architect, however, quotes from Toronto firms, specializing in heritage building remediation are approximately \$350,000. Due to the ongoing structural investigation of the roof, the precise details of the proposed Homestead repairs have not been determined, however a budget of \$259,000 has been included as a provision to address the most urgent structural repair requirements of the house.

Post this budget cycle, the Authority will have no mechanism to collect levy for this essential preservation work. Given the fragile state of the house, its prominence on the site and its integration with programming, Administration is of the opinion that it is imperative to seed a preservation reserve fund with sufficient capital to facilitate crucial repairs over the next year or two.

Seeking and obtaining municipal funding (apportionment) agreements for JRPH museum operations may present a challenge in of itself, as the annual on-going levy requirement is approximately \$150,000- \$170,000 and adding the burden of infrastructure repairs, which are years overdue, on to current and future generations of ratepayers, may be unpalatable and repudiated. Seeding the JRPH preservation fund, is presented as a budget-neutral solution, as Administration is recommending that the customary \$500,000 annual levy funding for land acquisition, be diverted to this specific-purpose reserve fund. The land acquisition fund currently maintains a balance in excess of \$1.9 million.

During 2022, the Authority also engaged a consultant to undertake an assessment of its Greenways bridges and crossings. The preliminary report, received in December 2022, identified projected costs for infrastructure replacements and repairs, for end of lifespan bridges/crossings, in the order of \$1.8million, recommended to be completed between 2023 and 2027. An additional \$1.2million is estimated as the cost to replace end of lifespan assets in 2032.

While the 2023 budget includes a transfer to the general infrastructure reserve fund, of \$325,000, future budgets may need to account for a similar provision annually to address the infrastructure deficit noted above. The consequences of not replacing bridges may increase the Authority's risk profile to an unacceptable level and ultimately necessitate asset decommissioning/trail closures. Upon receipt and review of final asset condition reports, Administration will initiate the update to the asset management plan.

RESERVE FUNDS

The Authority maintains several reserve funds and this budget includes levy-funded transfers of \$840,000 to infrastructure reserves and transfers from the reserves, of \$795,500, are expected to fund capital projects and fleet/equipment acquisitions, as identified in **Appendix C**. Reserves are therefore projected to increment by \$44,500 and all Authority Reserve Funds are shown in **Appendix C**.

Capital projects include the following:

Table 3 - Capital Projects 2023

Capital Projects 2023	Total Cost	Infrastructure/ Other Reserve
JRPH Museum repairs	\$259,000	\$157,000
JRPH Connectivity	39,500	22,000
Greenways culvert/bridge remediation	242,500	242,500
Parking lot(s) resurfacing (deferred in part from 2022)	100,000	100,000
Contingency for emergency infrastructure repairs	30,000	30,000
Conservation Areas signage	25,000	25,000
Train Station maintenance & repairs	26,000	20,000
Fleet/Equipment replacement and fleet operations	352,700	153,000
Cloud development (S28) permitting system	70,500	46,000
	\$1,145,200	\$795,500

HUMAN RESOURCE ANALYSIS

While no new permanent staffing positions are contemplated, one term contract position is included in mandatory services but is grant-funded and related to the Hillman Marsh climate adaptation management plan. Despite the anticipated decline in permit revenues, Watershed Management Services (WMS) human resources will be mostly retained in order to fulfill one of the mandatory components of the Conservation Authorities Act Transition Plan, which is due by January 1, 2024. At the time of writing, one staff member in WMS is on temporary layoff and one has been redeployed to a vacant Conservation Areas Technician position. Recall of these positions will be dependent on the extent that development services revenues are expected to exceed the budgeted amount, based on ongoing monitoring and analysis of fee-for-service revenue trends.

Compensation, including payroll taxes and benefits is the Authority's largest category of expense, comprising 45% of the budget and 72% of the compensation expense is associated with mandatory services. Certain positions that were partly included in 2022, due to recruitment schedules, are included as full-time- equivalents (or nearly) in the 2023 budget. Overall, total FTEs of 47.7 are slightly lower than the 49 budgeted 2022 FTEs, due to a contraction in Water Quality, as term funding ended in March 2023, and a slight contraction in Watershed Management Services, associated with reduced permit application activity and revenues.

Recruitment and retention remain an on-going challenge with demand for many positions, outpacing the available supply of talent. The Authority shares positions of a similar nature, with municipalities and the public sector, which often have higher pay scales, which contributes to the recruitment challenge.

Table 4 – Budgeted Wages 2023

	2023 BUDGETED WAGES	2022 BUDGETED WAGES	2022 PROJECTED WAGES
Total Wages & Benefits			
Mandatory Programs & Services	\$ 2,992,900	\$ 2,872,300	\$ 2,747,758
Total Wages & Benefits Non-Mandatory			
Programs & Services-Annual Recurring	792,100	814,000	803,875
Total Wages & Benefits			
Non-Mandatory Term-Limited Special Projects	323,534	435,050	501,902
Total Wages & Benefits	\$ 4,108,534	\$ 4,121,350	\$ 4,053,535

Table 5- Summary of Employee Full time Equivalents

Service Delivery Area	2023 Mandatory	2023 Non- Mandatory Ongoing	2023 Non- Mandatory Term Project	2022 Mandatory	2022 Non- Mandatory Ongoing	2022 Non- Mandatory Term Project
Watershed Management Services	11.8			14.0		
Conservation Services	9.0	6.0	.1	8.2	5.5	
Water Quality	1.0	2.4	1.7	.8	2.4	4.2
Community Outreach	1.7	5.2	1.1	1.7	4.3	.3
Corporate Services	7.3	.4		7.2	.4	
Total FTEs	30.8	14.0	2.9	31.9	12.6	4.5

RETURN ON LOCAL INVESTMENT

Historically, the local investment of levy and municipal special project funding, directed to the Authority has been matched dollar for dollar, if not exceeded. Between 2017 and 2022, the Authority received municipal funds of \$10,315,527, representing levy and special-project funds, for programs and projects, that are expected to be categorized as Non-Mandatory, under the Act, but during that time, non- municipal funds of \$10,978,866 were received, supporting those very same initiatives.

Table 6 - Sources of Funding

2017-2022 Sources of Funds – Non-Mandatory Programs & Services			
Levies + Municipal Special Project \$	\$	10,315,527	48%
Federal & Provincial Grants		9,124,819	43%
Essex Region Conservation Foundation		639,284	3%
Other Non-Government		1,214,763	6%
	\$	21,294,393	100%
Total Funding - All Sources	\$	10,978,866	\$1.06:\$1.00

For capital projects, which include a mix of projects, supporting both mandatory and non-mandatory functions, as those are now defined, ERCA has attracted \$1.56 for every \$1 of local taxpayer investment, as shown below:

2017-2022 Sources of Funds - Capital Investment			
Levies + Municipal Special Project \$	\$	2,032,722	39%
Federal & Provincial Grants		1,260,477	24%
Essex Region Conservation Foundation		1,905,595	37%
	\$	5,198,794	100%
Total Non-Municipal Funding - Capital Investment	\$	3,166,072	\$1.56:\$1.00

It should be noted that the Essex Region Conservation Foundation provided funds of almost \$2.0 million, towards capital projects, between 2017 and 2022, with substantial investment directed to the Cypher Systems Greenway, the Fox Creek Conservation Centre and recently, to the JRPH house repairs.

LEVERAGED INVESTMENT HIGHLIGHTS

- Since 2016, the Watershed Management Service department has successfully secured \$995,500 in grant funds to support flood and erosion hazard programs and projects across the Essex Region. Through various provincial and federal grant opportunities, the Authority has secured over \$400,000 through funding programs only available to Conservation Authorities, which have enabled significant repair and improvement projects as well as condition assessment for flood and erosion control infrastructure.

- An initial investment of approximately \$46,000 into the development of a Floodplain Prioritization assessment resulted in securing a total of \$422,000 from the federal and provincial governments to undertake updates to hydrologic and hydraulic modelling and subsequent flood mapping updates.
- Over the past 5 years, approximately 70% of secured grant funding obtained through Watershed Management Services has benefitted the City of Windsor, with the remaining 30% largely focused on maintaining critical flood control infrastructure throughout the region.
- ERCA has protected 484 acres of land in 2022 through acquisition and donation and will soon acquire an additional 70 acres as a donation. \$635,000 of CW~GS funding supported 2022 land acquisition costs, while external support received was approximately \$2,500,000 in contributions from partners and donated land values. The fair market value of 2023 expected donations of land is valued at over \$1,000,000.
- ERCA has restored over 400 acres and planted over 400,000 trees over the past five years with \$665,000 support from CW~GS levy funding, attracting \$2,349,500 in government grants, and non-government grants and donations, including \$163,000 from the Foundation (ERCF).
- Between 2017 and 2022, \$494,789 in CW~GS levy was used to support watershed research and water quality sampling at approximately 62 sampling locations throughout the region, and 275 water quality improvement projects were implemented, while corporate, federal and provincial contributions towards these initiatives, to enhance our understanding of impacts on our local water sources, was \$2,625,260.
- From 2017 – 2022, a total of \$562,755 of levy funding was used to support outreach and education programs, while \$250,778 in external funding was contributed through grants and donations. During that period, a total of 52 Community Outreach Events were undertaken across the region, resulting in 6,144 volunteers planting 14,937 trees, 2,275 native plant plugs and removing 2.32 metric tonnes of garbage across the region – even though stewardship events were severely curtailed though 2020 and 2021.
- Through 2021 and 2022, Administration actively solicited private funding as part of a focused fundraising campaign through the Essex Region Conservation Foundation, which has eliminated the need for levy funding for curriculum-based Outdoor Education programs for a five-year period.

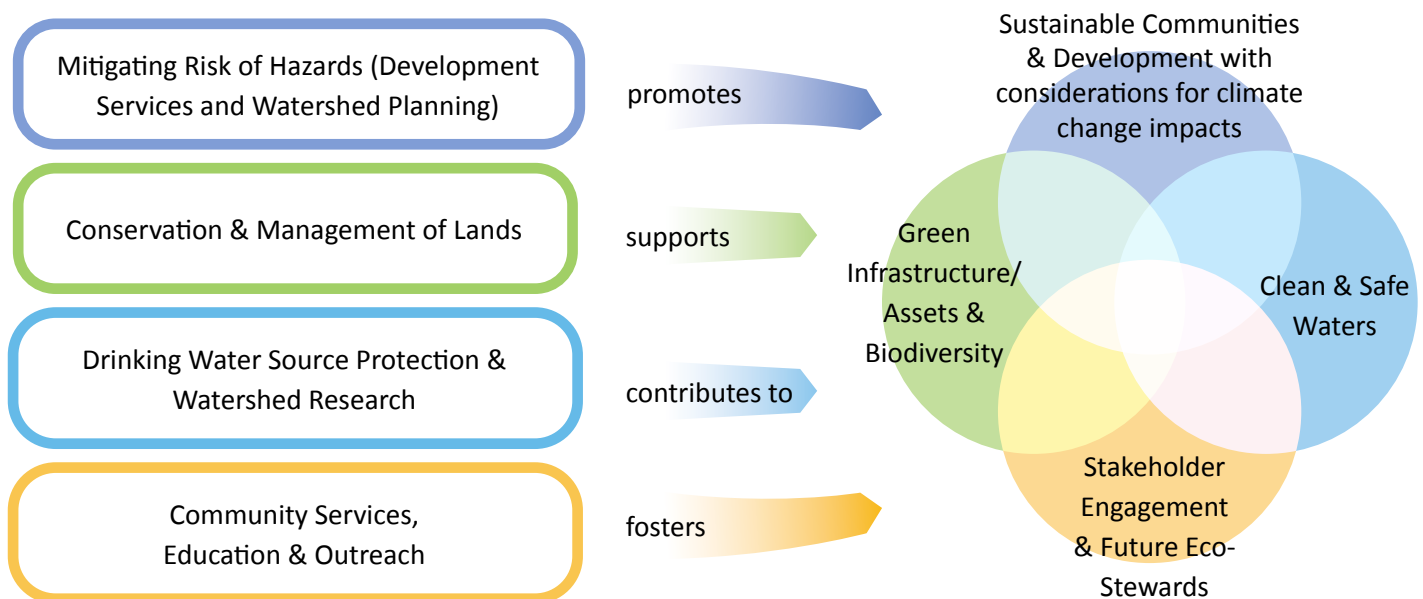
Integrated Watershed Management

As an integrated watershed management agency, ERCA's five service delivery areas have developed over decades, and include beneficial programs and services that support our collective shared objectives and goals, related to ecological, social, and economic health.

These programs were developed by and are implemented by recognized experts in civil/environmental engineering, environmental studies, watershed planning, forestry, biology, ecology, agronomy, water quality science, restoration, and natural resource management. ERCA works across all sectors and levels of government, to secure mission support and sustainable funding, in order to achieve the community's vision for our region.

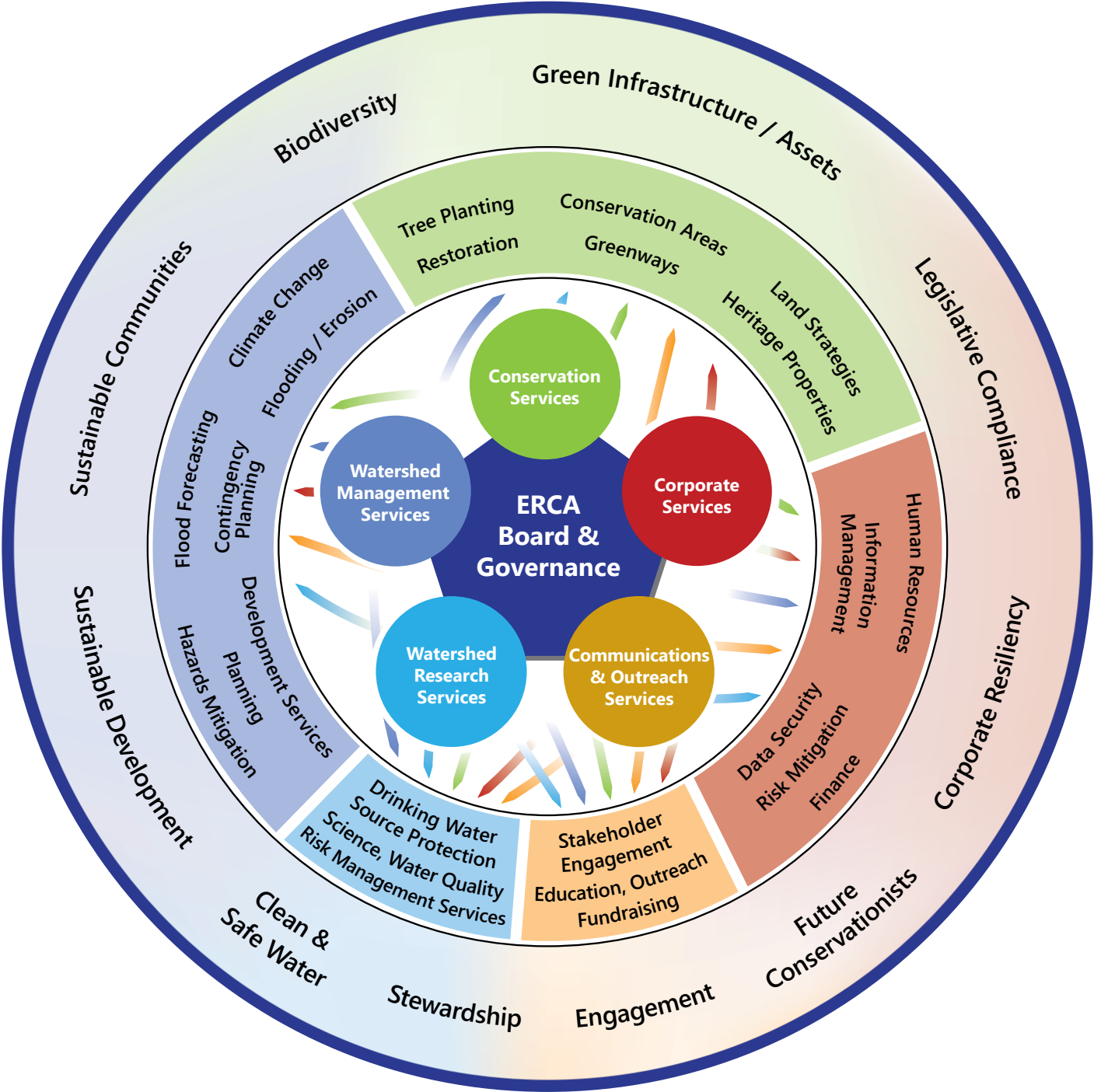
Recent changes to the Conservation Authorities Act confirmed core and the mandatory functions of conservation authorities including: mitigating risks of natural hazards; conserving and managing lands, for heritage and hazards; drinking water source protection; and surface water and groundwater monitoring. To continue to be relevant and to serve the residents of this region, ERCA should be delivering, and can continue to deliver the ancillary programs and services that impact the overall well-being, health and safety of the region and its citizens. **As noted above, the programs, which may be permanently recognized as non-mandatory in the near future, and are potentially at-risk for loss of municipal funding, have returned \$1.06 for every local taxpayer dollar since 2017.**

While it is convenient to organize business functions by service delivery areas and additionally, they align with Provincial categories, each of ERCA's programs support environmental objectives, embraced by all:



ERCA delivers programs consistent with the objects of Conservation Authorities, as defined in the Conservation Authorities Act and is committed to delivering the non-mandatory local natural resource programs and services, in consultation with its participating municipalities and the residents of this region. However, museum operations, maintenance of heritage assets and heritage programming do not fall within the objects of Conservation Authorities, but notwithstanding, the Authority is operating the museum within the covenants of the 2008 property transfer agreement, for the John R Park Homestead site.

PROGRAM INTEGRATION MODEL



The Integrated Watershed Management approach requires an understanding of the interactions between our environment, the economy, and society. At the core of everything that ERCA does to better understand, preserve, and enhance our region, is ERCA’s Board of Directors and our five key service areas. Through the Board’s sound governance and oversight, along with Administration’s efforts in delivering the various interconnected programs within these service areas, ERCA continues to gain a better understanding of our watershed. It is through this approach that ERCA will continue to protect our region’s resources, people, and property, and address the escalating environmental challenges we face now and in the future. The Program Integration Model above demonstrates the linkages between each of the various programs and services, both Mandatory and Non-Mandatory, which are all crucial to achieving our region’s objectives of a healthy, sustainable future for the residents of Windsor-Essex.

Service Delivery Area

Operating Plan Highlights



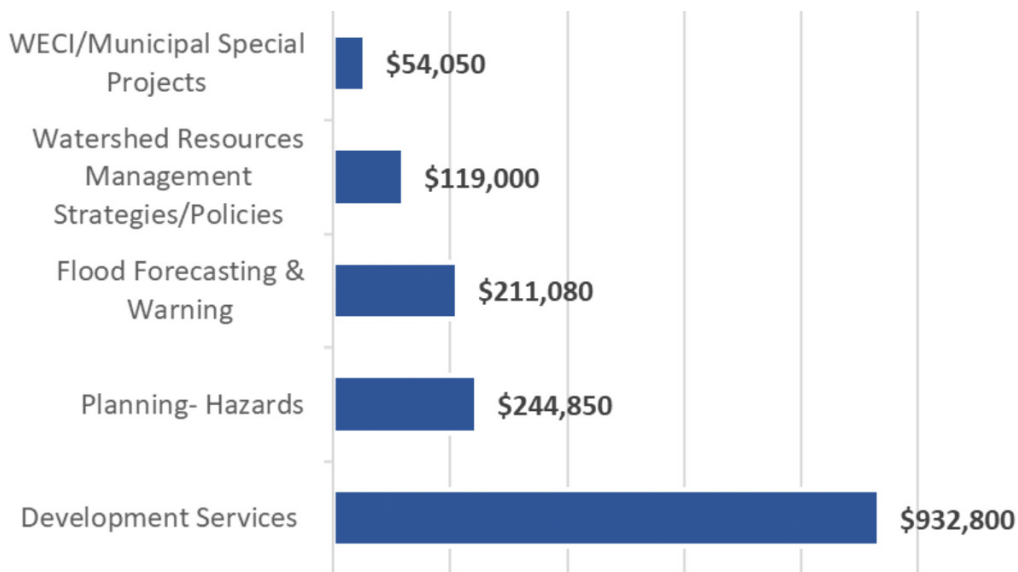
Watershed Management Services

Watershed Management Services are identified as mandatory services and ensures that development in the region progresses in a sustainable manner, is directed away from natural hazards, while protecting existing development, water resources, and natural features that contribute to flood and erosion attenuation.

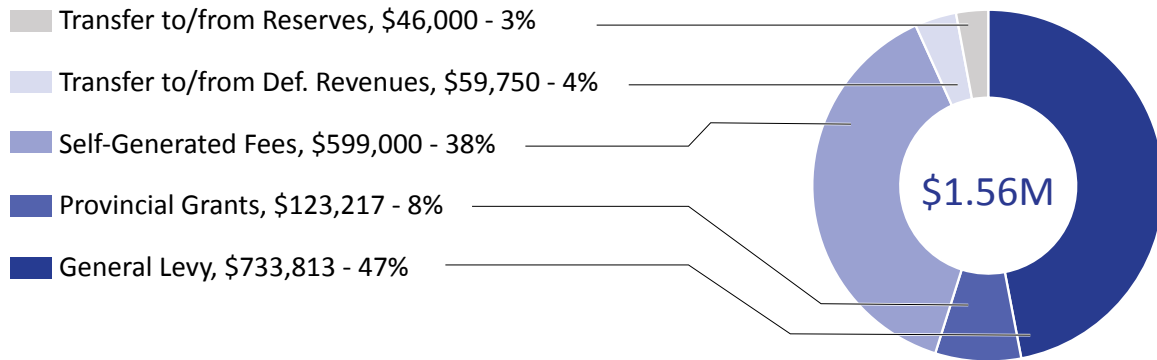
Watershed Management Services are delivered through four programs:

- Development Services (mandatory services)
- Watershed/Water Resources Engineering (mandatory services)
- Flood Management/Flood Forecasting and Warning (mandatory services)
- Watershed Planning (mandatory)
- Approximately 12 FTEs deliver these services

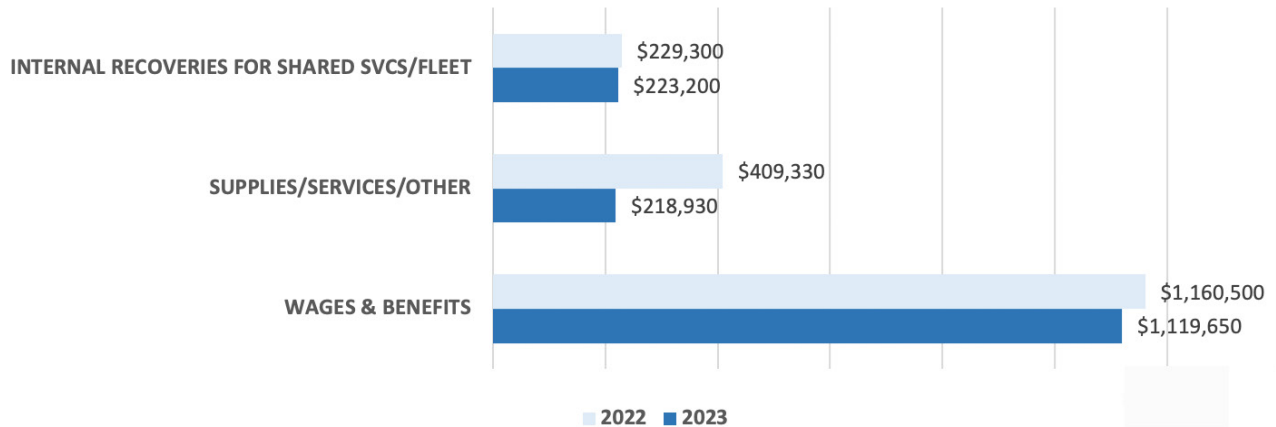
Mandatory Watershed Management Programs & Services - \$1.56M



Watershed Management Services Sources of Revenues for MANDATORY Programs



MANDATORY Watershed Management Program Expenses by Category



In general, the budgeted Watershed Management Services expenses are less than recent previous years as a result of the anticipated decline in development activities across the region. Past years included wages to account for increased hours to meet increasing demands and service delivery targets. The 2023 budget includes most staff on normal working hours with a focus on meeting development service delivery targets, policy review and development, and special projects and ancillary services that support core mandate functions. Two temporary layoffs have been instituted while development applications and related services continue to be monitored.

DEVELOPMENT SERVICES

ERCA administers the Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation, approved by the Minister of Natural Resources and Forestry and known as Ontario Regulation 158/06, as amended. The Regulation allows ERCA to regulate development within hazardous lands through a permitting process. These lands could be unsafe for development because of naturally occurring processes associated with flooding, erosion, unstable soils, dynamic beaches, unstable slopes or in areas where conservation of lands could be impacted by development. The priority is to reduce risk to life, damage to property, and social disruptions resulting from natural hazards.

2023 Program Highlights

- Administration will review the Authority's development policies from 1987 and 2006 and complete an update to comply with current development practices and legislative requirements.
- In an effort to continue with modernizing development review processes, Watershed Management Services is working closely with Information Technology to migrate the permitting and Property Information Management System to a cloud-based service to reduce potential points of failure (i.e., Civic Centre power failures) that disrupt service delivery. This modernization includes a phased approach to build the necessary cloud-based software for staff use and the government-client portal for online services.

WATERSHED / WATER RESOURCES ENGINEERING

Managing the risks associated with the natural hazards of flooding and erosion is one of the primary roles of conservation authorities under the Conservation Authorities Act. This role is fulfilled through the delivery of multiple natural resource management programs and services, including flood plain management and mapping, water and erosion control infrastructure planning, and stormwater management. Many projects delivered through the engineering program are considered "special projects" or "ancillary services" that support core responsibilities of the authority within the context of natural hazards management. The program is currently wrapping up several complex flood mapping projects and beginning new undertakings to update the coastal hazard mapping completed in 1976.

2023 Program Highlights

- Complete the Little River Floodplain Mapping as part of the City of Windsor Sandwich South Master Servicing Study to inform regulatory requirements for future development. This project is delivered on behalf of the City of Windsor as a fee for service undertaking and is 100% cost recoverable.
- Complete the Turkey Hydrologic and Hydraulic Modelling, funded by the City of Windsor, the Town of LaSalle, and the Town of Tecumseh. This project was delivered as a fee-for-service undertaking ensuring cost recovery for the Authority, with municipal expenses subsidized with federal funding of \$182,000 through the National Disaster Mitigation Program (NDMP).
- In coordination with municipal partners, the coastal hazard mapping completed in 1976 will be updated through 2023, with final deliverables expected in March 2024. The total project is valued at approximately \$480,000, with \$240,000 of federal and provincial funding obtained through the Flood Hazard Identification and Mapping Program (FHIMP).
- Evaluate needs to support developing a Watershed-Based Resource Management Strategy, completed by December 31, 2024, as required through Ontario Regulation 686/21: Mandatory Programs and Services.
- Administration will continue to explore partnership and funding opportunities to update flood and erosion hazard mapping.

FLOOD MANAGEMENT

Recognizing that protection of life and property from flooding and erosion hazards is dependent on natural system protection, restoration and remediation; and that development and redevelopment should contribute to the prevention, elimination, and reduction in risk from flooding, erosion, and slope instability. The five pillars of flood management: prevention, mitigation, preparedness, response and recovery, are applied.

2023 Program Highlights

- Update ERCA's Flood Contingency Plan.
- Develop an Operating and Maintenance Manual for ERCA owned and managed climate stations.
- Explore opportunities for increasing flood forecasting operational capacity, including grant funds support field data collection and telemetry.
- Explore grant opportunities through Water and Erosion Control Infrastructure (WECI) mandatory flood management activities across member municipalities.
- Monitor lake levels and a network of 30 climate stations to provide advanced warning of flooding and accelerated erosion.
- Continue to participate in flood-related emergency planning and response activities with member municipalities. Continue to participate as a selected committee member on the Provincial Flood Mapping Technical Team to fulfill Provincial commitments contained within Ontario's Flood Strategy.

WATERSHED PLANNING

ERCA continues to work towards a 'Planning-first principle', which ensures that appropriate planning permissions are in place before any consideration is made for approvals under the Conservation Authorities Act. The planning program area delivers services that fall under the mandatory service category. ERCA's service delivery through Watershed Planning includes all mandatory-related reviews and comments on various Planning Act instruments, as mandated through the amended [Conservation Authorities Act](#) and [Ontario Regulations 686/21: Mandatory Programs and Services](#). It is through this service that Administration provides the necessary comments related to natural hazards, source water protection, and conservation authority owned lands, ensuring the continued "planning-first approach" to protecting the watershed.

2023 Program Highlights

- Watershed Planning currently delivers hazard reviews and comments on circulated Planning Act instruments, as required through Ontario Regulation 686/21: Mandatory Programs and Services, ensuring consistency with the current Provincial Policy Statement and local natural hazard development policy. Source Water Protection, more specifically, the Risk Management Services related to Part IV of the Clean Water Act and comments related to lands owned by ERCA, are also delivered through Watershed Planning. The program is funded through a combination of General Levy and supplemented by program user fees, consistent with the "user pay principle".
- The decentralization of climate change considerations continues to be implemented. Such considerations are delivered through Watershed Planning and Engineering services as potential impacts are often multi-faceted and require input from various professionals within WMS.

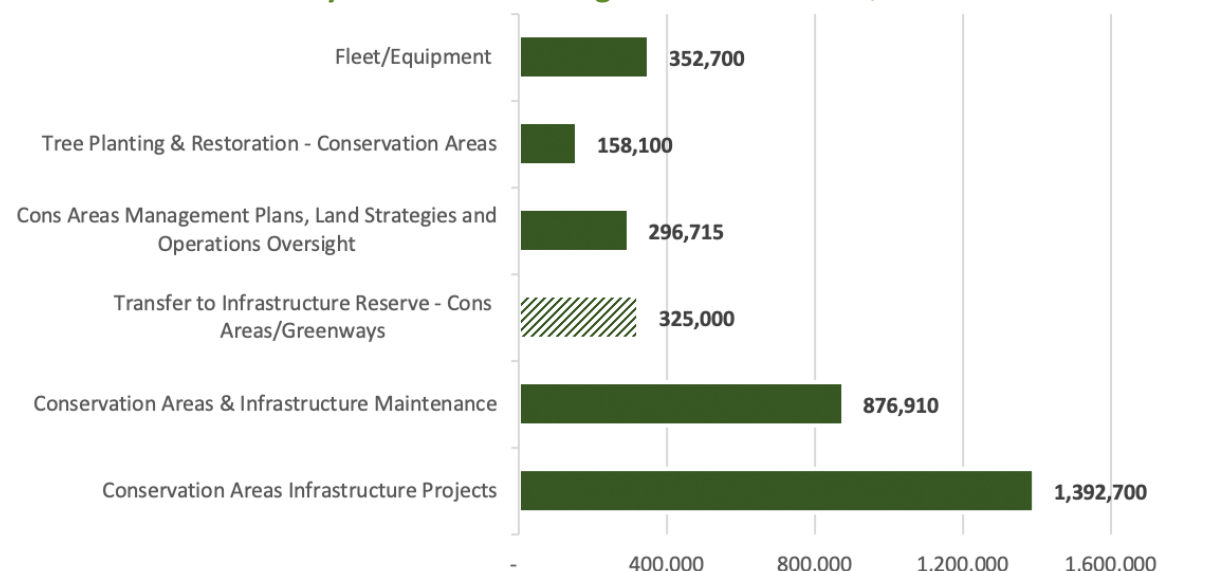
Conservation Services

ERCA's Conservation Services programs protect, restore, and manage natural heritage areas and systems within ERCA's watersheds. This is accomplished through a system of conservation lands, strategic and leveraged investment in land securement, and by identifying and implementing priority restoration projects. All Conservation Areas within the ERCA watershed are impacted on by Natural Hazards, fundamental to the management of sites is the access to hazard areas for flood observation and in the case of trails physical access to reaches that would otherwise be inaccessible. Further, some of our properties are designed/engineered to receive flood waters to reduce upstream impacts of flood waters should they occur. Conservation Services are delivered through multiple programs, in a mix of mandatory and non-mandatory services:

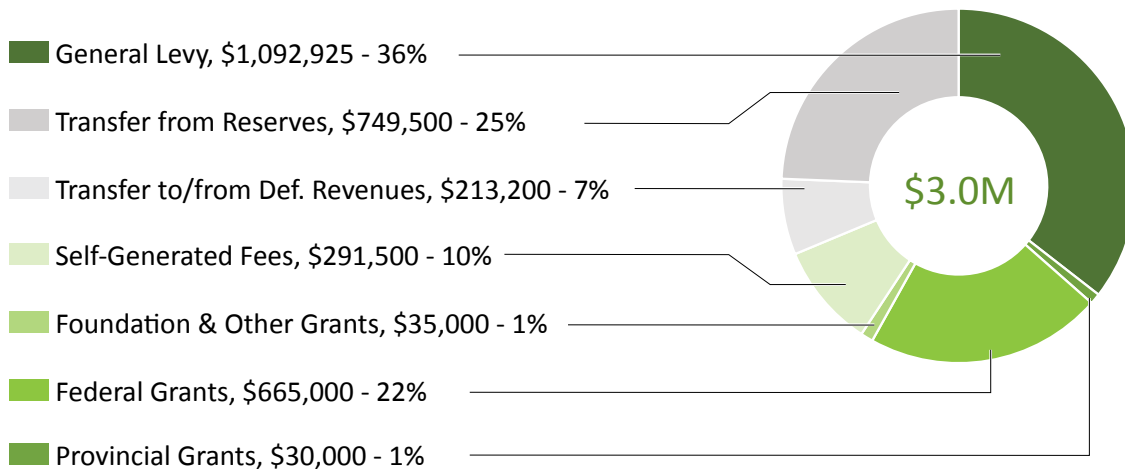
Mandatory Services	Non-Mandatory Services
Conservation Land Management	Tree Planting and Habitat Restoration on Private and Municipal lands
Public Conservation Areas	Land Securement & Acquisition
Tree Planting & Restoration - Conservation Lands	Holiday Beach Conservation Area
John R. Park Homestead – Conservation Area Operations	John R. Park Homestead – Museum Operations
Capital Projects	

Approximately 15 FTEs deliver the services and includes seasonal restoration workers, tree planters, conservation areas technicians and support staff. Included in the 2023 budget are costs associated with expanded staff capacity during the winter months to undertake maintenance along the greenways, including the new CASO property and implement hazard tree removals to ensure public safety.

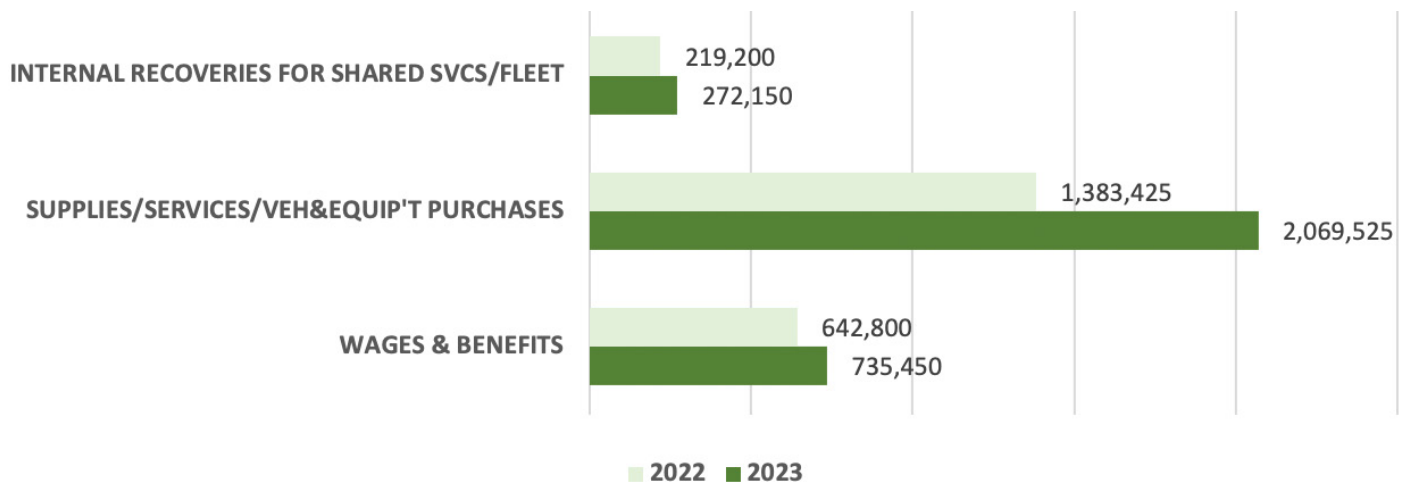
Mandatory Conservation Programs & Services - \$3.4M



Conservation Services Sources of Revenues for MANDATORY Programs



MANDATORY Conservation Programs & Services Expenses by Category



CONSERVATION LAND MANAGEMENT

The Essex Region supports a higher diversity of plant and animal species than any other region in Canada and sustains one of the highest concentrations of globally rare species in an area with some of the lowest percentage of natural cover in Canada. Conservation Areas are managed to protect this natural heritage, preserve human and cultural heritage, and support active and healthy living.

ERCA will continue to manage the natural resources of our region as outlined in the updated Conservation Authorities Act and undertake management of Conservation Areas to improve the biodiversity of the region while also improving the resiliency of species at risk that are vulnerable to climate change.

2023 Program Highlights

- ERCA's Forester will undertake and update forest inventories in many conservation areas to inform management planning documents.
- Invasive species management will be undertaken along the greenway properties and in Conservation Lands that have wetlands.

- ERCA's burn crew will implement prairie management through prescribed burn at Hillman Marsh.
- A new wetland will be built in the Cedar Creek watershed and plans are underway to restore a large former farm field to wetland.
- In keeping with revisions to the Conservation Authority act, staff have initiated the creation of a new Conservation Areas Land Management Strategy.
- ERCA has initiated a restoration and climate adaptation planning process at Hillman Marsh to restore habitat lost in this wetland and to stabilize the eroding shoreline.

PUBLIC CONSERVATION AREAS

Since 1974, ERCA has been acquiring lands to ensure the protection and conservation of their significant natural and cultural heritage features. Conservation Areas ensure that valuable greenspace is protected while allowing for recreational opportunities in safe, well maintained natural settings which are critical to maintaining physical and mental health. Conservation Areas and trails are also identified as key economic drivers and of critical importance to creating an environmentally and economically sustainable region, where people want to live and where companies want to invest.

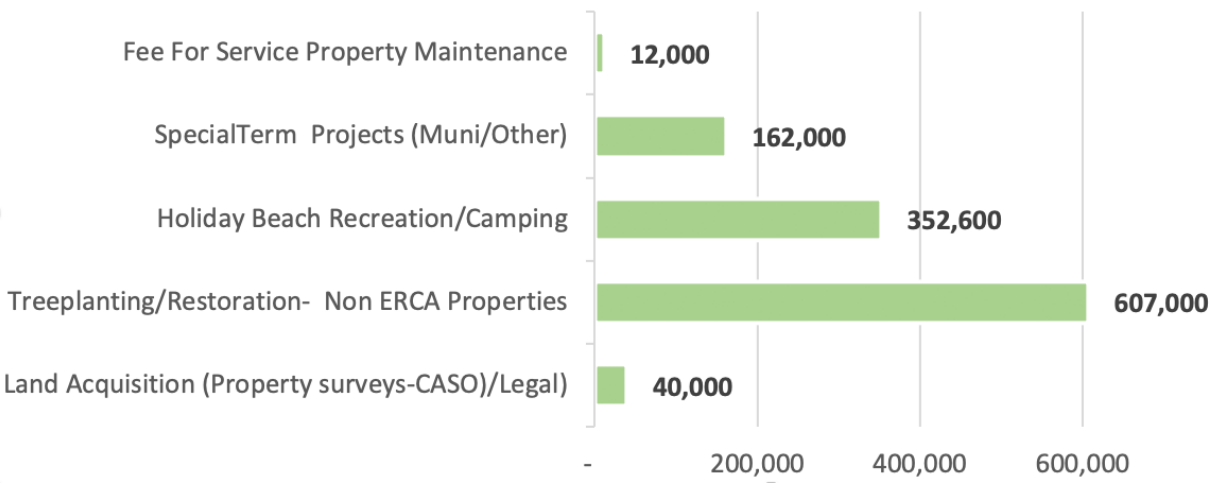
2023 Program Highlights

- Undertake restoration works of the main house at the John R. Park Homestead.
- Initiate wetland and shoreline restoration works at Hillman Marsh Conservation Area.
- Assess the condition of and forecast future maintenance work for the major bridges along ERCA's rail trail corridors and initiate replacements of bridges at the end of their lifespan.
- Winterize and upgrade facilities at Holiday Beach to allow for winter festivals such as the annual maple syrup festival.
- Remove vegetation from trail edges and remove hazardous trees, primarily along the Greenway multi-use paths.
- Continue making public infrastructure investments in the Collavino Conservation Area with the goal of making the site publicly accessible within two years.
- Complete the installation of an accessible lift in the Fox Creek Conservation Center.
- Ongoing Tree Planting and Restoration in Conservation Areas.
- Operate and maintain 17 conservation areas welcoming thousands of visitors each year.
- Ongoing replacement of fleet and equipment assets.
- Hard surfacing (tar and chip) parking lots to improve accessibility and visitor experiences at the John R. Park Homestead and Devonwood Conservation Areas.
- Continue to contribute to the update of ERCA's Asset Management Plan to accurately reflect future capital funding requirements.

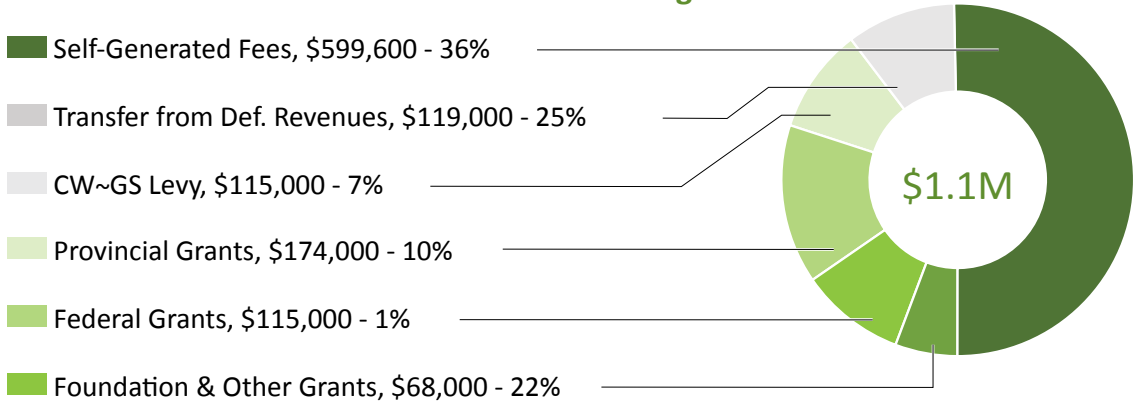
ERCA continues to expand natural habitat in this region by increasing wetland, prairie and tree cover on properties it owns. Through partnerships, lands will continue to be strategically acquired through purchase or donation to create a more sustainable region. In 2023, a new wetland on ERCA's Cedar Creek landholdings will prevent ongoing erosion of our field and provide multiple co-benefits such as flood attenuation, water quality improvements and habitat for wildlife.

CONSERVATION SERVICES - NON-MANDATORY

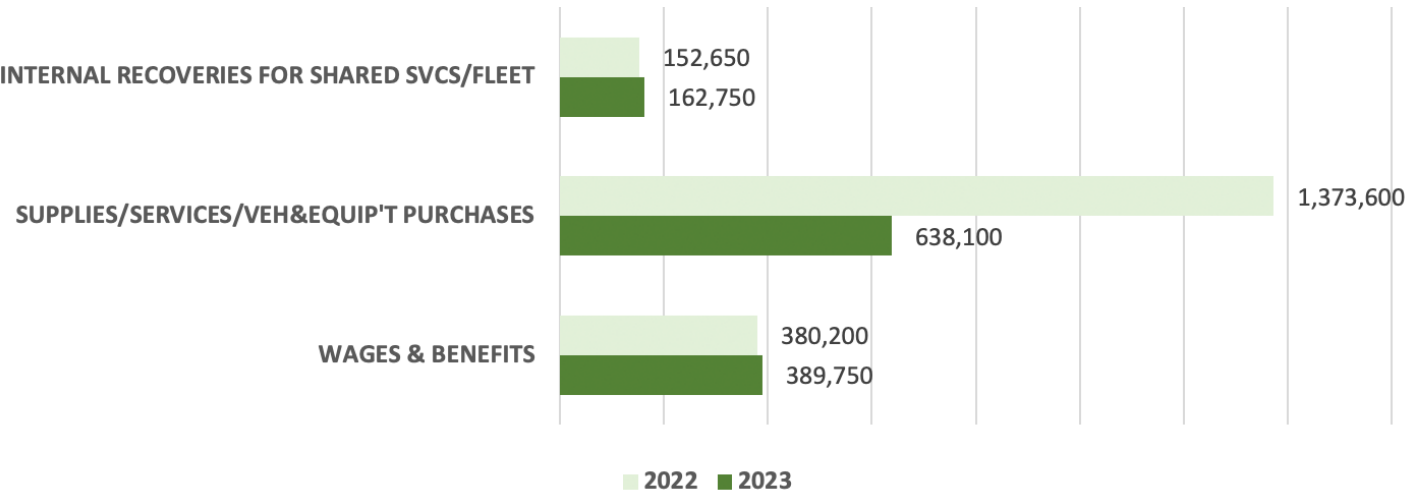
Non-Mandatory Conservation Services by Function - \$1.2M



Conservation Services Sources of Revenues for MANDATORY Programs



NON MANDATORY Conservation Programs & Services Expenses by Category



TREE PLANTING AND HABITAT RESTORATION ON PRIVATE AND MUNICIPAL LANDS

To achieve a sustainable future, mitigate climate impacts, expand tree canopy cover, improve water quality and keep endangered species from extinction in Canada, partnerships must continue with private landowners to grow the amount of habitat restored in the region. To assist with the costs of restoration that takes place on private lands and provide the biological professionals needed to undertake this work, ERCA obtains grants and donations to provide incentives and keeps cost reasonable, including funding from the Clean Water~Green Spaces fund. Clean Water~Green Spaces funding to assist with private lands restoration accounts for approximately 15% of this activity, which does not include the value of land. ERCA has restored over 430 acres of land on private property since 2017. These privately owned restoration sites are an invaluable contribution from our community as they further the rehabilitation of our region.

2023 Program Highlights

- Plant 50,000 trees throughout the region on our property as well as privately owned lands leading to the creation of at least 70 acres of new habitat.
- Build a minimum of two new wetlands in the region to reduce erosion and simultaneously create habitat.
- Continue a multi-year large scale restoration project on Caldwell First Nation property involving 10 acres of tree planting of Phase 2 in 2023.

LAND SECUREMENT

Each year ERCA works towards the strategic purchase of lands that have the highest biological value, as indicated by the Land Securement Strategy, and will have the greatest impact on improving the biological health of the region. Specifics of new land acquisitions are managed in Committee of the Whole and once purchased, restoration and management of these lands would be categorized as mandatory.

ERCA is currently negotiating the donation of a 72 acre parcel of land that will contribute to improve water quality, reduced soil erosion and habitat for wildlife.

As of December 31, 2022, the land acquisition fund has a total of \$1.9million in available funds.

HOLIDAY BEACH CONSERVATION AREA

The Province of Ontario with the Ministry of Natural Resources and Forestry as its representative, is the legal owner of Holiday Beach Conservation Area but the site is operated by the Authority via a thirty-year management agreement with the Province, which expires in 2031. The operational costs associated with this site are covered by user fees related to camping, hunting and cottage rentals, however, revenue generation is not sufficient to fund future capital replacement and major renovation costs. Recent trail and amenities improvements have been funded through government grants and contributions from the Foundation.

The most recent project, funded through the Federal Economic Development Agency for Southern Ontario allowed ERCA to expand the Maple Syrup Festival to include a second location at Holiday Beach Conservation Area, resulting in infrastructure improvements to winterize washrooms and undertake necessary upgrades to the portable classroom. Financial information for this grant is captured within the Community Outreach Services 2023 budget details, as the project spanned multiple program areas.

CAPITAL PROJECTS

An overview of major mandatory and non-mandatory capital projects included in the 2023 budget is summarized below. These projects will improve accessibility and overall visitor experiences in our Conservation Areas.

Capital Project	General Levy/ Reserve Transfers	ERCF/ Other	Fed Grant	Prov Grant	Total	Category
Greenway / Bridge replacement	\$242,000				\$242,000	Mandatory
Hillman coastal erosion and wetland works	\$10,000		\$50,000	\$500,000	\$560,000	Mandatory
JRPH telecommunications tower	\$22,000	\$17,500			\$39,500	Non-Mandatory
Parking lot resurfacing	\$100,000				\$100,000	Mandatory
JRPH historic buildings condition assessment & repairs (Phase 1)	\$137,000	\$102,000			\$259,000	Non-Mandatory
HBCA building winterization			\$110,000		\$110,000	Non-Mandatory
Collavino Conservation Area Improvements		\$90,000			\$90,000	Mandatory
Totals	\$511,000	\$209,500	\$160,000	\$500,000	\$1,400,500	

*Pending contribution agreements

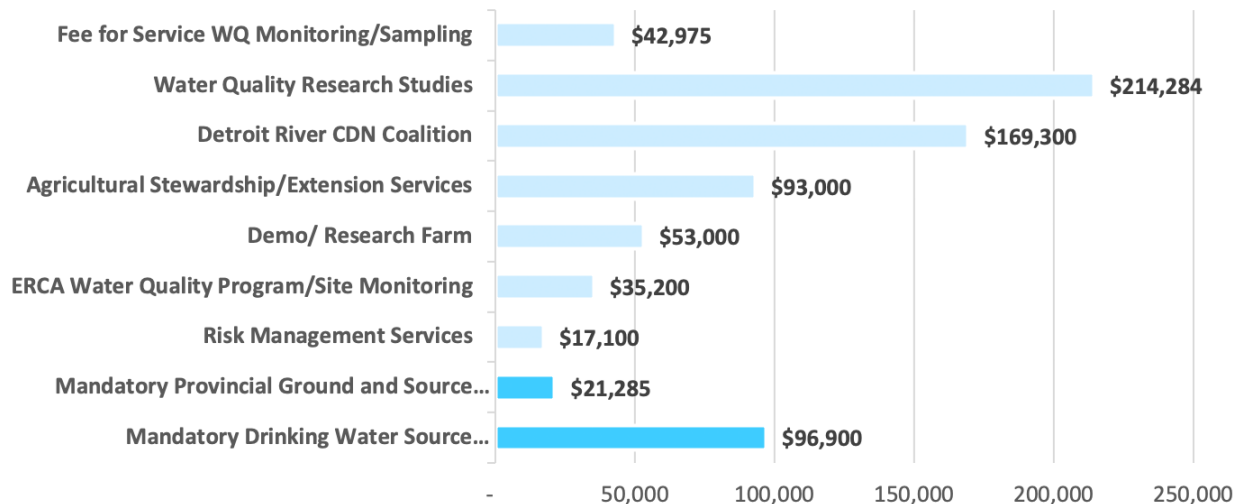
Water Quality Programs & Services

Water Quality programs and services endeavor to improve the health of local watercourses through agricultural Best Management Practices, enhanced monitoring at the watershed and edge-of-field scale and collection of landscape information through Geographic Information Services. Strengthened relationships with academic and government scientists and active participation in several ongoing research programs allows solutions to be developed that are best suited to the region's unique ecosystem. Local sources of drinking water are protected through the implementation of policies in the Source Protection Plan and its amendments.

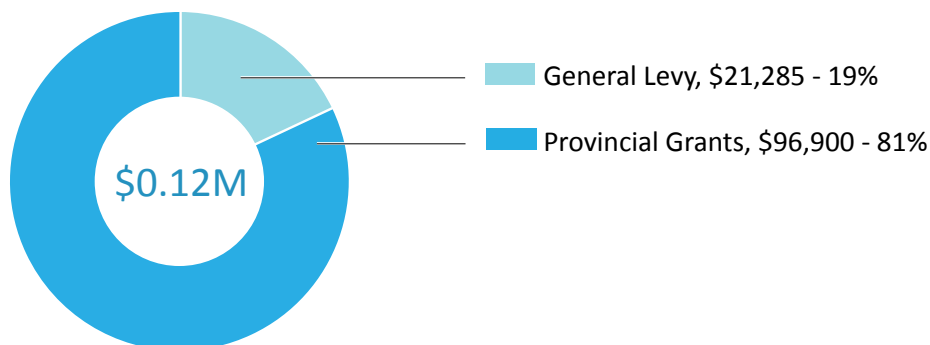
Water Quality Services are delivered through three programs:

- Source Water Protection (mandatory)
- Watershed Science (mandatory and non-mandatory)
- Water Quality Improvements (non-mandatory)
- ~5 FTEs deliver the combination of mandatory and non-mandatory programs

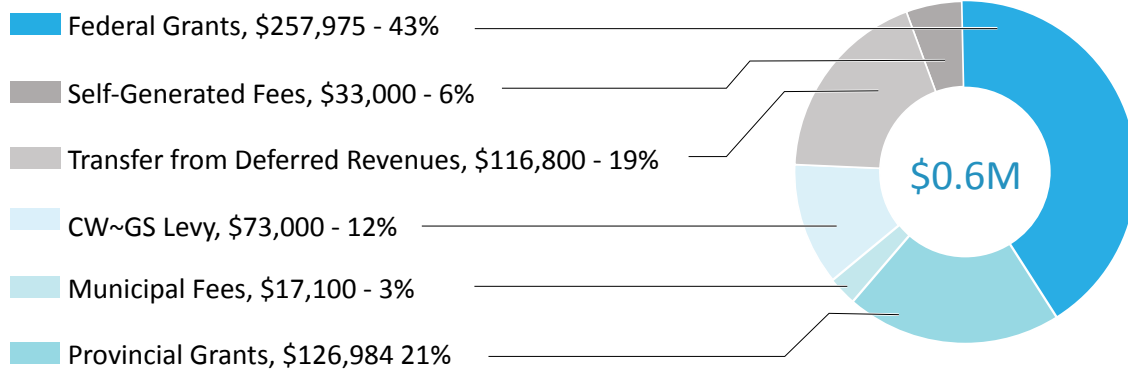
Mandatory & Non Mandatory Water Quality Programs & Services - \$0.7M



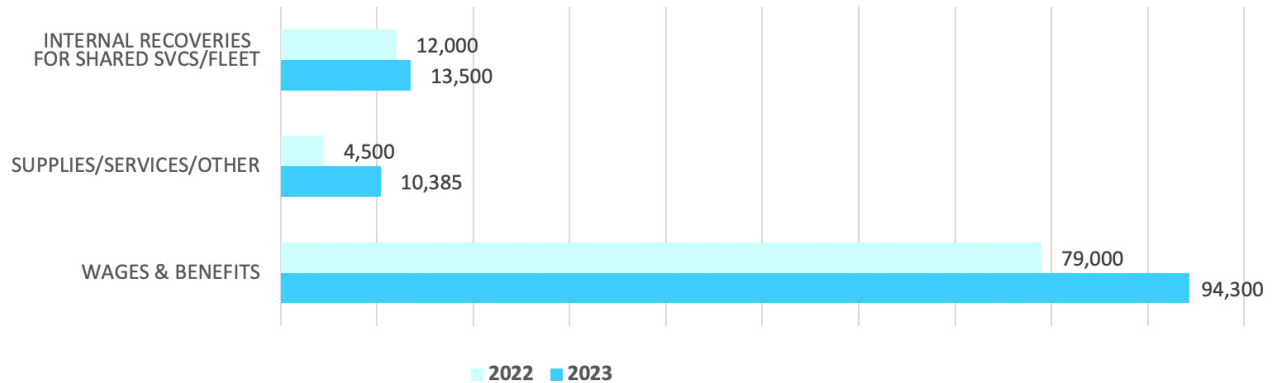
Water Quality Sources of Revenues for MANDATORY Programs



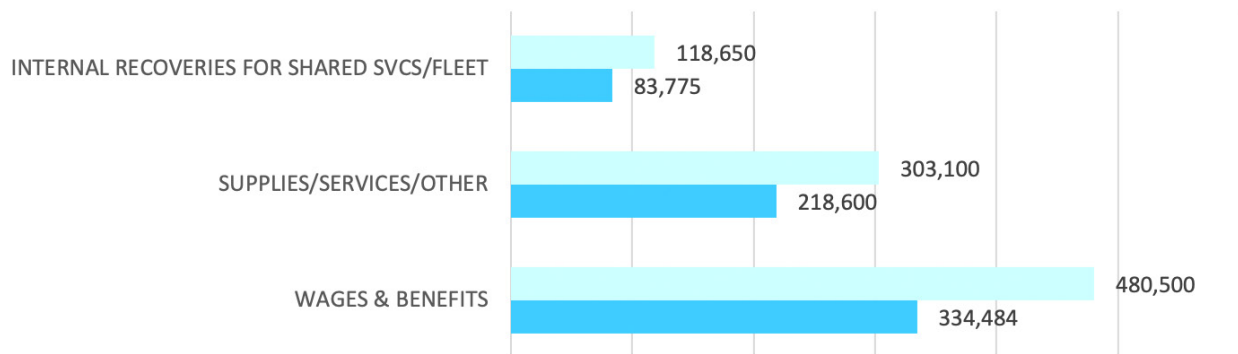
Water Quality Sources of Revenues for NON-MANDATORY Programs



MANDATORY Water Quality Programs & Services Expenses by Category



NON-MANDATORY Water Quality Programs & Services Expenses by Category



SOURCE WATER PROTECTION

Administered under the Clean Water Act, the watershed-based Source Protection Program is the first step in a multi-barrier approach to protect drinking water. It complements municipal water treatment and supports sound land use planning decisions. ERCA, and other conservation authorities, have designated responsibilities under the Clean Water Act to work closely with stakeholders to ensure that sources of municipal drinking water are safe and abundant. ERCA's Risk Management Services implements a specific subset of policies on behalf of municipalities.

- Source Water Protection (Clean Water Act) is identified as a mandatory program and service in the Conservation Authorities Act, and the Province remains committed to providing funding for this program; ERCA received a slight increase for the current two-year funding cycle (2022-2024) to accommodate expanded workload while the Source Protection Plan is being amended. This is the first time that the Province has provided multi-year funding for this program and their commitment provides greater stability for this mandatory work.
- Risk Management Services are offered on behalf of all municipalities in the Essex Region as a direct service cost through an agreement originally established in 2015. This agreement was renewed January 1, 2022, for another three-year term. Risk Management Officials undertake work to implement Source Protection Policies for which municipalities are the Implementing Body. This does not fall under a mandatory program or service in the Conservation Authorities Act, but rather is a Category 2 activity as it is a municipal responsibility.

2023 Program Highlights

- Provide annual reporting to the Province and Municipalities.
- Continue technical work to update the Source Protection Plan and Assessment Report to align with changes to the Director Technical Rules and the Section 36 Assessment Report. Begin the formal consultation process on the comprehensive updates to the Source Protection Plan, policies and Assessment Report.
- Update policies to address new types of Significant Drinking Water Threats and/or changes to applicable vulnerable areas.
- Conduct compliance monitoring to ensure properties with Risk Management Plans continue to adhere to Risk Management Measures.
- Continue reviewing s.59 applications for potential new significant drinking water threats.
- While a number of staff support this program and deliver DWSP services, it accounts for less than one full-time person.

Healthy rivers, headwaters, and species in our watershed are key elements of a sustainable and healthy environment that we all rely on for our sources of drinking water, our economy and for recreation. The ability to track and report on changes to these indicators of healthy watersheds and share that knowledge helps assess and understand current health and emerging trends as a basis for setting environmental management priorities, identify research gaps to work with academic and other research partners to address, and manage, protect or enhance watershed resources. ERCA undertakes its watershed science programs through partnerships with the Provincial Water Quality Monitoring Network (PWQMN), and the Provincial Groundwater Monitoring Network (PGMN) and works in partnership with Provincial and Federal programs and with universities including the Great Lakes Institute for Environmental Research at the University of Windsor.

Within the Essex region, water health is inextricably linked to farming practices. Because of this, ERCA continues to support the Essex Soil and Crop Improvement Association to facilitate knowledge transfer opportunities. In collaboration with the Ontario Ministry of Agriculture and Rural Affairs and Environment Canada, ERCA provides incentives to producers. These incentives to undertake Best Management Practices on their farms can reduce fertilizer applications, reduce erosion, improve soils and decrease nutrient and soil runoff that leads to toxic algae blooms in Lake Erie.

- Participation in the PWQMN and PGMN are a mandatory program in the Conservation Authorities Act, however, the majority of our water quality science work falls outside mandatory services yet is critical to providing the residents of this region and partners with information. In 2023, ERCA will continue to monitor ground and surface water quality stations and provide this information to the Province, consistent with most Conservation Authorities. Beyond this fundamental monitoring, ERCA will also undertake the following water quality work, which is supported by Provincial and Federal grants:

2023 Program Highlights

- Collect water samples, funded by various external partners as funding is available, to provide samples for research projects that could not otherwise be collected due to travel restrictions or other logistical challenges.
- Seek out funding to maintain the important ongoing monitoring of greenhouse influenced streams. This sampling was supported by the MECP from 2012 to December 31, 2021. The MECP is not supporting this monitoring program in Fiscal Year 2022/23.
- Complete over 20 Agricultural Best Management Practice (BMP) projects in partnership with landowners.
- Operate the Essex County Demonstration Farm to facilitate agricultural research and disseminate lessons learned to the farming community.

Community Outreach Services

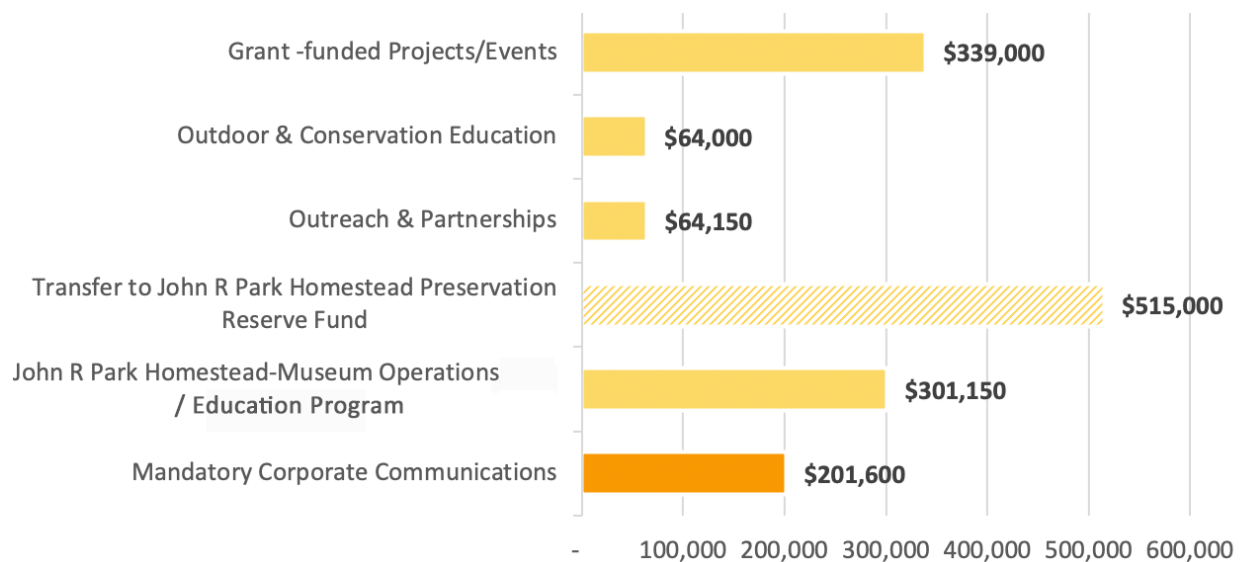
Communications and outreach services support all business units of the Authority. This includes supporting flood messaging, disseminating natural hazard information, engaging landowners in conservation practices and climate action, educating students of all ages about environmental sustainability, promotion of and engagement in tree planting and restoration, connecting people to nature through a variety of programs and events, identifying the value of natural connections to our health, and communicating broadly with stakeholder groups and watershed residents. Communications efforts also support revenue-generating activities for conservation areas.

Providing stewardship and educational opportunities to residents living within our watersheds is important and critical to conservation success across the region. Providing hands on opportunities for people to connect with nature and take action for the environment will raise awareness about broader local environmental needs, including expanding natural areas coverage, protecting mature forests, and reducing energy use to mitigate climate change impacts such as frequent and more intense flood events.

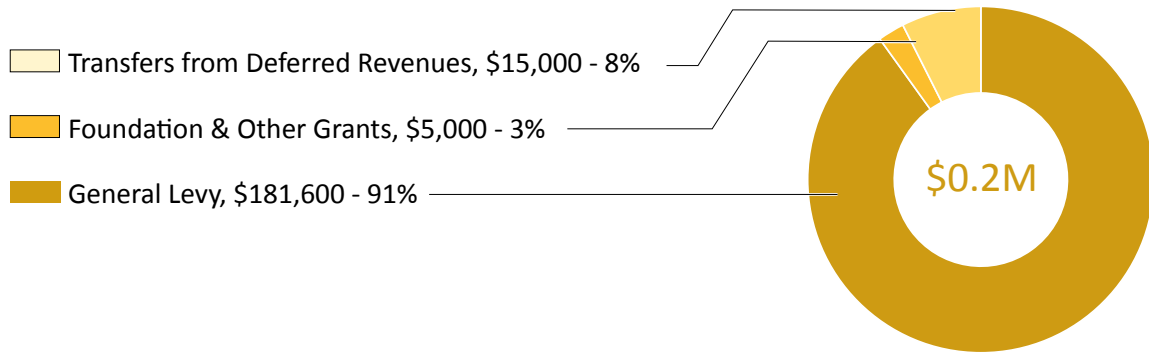
Community Outreach Services are delivered through four programs:

- Communications (mandatory)
- Outdoor Education (non-mandatory)
- Outreach and Engagement (non-mandatory)
- JRPH Museum Operations & Programming
- ~8 FTEs will deliver the mandatory and non-mandatory programs

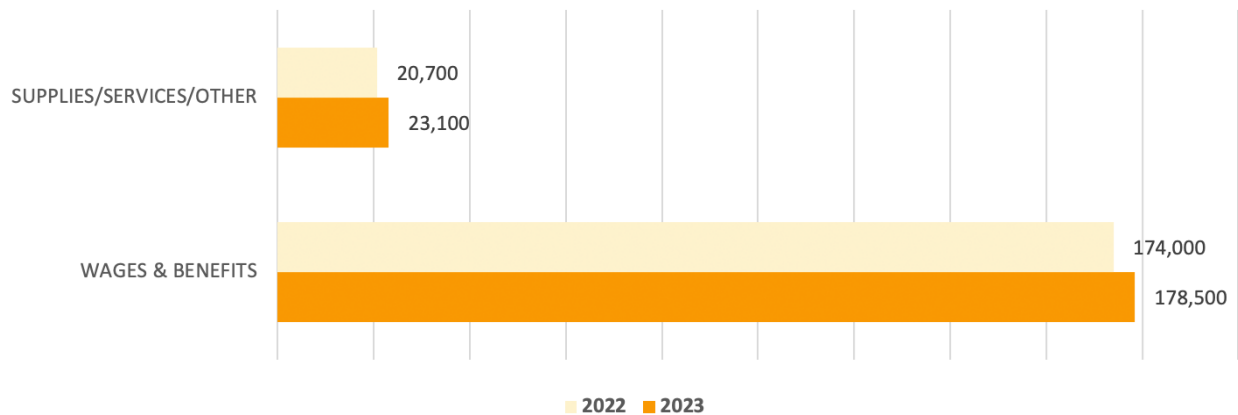
Community Outreach Services Mandatory and Non Mandatory Programs & Services + John R Park Homestead -\$1.5M



Community Outreach Sources of Revenues for MANDATORY Programs



MANDATORY Communications Expenses by Category



COMMUNICATIONS

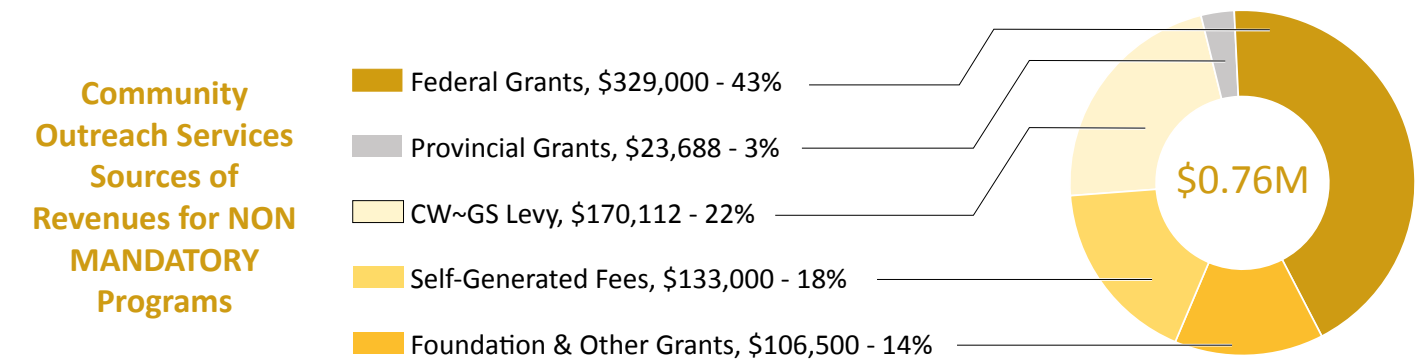
Corporate communication is included as a mandatory service as it supports the communication needs of the Authority's mandatory functions, including critical flood messaging, to various audiences across multiple platforms. This includes Annual Reporting, stakeholder relations, engagement through traditional and social media, media relations and other communications priorities.

2023 Program Highlights

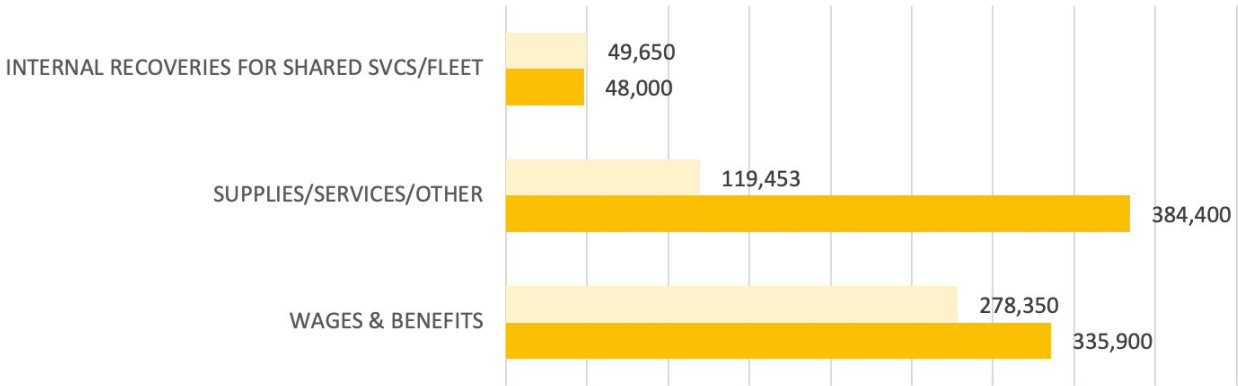
- Continue to engage and inform stakeholders and watershed residents to engage in conservation practices and programs across a variety of platforms; and communicate broadly as ERCA implements its Transition Plan.

- Engage stakeholders and the broader Windsor-Essex-Peel Island community in celebrating ERCA's 50 years of conservation.
- Continue to support revenue generation through enhanced marketing of conservation programs.
- Continue to support the Essex Region Conservation Foundation in fundraising to support conservation projects and program areas.

NON-MANDATORY PROGRAMS



NON MANDATORY Communications Expenses by Category



OUTDOOR EDUCATION

There is a significant body of research-based evidence surrounding the value of outdoor learning experiences. There is also increasing demand within the education sector for programs and services that focus on environmental issues that are important today. ERCA’s Outdoor Education programs provide experiential environmental programs and services for kindergarten to grade 12 students and teachers, meeting the objectives of the provincial curriculum. Busing costs and availability continue to impact student field trips. However, enhanced partnerships and relationships with all major school boards continue to position ERCA’s outdoor education and Specialist High Skills Major programs as a preferred service delivery partner. Nature-Near-You programs continue to be popular when bussing is not available. While outdoor education is identified as non-mandatory, significant fundraising through the Essex Region Conservation Foundation has eliminated the reliance on levy to continue to deliver these vital conservation education programs.

2023 Program Highlights

- Continue to deliver Specialist High Skills Major certification programs both digitally and in person as a preferred service delivery provider to ensure students across the province can receive training modules required to graduate with the SHSM designation.
- Continue to deliver both curriculum-based field trips at conservation areas and through Nature Near You programs to engage students in environmental learning.
 - Implement the expanded Maple Syrup Festival program.
 - Environmental Educator position remains on reduced hours.

OUTREACH AND ENGAGEMENT

There continues to be significant demand to provide opportunities for the community to engage in environmental restoration activities. Tree planting events for 2023 include Earth Day in east Windsor, as well as plantings in Sandwich Town and Ford City. Administration continues to pursue grants and partner funding to implement far-reaching stewardship and outreach programs. The Outreach and Partnerships Coordinator position continues to be a shared position also supporting the Detroit River Remedial Action Plan on a cost-recovery basis.

JOHN R. PARK HOMESTEAD - MUSEUM OPERATIONS

While passive recreation and related maintenance costs are eligible within the mandatory levy category, the John R. Park Homestead (JRPH) Museum and other heritage buildings are associated with the provision of non-mandatory services and the Authority is precluded from levying for preservation of these heritage assets. This is despite the fact that the transfer of the property from the Province in 2008 contained a number of restrictive covenants and obligations, regarding operations and the maintenance of assets. Additional covenants include the requirement to maintain the employ of a Curator and that the site be opened a minimum of 1080 hours, 180 days and 20 days during 8 months of the calendar year. Another significant covenant is that it be operated in accordance with the Community Museum Standards, as defined in the Ontario Heritage Act.

2023 Program Highlights

- Tree planting and citizen science programs include Earth Day Tree Planting, as well as planting activities in Sandwich Town, Ford City, Kingsville, Amherstburg, and others, with support from a variety of community partners.
- Introduce and manage the Adopt-A-Greenway program with various community partners to undertake annual cleanups of the 80km multi-use trail system.
- Host multiple clean up events across the region as part of the Bi-National Detroit River Coalition.

2023 Program Highlights

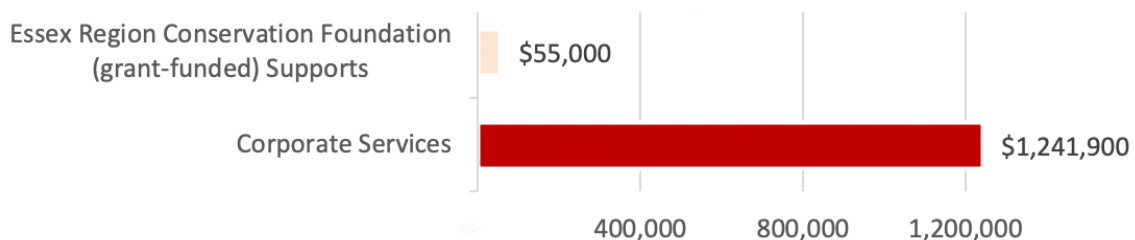
- A successful grant through the Federal Economic Development Agency for Southern Ontario in the amount of \$329,000 to significantly expand the Maple Syrup Festival will positively impact the budget as the grant provided for wages, as well as new exhibit and program materials. The expansion of this traditionally popular Festival also resulted in significant self-generated revenues.
- Further enhance partnerships with the Caldwell First Nation and expanding Indigenous Education programming.
- Continue to grow self-generated revenues through enhanced program options, marketing efforts and rental income opportunities.
- Initiate urgent structural repair work needed to the historic home.

Administration & Corporate Services

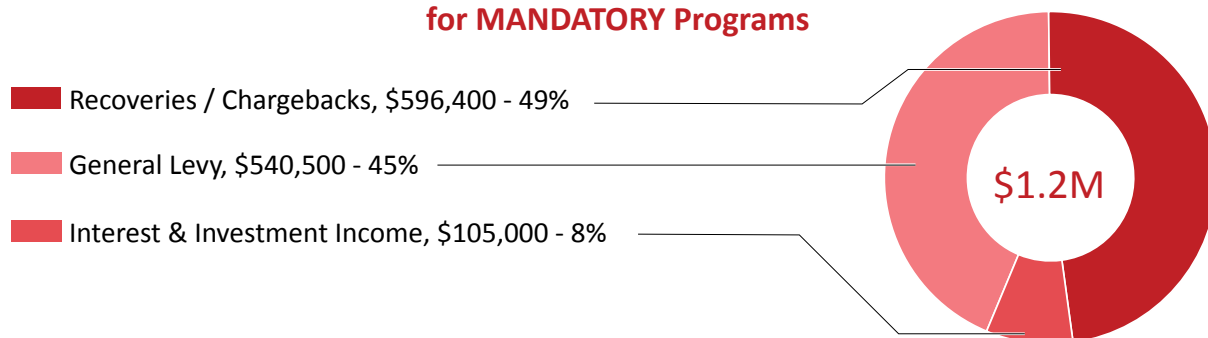
Corporate Services includes:

- Administration/Governance
- Compliance/Risk Management
- Finance
- Human Resources
- Information Management/Records/GIS/Systems/Network
- All services are provided to the Essex Region Conservation Foundation
- ~7 FTEs will deliver and support the diverse functions of Corporate Services

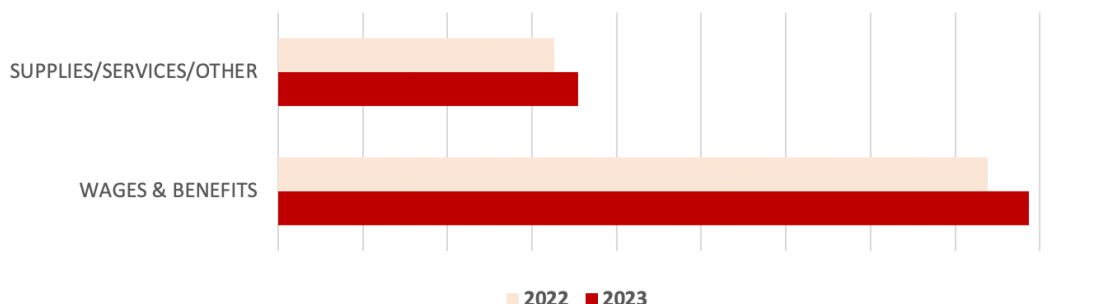
Corporate Services by Function - \$1.3M



Corporate Services Sources of Revenues for MANDATORY Programs



MANDATORY Corporate Services Expenses by Category



ADMINISTRATION / GOVERNANCE

2023 Program Highlights

- Continue to deliver and report on requirements outlined in the Transition Plan as required under O.Reg. 687/21.
- Engage municipal partners in consultations regarding suite of non-mandatory services and develop apportionment agreements for municipal funding, where required.
- Review and update Administrative Bylaws and Terms of Reference, where required.
- Explore potential transfer of ownership of Holiday Beach and/or asset management planning, with the Ministry of Natural Resources and Forestry.
- The Province is being reengaged regarding the John R Park Homestead, vis a vis the non-mandatory categorization, as the transfer agreement is with the Ontario Realty Corporation and the original transfer agreement was with the MNRF. (Ministry of Natural Resources and Forestry).
- Complete performance reviews, skills gap assessments and professional development opportunities (Management).

HUMAN RESOURCES

2023 Program Highlights

- Continue to review and update policy, procedures and guidelines to ensure ERCA's Health & Safety program remains robust and compliant with all legislation.
- Continue to provide some on-boarding of new hires remotely, for efficiency and convenience of new staff.
- Input into Collective Bargaining negotiations with CUPE Local 3784 for a new agreement commencing January 1, 2024.

FINANCE

2023 Program Highlights

- Prepare financial information, analysis and draft apportionment agreements for discussion and negotiation related to funding for non-mandatory levy-supported services. Update the required inventory of programs and services as required by the Transition Plan (O.Reg 687/21).
- Work in collaboration with watershed management(engineering) and conservation services to update the asset management plan, including segregation of non-mandatory assets.
- Continue with refining budgets and financial reports to support transparency of operations and to comply with new Ontario Regulation 402/22: Budget and Apportionment.
- Assist with exploring and evaluating revenue-generating proposals and concepts to reduce dependency on non-mandatory levies.

INFORMATION MANAGEMENT / RECORDS / SYSTEMS / NETWORK

2023 Program Highlights

In response to recommendations from the 2020 consultant's report on the status and readiness of Information Technology at ERCA, a focus on IT modernization, sustainability, and security has been adopted to address various technology deficits and security needs. Included in this program are diverse projects that will provide the security and platforms needed to meet our mandated services.

The projects are broken down into several key areas of investment and practice, each representing a component of the Board approved plan. These include:

- **Permit Application and Property Information System (PIMS):** Completion of a modernized system based on current internet facing technologies, professional-built database, and modular, transaction-focused architecture, that will replace the legacy on-premise MS Access database. This new system will also incorporate a customer self-service portal to streamline applicant requests and payments while reducing the need for administrative resources.
- **Corporate records management:** Progress continues to be made on the cataloging of HR-related records, scanning of governance records and the disposition of expired records.
- **Infrastructure as a Service Migration:** The migration of our legacy, unsupported infrastructure (servers, storage, backup) to a cloud hosted solution provided by Microsoft which includes necessary upgrades to the unsupported, unpatched, vulnerable servers as well as providing client-side upgrades to email and MS Office. This implementation includes enhanced security, threat reduction, increased manageability, and redundancy. Secondary and stretch goals outlined in the approved modernization plan will be targeted for implementation this year. These will include the upgrade of multifactor authentication, automated software deployment, new security policies, end user security patching automation and automated security updates.
- **Information as a Service:** ERCA ITS will begin to build and integrate new systems to replace legacy offerings. In doing so, IT will begin to provide data integration, advanced reporting, business intelligence & decision support services to respond to the decision-making challenges faced by ERCA as well provide potential revenue streams via the creation of advanced, value-added service offerings. Other aspects to be addressed in these initiatives are: streamlining and facilitating a new web Presence; enhancing the online identity; and incorporating financial transactional services to ERCA's online portfolio.
- **Website Rebuild:** ERCA will undertake a full rebuild and reinvestment in the website to better reflect changes to ERCA services and offerings. The overall goal is to better serve customers and to delineate the mandatory and non-mandatory services, while still maintaining a consistent identity and brand. The new site will be tied to the new permitting portal for development services and will include self-service and online payment options to reduce workflow and increase efficiency.
- **Phone System Replacement:** ITS is currently in the process of replacing the aged on-premises phone systems with a new cloud-based service which offers increased resilience, removes points of failure and streamlines services between ERCA sites
- **John R Park Homestead (JRPH) Communications improvements:** In response to feedback related to communications challenges (cellular and data connectivity) at the JRPH site, the deployment of a 68-foot communication Tower and antenna array will be added to the site to better serve our staff and guests. This new development will help boost reception and be coupled with an internal cellular booster setup in the guest center to ensure strong inbuilding signal. As part of this deployment, new fiber optic cable will be run in the building in preparation for future connectivity for the site as well as to prepare the way for future connectivity to new fiber optic networking options from Cogeco.

Summary

This 2023 Draft Budget including appendices, once approved by the Essex Region Conservation Authority Board of Directors, will be posted publicly on the Authority's website at www.essexregionconservation.ca and circulated to Municipalities to provide notice under the Conservation Authorities Act of a weighted vote, in accordance with Ontario Regulation 139/96, regarding the 2023 Draft Budget at the Board of Directors Meeting on May 10, 2023.

As budgets are a snapshot in time and represent management's best estimates at the time the budget is prepared, actual results can vary, and projects may proceed in a slightly altered fashion than contemplated in this budget. At any time, the Authority may experience employee attrition, turnover or short-term vacancies in positions, which may result in realized savings for the year but may be utilized to buffer against unanticipated/unbudgeted expenses or declines in revenues.

Administration endeavors to respond to the wishes of the community it serves by delivering programs and services, as consistent with the objects of the Conservation Authorities Act, and by utilizing public funds efficiently, effectively, responsibly and transparently.

APPENDICES

- **Appendix A:** Detailed 2023 Draft Budget Financial Activities
- **Appendix B:** Draft Municipal Levy Schedule (6.4%)
- **Appendix C:** Draft Reserves Continuity Schedule
- **Appendix D:** 2023 Funding Sources by Service Delivery Program Area
- **Appendix E:** Where Does Your Money Go?



ERCA Board

Jim Morrison, City of Windsor – Chair
Sue Desjarlais, Town of Lasalle – Vice-Chair
Molly Allaire, Town of Amherstburg
Peter Courtney, Town of Amherstburg
Kimberly DeYong, Town of Kingsville
Thomas Neufeld, Town of Kingsville
Jason Matyi, Town of Essex

Katie McGuire Blaise, Town of Essex
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Ryan McNamara, Municipality of Lakeshore
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Larry Verbeke, Municipality of Leamington
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Tania Jobin, Town of Tecumseh
Joe Bachetti, Town of Tecumseh
Angelo Marignani, City of Windsor
Mark McKenzie, City of Windsor
Kieran McKenzie, City of Windsor

ERCA Staff

Tim Byrne Chief Administrative Officer / Secretary Treasurer

Corporate Services

Shelley McMullen	Chief Financial Officer / Director, Finance & Corporate Services
Tom Dufour	Geomatics Technician
Lori Jacobs	Payroll & Accounting Specialist
Nicole Kupnicki	Human Resources Manager / Executive Assistant
Lisa Limarzi	Administrative Associate: Corporate Services
Ryan Rossman	Director, Information Technology Services
Nancy Roy	Accounting Associate
Bryan Schmidt	Application Support Technician

Watershed Management Services

James Bryant	Director, Watershed Management Services
Lina Florian	Watershed Engineer
Tom Gutpell	Engineering Technologist
Ashley Gyor	Regulations Analyst
Dan Jenner	Regulations Coordinator
Summer Locknick	Regulations Technician
Tian Martin	Water Resources Engineer
Laura Neufeld	Regulations Technician
Sydney Richmond	Regulations Analyst
Kathleen Schnekenburger	Resource Planner
TBD	Team Lead, Planning Services
TBD	Surveyor / Technical Assistant

Conservation Services

Kevin Money	Director, Conservation Services
Kathryn Arthur	Restoration Biologist
Tim Baxter	Conservation Area Technician
Michael Dick	Agricultural Technician
Paul Drca	Detroit River Remedial Action Plan Coordinator (Contract)
Paul Giroux	Forester
Jenny Gharib	HMCA Restoration and Adaptation Coordinator
Russ Jones	Conservation Area Technician
Dan Lebedyk	Biologist / Ecologist
Bevin Martin	Senior Conservation Area Technician
Jacqueline Serran (LOA)	Detroit River Remedial Action Plan Coordinator
Katie Stammer	Water Quality Scientist / Project Manager, Source Water Protection
William Tate	Superintendent, Field Operations
Amy Weinz	Water Quality Technician
TBD	Senior Conservation Area Technician, HBCA
TBD	Conservation Area Technician

Community Outreach Services

Danielle Breault Stuebing	Director, Communications & Outreach Services
Kathryn Bezaire	Interpreter
Kyrsten Burns	Environmental Educator (Contract)
Kris Ives	Curator / Education Coordinator
Gina Pannunzio	Partnerships & Outreach Coordinator
Jessica Rose (LOA)	Environmental Educator
Aaron Zimmer	Multimedia Specialist

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DRAFT 2023 DETAILED STATEMENT OF FINANCIAL ACTIVITIES

2023
DRAFT BUDGET

2022
BUDGET

2022
UNAUDITED

WATERSHED MANAGEMENT SERVICES

CATEGORY 1 MANDATORY SERVICES - RISKS OF NATURAL HAZARDS

DEVELOPMENT SERVICES

GENERAL LEVY	413,800	322,200	346,918
SELF-GENERATED FEES	519,000	715,000	677,890
	<u>932,800</u>	<u>1,037,200</u>	<u>1,024,808</u>
WAGES	691,500	796,000	803,649
CONSULTING	-	12,000	3,694
SUPPLIES/OFFICE/JANITORIAL	30,700	26,550	19,974
VEHICLE/TRAVEL/EQUIP'T USAGE	26,600	21,600	19,483
CORP SUPPORT/SHARED SVCS	120,000	138,000	131,157
RENT/INS/TAXES/UTILITIES	58,000	29,400	56,242
DUES/MEMBERSHIPS	1,000	1,150	1,506
AUDIT AND LEGAL	5,000	10,000	4,579
SMALL MISC	-	2,500	750
	<u>932,800</u>	<u>1,037,200</u>	<u>1,041,034</u>

PLANNING RELATED TO HAZARDS

GENERAL LEVY	164,850	107,150	123,072
SELF GENERATED FEES	80,000	108,500	134,395
	<u>244,850</u>	<u>215,650</u>	<u>257,467</u>
WAGES	200,200	182,000	208,332
SUPPLIES/OFFICE/JANITORIAL	1,550	1,550	363
VEHICLE/TRAVEL/EQUIP'T USAGE	1,500	500	750
CORP SUPPORT/SHARED SVCS	26,600	26,600	31,692
RENT/INS/TAXES/UTILITIES	15,000	5,000	14,580
	<u>244,850</u>	<u>215,650</u>	<u>255,717</u>

FLOOD /EROSION PROGRAM (S.39 PROV \$)

GENERAL LEVY	106,663	137,863	107,223
PROVINCIAL GRANTS	104,417	104,417	104,417
	<u>211,080</u>	<u>242,280</u>	<u>211,640</u>
WAGES	128,900	156,000	128,587
CONSULTING/INFO'N/DATA SVCS	35,500	35,500	36,079
SUPPLIES/OFFICE/JANITORIAL	5,180	5,180	4,540
VEHICLE/TRAVEL/EQUIP'T USAGE	7,000	6,000	6,635
CORP SUPPORT/SHARED SVCS	26,500	31,600	26,800
RENT/INS/TAXES/UTILITIES	8,000	8,000	8,999
	<u>211,080</u>	<u>242,280</u>	<u>211,640</u>

OTHER WMS TERM PROJECTS

GENERAL LEVY	48,500	-	-
OTHER GRANTS/USER FEES/RECOVERIES	46,000	-	-
TRANSFERS (TO)/FROM DEFERRED REVENUES	24,500	-	-
	<u>119,000</u>	<u>-</u>	<u>-</u>
DIRECT WAGES	52,000	-	-
CONSULTING/OUTSIDE ENGINEERING	58,000	-	-
TRAVEL/VEHICLE/ADMINISTRATION/OVERHEAD	9,000	-	-
	<u>119,000</u>	<u>-</u>	<u>-</u>

CLIMATE CHANGE - HAZARDS

GENERAL LEVY	-	25,000	25,000
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	(25,000)
	<u>-</u>	<u>25,000</u>	<u>(0)</u>
CONSULTING	-	25,000	-
	<u>-</u>	<u>25,000</u>	<u>-</u>

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
SUMMARY - CATEGORY 1 WMS MANDATORY SERVICES, RISKS OF NATURAL HAZARDS			
GENERAL LEVY	733,813	592,213	602,213
PROVINCIAL GRANTS	104,417	104,417	104,417
SELF-GENERATED FEES	599,000	823,500	812,285
TRANSFER TO/FROM DEF REVENUES	24,500	-	(25,000)
TRANSFER TO/FROM RESERVES	46,000	-	-
	1,507,730	1,520,130	1,493,916
WAGES & BENEFITS	1,072,600	1,134,000	1,140,568
SUPPLIES/SERVICES/OTHER	218,930	162,830	151,408
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	216,200	223,300	216,415
	1,507,730	1,520,130	1,508,391
SURPLUS/(DEFICIT)	-	-	(14,475)

MUNICIPAL WATER & EROSION CONTROL PROJECTS (50% PROV \$)

MUNICIPAL	-	-	4,000
	-	-	4,000
WAGES	-	-	308
CONSULTING/OUTSIDE ENGINEERING	-	-	3,190
TRAVEL/VEHICLE/ADMINISTRATION/OVERHEAD	-	-	502
	-	-	4,000

OTHER MUNICIPAL TERM STUDIES/PROJECTS

MUNICIPAL	(163,200)	97,000	241,225
PROVINCIAL GRANTS	182,000	182,000	-
TRANSFERS (TO)/FROM DEFERRED REVENUES	35,250	-	22,479
	54,050	279,000	263,704
WAGES	47,050	26,500	14,850
CONSULTING/OUTSIDE ENGINEERING	-	246,500	245,854
TRAVEL/VEHICLE/ADMINISTRATION/OVERHEAD	7,000	6,000	3,000
	54,050	279,000	263,704

SUMMARY CATEGORY 1 MANDATORY SERVICES -WECI PROJECTS AND MUNICIPAL SPECIAL STUDIES

MUNICIPAL	(163,200)	97,000	245,225
PROVINCIAL GRANTS	182,000	182,000	-
TRANSFER TO/FROM DEF REVENUES	35,250	-	22,479
	54,050	279,000	267,704
WAGES & BENEFITS	47,050	26,500	15,158
CONSTRUCTION/ENGINEERING/SUPPLIES	-	246,500	249,043
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	7,000	6,000	3,503
	54,050	279,000	267,704
SURPLUS/(DEFICIT)	-	-	0

CATEGORY 2 NON MANDATORY SERVICES -MUNICIPAL PROGRAMS

PLANNING RELATED TO NATURAL HERITAGE

CW~GS LEVY	-	59,500	61,761
	-	59,500	61,761
WAGES	-	52,000	50,178
CORP SUPPORT/SHARED SVCS	-	7,500	8,072
RENT/INS/TAXES/UTILITIES	-	-	3,512
	-	59,500	61,761

SUMMARY CATEGORY 2 NON MANDATORY SERVICES -MUNICIPAL PROGRAMS

CW~GS LEVY	-	59,500	61,761
	-	59,500	61,761
WAGES & BENEFITS	-	52,000	50,178
SUPPLIES/SERVICES/OTHER	-	-	3,512
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	-	7,500	8,072
	-	59,500	61,761
SURPLUS/(DEFICIT)	-	-	(0)

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
CONSERVATION SERVICES			
CATEGORY 1 MANDATORY SERVICES - CONSERVATION LANDS MANAGEMENT			
GENERAL PROGRAM OPERATIONS, MANAGEMENT PLANS & LAND STRATEGIES			
GENERAL LEVY	204,715	158,515	158,515
FEDERAL GRANTS	92,000	-	8,300
	296,715	158,515	166,815
WAGES	256,300	131,000	105,422
ENGINEERING/CONSULTING	-	-	-
SUPPLIES/OFFICE/JANITORIAL	5,515	4,215	2,972
VEHICLE/TRAVEL/EQUIP'T USAGE	3,500	2,000	2,681
CORP SUPPORT/SHARED SVCS	31,400	21,300	16,514
	296,715	158,515	127,589
CONSERVATION AREAS/GREEWAYS/OWNED PROPERTIES MAINTENANCE			
GENERAL LEVY	775,110	704,360	670,635
FEDERAL GRANTS	-	-	-
FOUNDATION & OTHER GRANTS	-	20,000	30,450
SELF-GENERATED USER FEES	81,800	79,400	94,432
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	4,000	(4,424)
TRANSFERS TO/FROM RESERVES	20,000	20,000	(26,585)
	876,910	827,760	764,508
WAGES	371,500	389,900	316,679
CONSTRUCTION	-	-	10,158
ENGINEERING/CONSULTING	17,000	-	24,509
SUPPLIES/OFFICE/JANITORIAL	58,110	47,410	50,043
VEHICLE/TRAVEL/EQUIP'T USAGE	90,000	46,100	101,682
PLANT MAT/LANDOWNER GRANTS	5,500	24,000	17,762
CORP SUPPORT/SHARED SVCS	107,600	102,200	96,366
RENT/INS/TAXES/UTILITIES	155,700	125,300	121,560
AUDIT AND LEGAL	-	-	1,980
CAP MAINT/LOW VALUE ASSETS	68,000	89,600	21,015
SMALL MISC	3,500	3,250	4,104
	876,910	827,760	765,859
CAPITAL OR MAJOR MAINTENANCE/IMPROVEMENT PROJECTS			
GENERAL LEVY	-	23,500	36,466
PROVINCIAL GRANTS	-	161,000	261,000
FEDERAL GRANTS	573,000	180,000	190,200
FOUNDATION & OTHER GRANTS	30,000	327,000	420,055
SELF-GENERATED FEES	-	-	-
TRANSFERS TO/FROM DEFERRED REVENUES	213,200	174,000	100,612
TRANSFERS TO/FROM RESERVES	576,500	27,000	(173,200)
	1,392,700	892,500	835,133
WAGES	24,250	14,000	36,299
CONSTRUCTION	1,124,300	688,500	606,935
ENGINEERING/CONSULTING/SUB CONTRACTING	179,000	133,000	135,023
CONSTRUCTION SUPPLIES	9,200	7,000	17,528
VEHICLE/TRAVEL/EQUIP'T USAGE	2,000	-	425
PLANT MAT/LANDOWNER GRANTS	5,000	-	1,380
CORP SUPPORT/SHARED SVCS	23,750	30,500	13,384
CAP MAINT/LOW VALUE ASSETS	23,200	19,500	30,846
SMALL MISC	2,000	-	896
	1,392,700	892,500	842,715
TREE PLANTING AND RESTORATION -ERCA LANDS			
GENERAL LEVY	113,100	124,300	124,300
PROVINCIAL GRANTS	30,000	10,000	-
FOUNDATION & OTHER GRANTS	5,000	35,000	17,072
SELF GENERATED FEES	10,000	-	-
	158,100	169,300	141,372
WAGES	72,500	101,000	66,200
CONSTRUCTION	40,000	-	-
ENGINEERING/CONSULTING/SUB CONTRACTING	-	-	300
SUPPLIES/OFFICE/JANITORIAL	4,250	10,579	966
VEHICLE/TRAVEL/EQUIP'T USAGE	12,850	13,050	6,567
PLANT MAT/LANDOWNER GRANTS	11,500	24,071	18,483
CORP SUPPORT/SHARED SVCS	17,000	20,600	13,872
	158,100	169,300	106,387

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
FLEET & FIELD EQUIPMENT			
GENERAL LEVY	-	27,750	48,509
RECOVERIES/CHARGEBACKS	199,700	126,600	204,585
TRANSFERS TO/FROM RESERVES	153,000	43,000	(23,000)
	352,700	197,350	230,094
MAINTENANCE/REPAIRS	65,900	61,900	67,308
FUEL	57,500	31,000	57,935
LICENCES/MISC/SMALL TOOLS	19,300	19,450	18,383
AMORTIZATION	89,000	90,000	-
	231,700	202,350	143,626
SUMMARY CATEGORY 1 MANDATORY SERVICES -LAND MGMT, (OWNED) CONSERVATION AREAS OPERATIONS,MAINTENANCE & CAPITAL			
GENERAL LEVY	1,092,925	1,038,425	1,038,425
CW~GS LEVY	-	-	-
PROVINCIAL GRANTS	30,000	171,000	261,000
FEDERAL GRANTS	665,000	180,000	198,500
FOUNDATION & OTHER GRANTS	35,000	382,000	467,577
SELF-GENERATED FEES	291,500	206,000	299,016
TRANSFER TO/FROM DEF REVENUES	213,200	178,000	96,188
TRANSFER TO/FROM RESERVES	749,500	90,000	(222,785)
	3,077,125	2,245,425	2,137,921
WAGES & BENEFITS	735,450	642,800	533,147
CONSTRUCTION/ENGINEERING/SUPPLIES	1,948,525	1,388,425	1,212,189
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	272,150	219,200	240,840
	2,956,125	2,250,425	1,986,176
SURPLUS/(DEFICIT)	121,000	(5,000)	151,745
CATEGORY 3 NON MANDATORY SERVICES - ONGOING ERCA CORE CONSERVATION-RELATED PROGRAMS			
LAND SECUREMENT			
CW~GS LEVY	40,000	500,000	500,000
MUNICIPAL	-	-	549,793
FEDERAL GRANTS	-	-	1,013,655
FOUNDATION & OTHER GRANTS	-	-	1,053,250
TRANSFERS (TO)/FROM LAND ACQ FUND	-	(453,000)	135,294
	40,000	47,000	3,251,992
WAGES	5,000	18,300	20,074
PROPERTY	-	-	3,121,675
LEGAL, SURVEYING,CONSULTNG	30,000	22,700	98,144
CORP SUPPORT/SHARED SVCS	5,000	6,000	12,099
	40,000	47,000	3,251,992
RESTORATION/TREE PLANTING PROGRAM - NON ERCA PROPERTIES			
CW~GS LEVY	75,000	75,000	75,000
PROVINCIAL GRANTS	150,000	70,000	70,833
FEDERAL GRANTS	40,000	40,000	91,617
FOUNDATION & OTHER GRANTS	-	60,000	139,851
SELF-GENERATED FEES	225,000	255,000	339,556
IN-KIND	10,000	-	2,171
TRANSFERS (TO)/FROM DEFERRED REVENUES	107,000	25,600	(34,350)
	607,000	525,600	684,678
WAGES	207,400	187,800	216,147
CONSTRUCTION	40,000	-	-
ENGINEERING/CONSULTING/SUB-CONTRACTING	-	-	604
SUPPLIES/OFFICE/JANITORIAL	18,200	10,700	19,879
VEHICLE/TRAVEL/EQUIP'T USAGE	41,400	33,100	44,595
PLANT MAT/LANDOWNER GRANTS	215,500	216,500	311,777
CORP SUPPORT/SHARED SVCS	65,000	68,500	78,808
RENT/INS/TAXES/UTILITIES	9,000	8,000	8,935
IN KIND SVCS SUPPLIES	10,000	-	2,171
CAP MAINT/LOW VALUE ASSETS	500	1,000	1,744
	607,000	525,600	684,660
HOLIDAY BEACH (OPERATED UNDER MGMT AGREEMENT)			
CW~GS LEVY	-	6,000	6,000
SELF GENERATED	352,600	315,600	331,960
TRANSFERS TO/FROM RESERVES	-	-	(2,816)
	352,600	321,600	335,144

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
WAGES	161,000	166,800	154,962
ENGINEERING/CONSULTING/SUB CONTRACTING	8,500	1,000	4,126
SUPPLIES/OFFICE/JANITORIAL	61,600	44,664	62,590
VEHICLE/TRAVEL/EQUIP'T USAGE	19,000	17,036	19,699
CORP SUPPORT/SHARED SVCS	35,500	34,600	34,438
RENT/INS/TAXES/UTILITIES	44,000	40,500	44,641
MAJOR MAINT/ROADS/VEGETATION	20,500	16,500	9,932
SMALL MISC	2,500	500	2,506
	352,600	321,600	332,894

SUMMARY CATEGORY 3 NON MANDATORY SERVICES - ERCA ONGOING CORE CONSERVATION & HERITAGE PROGRAMS			
CW~GS LEVY	115,000	581,000	581,000
MUNICIPAL	-	-	549,793
PROVINCIAL GRANTS	150,000	70,000	70,833
FEDERAL GRANTS	40,000	40,000	1,105,272
FOUNDATION & OTHER GRANTS	-	60,000	139,851
SELF-GENERATED FEES	577,600	570,600	674,766
IN-KIND	10,000	-	1,052,171
TRANSFER TO/FROM DEF REVENUES	107,000	(427,400)	100,944
TRANSFER TO/FROM RESERVES	-	-	(2,816)
	999,600	894,200	4,271,813
WAGES & BENEFITS	373,400	372,900	391,183
OTHER OPERATING/SITE SUPPLIES/PROF SERVICES	478,200	373,200	3,705,305
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	148,000	148,100	173,058
	999,600	894,200	4,269,546
SURPLUS/(DEFICIT)	-	-	2,267

CATEGORY 3 NON MANDATORY SERVICES - FEE FOR SERVICE TERM-LIMITED PROJECTS/CONTRACTS			
FEE FOR SERVICE RESTORATION PROJECTS & HABITAT STUDIES			
MUNICIPAL	-	1,000,000	1,973,978
PROVINCIAL GRANTS	24,000	-	36,000
FEDERAL GRANTS	75,000	-	724,769
FOUNDATION & OTHER GRANTS	68,000	-	58,200
TRANSFERS (TO)/FROM DEFERRED REVENUES	(5,000)	-	75,639
	162,000	1,000,000	2,868,586
WAGES	9,000	-	17,868
CONSTRUCTION	70,000	1,000,000	2,623,616
ENGINEERING/CONSULTING/SUB-CONTRACTING	57,000	-	168,258
SUPPLIES/OFFICE/JANITORIAL	2,000	-	7,491
VEHICLE/TRAVEL/EQUIP'T USAGE	500	-	3,317
PLANT MAT/LANDOWNER GRANTS	15,000	-	35,000
CORP SUPPORT/SHARED SVCS	8,500	-	13,035
	162,000	1,000,000	2,868,585

FEE FOR SERVICE PROPERTY MAINTENANCE/MANAGEMENT			
SELF-GENERATED FEES	12,000	12,250	12,509
	12,000	12,250	12,509
WAGES	6,600	7,300	8,169
VEHICLE/TRAVEL/EQUIP'T USAGE	2,700	2,800	2,514
CORP SUPPORT/SHARED SVCS	2,300	1,750	1,626
RENT/INS/TAXES/UTILITIES	400	400	213
	12,000	12,250	12,522

SUMMARY CATEGORY 3 NON MANDATORY SERVICES - FEE FOR SERVICE CONTRACTS/TERM LIMITED PROJECTS			
MUNICIPAL	-	1,000,000	1,973,978
PROVINCIAL GRANTS	24,000	-	36,000
FEDERAL GRANTS	75,000	-	724,769
FOUNDATION & OTHER GRANTS	68,000	-	86,200
SELF-GENERATED FEES	12,000	12,250	12,509
TRANSFER TO/FROM DEF REVENUES	12,000	-	133,436
	191,000	1,012,250	2,966,891
WAGES & BENEFITS	16,350	7,300	27,034
CONSTRUCTION/SUPPLIES/OTHER	159,900	1,000,400	2,920,861
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	14,750	4,550	19,009
	191,000	1,012,250	2,966,904
SURPLUS/(DEFICIT)	-	-	(13)

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
WATER QUALITY			
CATEGORY 1 MANDATORY SERVICE - DRINKING WATER SOURCE PROTECTION AND PROV SURFACE/GROUND WATER MONITORING PROGRAMS			
GENERAL LEVY	21,285	-	-
PROVINCIAL GRANTS	96,900	95,500	70,258
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	21,999
	118,185	95,500	92,257
WAGES	94,300	79,000	75,556
SUPPLIES/OFFICE/JANITORIAL	785	-	384
VEHICLE/TRAVEL/EQUIP'T USAGE	1,500	-	-
CORP SUPPORT/SHARED SVCS	13,500	12,000	11,415
RENT/INS/TAXES/UTILITIES	3,500	1,500	1,770
PER DIEMS/MISC	4,600	3,000	4,345
	118,185	95,500	93,471
CATEGORY 2 MUNICIPAL SERVICES - RISK MANAGEMENT SERVICES (PART IV CWA, 2006)			
MUNICIPAL	17,100	15,500	16,977
	17,100	15,500	16,977
WAGES	11,600	12,000	11,755
SUPPLIES/OFFICE/JANITORIAL	500	500	381
VEHICLE/TRAVEL/EQUIP'T USAGE	1,500	-	840
CORP SUPPORT/SHARED SVCS	1,500	1,500	2,210
RENT/INS/TAXES/UTILITIES	2,000	1,500	1,792
	17,100	15,500	16,977
CATEGORY 3 NON MANDATORY SERVICE - ONGOING ERCA CORE WATER QUALITY/RESEARCH PROGRAM			
WATERSHED WATER QUALITY PROGRAM			
CW~GS LEVY	-	54,000	51,739
TRANSFERS (TO)/FROM DEFERRED REVENUES	35,200	-	(35,000)
	35,200	54,000	16,739
WAGES	16,500	28,000	(8,938)
CONSULTING/SUB CONTRACTING	5,500	9,750	9,017
SUPPLIES/OFFICE/JANITORIAL	1,700	2,400	2,595
VEHICLE/TRAVEL/EQUIP'T USAGE	4,000	4,500	8,153
CORP SUPPORT/SHARED SVCS	4,500	8,000	1,256
RENT/INS/TAXES/UTILITIES	2,500	1,350	4,072
TECHNICAL EQUIPMENT	500	-	450
	35,200	54,000	16,604
DEMONSTRATION/CROP RESEARCH FARM			
CW~GS LEVY	-	36,750	36,750
PROVINCIAL GRANTS	30,000	-	15,000
SELF-GENERATED	23,000	17,600	23,240
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	(17,924)
	53,000	54,350	57,066
WAGES	32,500	35,500	29,259
SUPPLIES/OFFICE/JANITORIAL	4,250	1,500	11,026
VEHICLE/TRAVEL/EQUIP'T USAGE	4,000	3,000	5,639
PLANT MAT/LANDOWNER GRANTS	-	1,000	-
CORP SUPPORT/SHARED SVCS	6,000	7,500	6,585
RENT/INS/TAXES/UTILITIES	750	350	640
DUES/MEMBERSHIPS	500	500	259
SMALL MISC	5,000	5,000	3,658
	53,000	54,350	57,066
LANDOWNER STEWARDSHIP PROGRAM			
CW~GS LEVY	73,000	35,000	35,000
IN-KIND	20,000	20,000	3,674
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	(14,000)
	93,000	55,000	24,674

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
WAGES	38,000	7,000	11,910
SUPPLIES/OFFICE/JANITORIAL	-	-	300
VEHICLE/TRAVEL/EQUIP'T USAGE	-	2,000	-
PLANT MAT/LANDOWNER GRANTS	30,000	22,000	5,396
CORP SUPPORT/SHARED SVCS	4,000	4,000	3,144
RENT/INS/TAXES/UTILITIES	1,000	-	305
IN KIND SVCS SUPPLIES	20,000	20,000	3,674
	93,000	55,000	24,729
SUMMARY CATEGORY 3 NON MANDATORY SERVICES - ERCA ONGOING WATER QUALITY/ RESEARCH PROGRAM			
CW-GS LEVY	73,000	125,750	123,489
PROVINCIAL GRANTS	30,000	-	15,000
SELF-GENERATED	23,000	17,600	23,240
IN-KIND	20,000	20,000	3,674
TRANSFER TO/FROM DEF REVENUES	35,200	-	(66,924)
	181,200	163,350	98,479
WAGES & BENEFITS	87,000	70,500	32,230
SUPPLIES/TECH SERVICES/EQUIP'T	71,700	65,850	41,504
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	22,500	27,000	24,664
	181,200	163,350	98,399
SURPLUS/(DEFICIT)	-	-	80
CATEGORY 3 NON MANDATORY SERVICES - TERM LIMITED GRANT-FUNDED/FEE-FOR-SERVICE PROJECTS/STUDIES			
DETROIT RIVER CANADIAN CLEANUP			
PROVINCIAL GRANTS	73,500	73,500	73,500
FEDERAL GRANTS	70,000	73,500	35,000
TRANSFERS (TO)/FROM DEFERRED REVENUES	25,800	12,000	81,796
	169,300	159,000	190,296
WAGES	131,200	121,000	150,091
ENGINEERING/CONSULTING	-	-	6,243
SUPPLIES/OFFICE/JANITORIAL	4,400	6,150	5,710
VEHICLE/TRAVEL/EQUIP'T USAGE	300	250	1,286
PLANT MAT/LANDOWNER GRANTS	10,000	10,000	-
CORP SUPPORT/SHARED SVCS	21,000	20,000	24,578
RENT/INS/TAXES/UTILITIES	2,400	1,600	2,387
	169,300	159,000	190,296
REGIONAL ENERGY PLAN & CLIMATE CHANGE STUDIES			
FEDERAL GRANTS	-	5,000	-
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	5,864
	-	5,000	5,864
WAGES	-	5,000	5,100
VEHICLE/TRAVEL/EQUIP'T USAGE	-	-	-
CORP SUPPORT/SHARED SVCS	-	-	764
	-	5,000	5,864
OTHER WATER QUALITY STUDIES (FED\$ & PROV\$)			
PROVINCIAL GRANTS	23,484	280,000	224,758
FEDERAL GRANTS	145,000	-	113,396
OTHER	(10,000)	-	-
IN-KIND	-	70,000	20,313
TRANSFERS (TO)/FROM DEFERRED REVENUES	55,800	161,900	132,522
	214,284	511,900	490,989
WAGES	72,784	241,000	253,908
CONSULTING/SUB CONTRACTING	46,800	52,000	19,540
SUPPLIES/OFFICE/JANITORIAL	8,000	6,000	21,262
VEHICLE/TRAVEL/EQUIP'T USAGE	4,200	3,000	10,079
PLANT MAT/LANDOWNER GRANTS	70,000	70,000	85,173
CORP SUPPORT/SHARED SVCS	12,500	50,900	50,611
IN KIND SVCS SUPPLIES	-	70,000	20,313
TECHNICAL EQUIPMENT	-	19,000	29,801
SMALL MISC	-	-	301
	214,284	511,900	490,988
OTHER WATER QUALITY FEE FOR SERVICE (SAMPLING/DATA/ANALYSIS)			
FEDERAL GRANTS	42,975	37,000	28,038
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	(1,441)
	42,975	37,000	26,597

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
WAGES	31,900	31,000	20,657
CONSULTING/SUB CONTRACTING	500	-	1,299
SUPPLIES/OFFICE/JANITORIAL	1,500	500	75
VEHICLE/TRAVEL/EQUIP'T USAGE	2,675	-	-
CORP SUPPORT/SHARED SVCS	5,700	5,500	3,575
RENT/INS/TAXES/UTILITIES	700	-	-
SMALL MISC	-	-	1,800
	42,975	37,000	27,405
SUMMARY CATEGORY 3 NON MANDATORY SERVICES - GRANT-FUNDED/FEE-FOR-SERVICE PROJECTS/STUDIES			
PROVINCIAL GRANTS	96,984	353,500	298,258
FEDERAL GRANTS	257,975	115,500	176,434
SELF-GENERATED	(10,000)	-	-
IN-KIND	-	70,000	20,313
TRANSFER TO/FROM DEF REVENUES	81,600	173,900	218,740
	426,559	712,900	713,746
WAGES & BENEFITS	235,884	398,000	429,756
SUBSIDIES/MATERIALS/TECH SVCS/EQUIP'T	144,400	235,250	200,470
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	46,275	79,650	84,326
	426,559	712,900	714,553
SURPLUS/(DEFICIT)	-	-	(807)

COMMUNITY SERVICES

CATEGORY 1 MANDATORY SERVICES- SUPPORTS ALL MANDATORY SERVICES

CORPORATE COMMUNICATIONS

GENERAL LEVY	181,600	189,700	189,700
FOUNDATION & OTHER GRANTS	5,000	5,000	4,167
TRANSFERS (TO)/FROM DEFERRED REVENUES	15,000	-	(15,000)
	201,600	194,700	178,867

WAGES	178,500	174,000	162,169
CONSULTING	10,000	15,000	-
SUPPLIES/OFFICE/JANITORIAL	12,400	4,800	4,519
VEHICLE/TRAVEL/EQUIP'T USAGE	250	450	233
CAP MAINT/LOW VALUE ASSETS	450	450	300
	201,600	194,700	167,222

CATEGORY 3 NON MANDATORY SERVICES - ONGOING ERCA STAKEHOLDER ENGAGEMENT, OUTREACH & EDUCATION

OUTDOOR & CONSERVATION EDUCATION

CW~GS LEVY	-	-	(0)
FOUNDATION & OTHER GRANTS	40,000	45,000	87,243
SELF-GENERATED	24,000	28,000	20,689
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	(20,000)	(56,137)
	64,000	53,000	51,795

WAGES	51,350	36,100	43,341
SUPPLIES/OFFICE/JANITORIAL	1,970	2,320	1,231
VEHICLE/TRAVEL/EQUIP'T USAGE	1,080	1,080	64
CORP SUPPORT/SHARED SVCS	8,000	11,900	6,013
RENT/INS/TAXES/UTILITIES	1,600	1,600	1,146
	64,000	53,000	51,795

OUTREACH & ENGAGEMENT

CW~GS LEVY	34,150	61,600	61,600
FOUNDATION & OTHER GRANTS	10,000	10,000	19,144
TRANSFERS (TO)/FROM DEFERRED REVENUES	20,000	-	(7,029)
	64,150	71,600	73,715

WAGES	35,100	45,000	27,228
SUPPLIES/OFFICE/JANITORIAL	3,350	3,850	5,904
VEHICLE/TRAVEL/EQUIP'T USAGE	4,200	1,950	4,388
PARTNER GRANTS/PLANT MATERIAL	9,000	9,000	24,366
CORP SUPPORT/SHARED SVCS	10,000	10,000	8,780
RENT/INS/TAXES/UTILITIES	2,000	1,300	2,406
CAP MAINT/LOW VALUE ASSETS	500	500	228
SMALL MISC	-	-	415
	64,150	71,600	73,716

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
JOHN R PARK HOMESTEAD MUSEUM OPERATIONS AND EDUCATIONAL PROGRAMMING			
GENERAL LEVY	-	189,565	189,565
CW~GS LEVY	150,962	-	-
PROVINCIAL GRANTS	23,688	23,688	23,688
FEDERAL GRANTS	6,000	6,000	65,274
FOUNDATION & OTHER GRANTS	26,500	23,000	28,142
SELF-GENERATED FEES	109,000	45,750	84,985
TRANSFERS (TO)/FROM DEF REVENUES	-	-	5,000
TRANSFERS (TO)/FROM RESERVES	(15,000)	(15,000)	(93,500)
	<u>301,150</u>	<u>273,003</u>	<u>303,154</u>
WAGES	189,000	182,000	202,045
CONSULTING/SUB K	-	3,500	1,869
SUPPLIES/OFFICE/JANITORIAL	43,850	21,303	29,271
VEHICLE/TRAVEL/EQUIP'T USAGE	3,300	300	4,298
CORP SUPPORT/SHARED SVCS	25,000	25,000	25,000
RENT/INS/TAXES/UTILITIES	38,500	36,900	37,899
CAP MAINT/LOW VALUE ASSETS	1,000	3,000	1,248
SMALL MISC	500	1,000	670
	<u>301,150</u>	<u>273,003</u>	<u>302,302</u>

SUMMARY CATEGORY 3 NON MANDATORY SERVICES - COMMUNITY OUTREACH, EDUCATION & JRPH MUSEUM OPERATIONS			
GENERAL LEVY	-	189,565	189,565
CW~GS LEVY	185,112	61,600	61,600
PROVINCIAL GRANTS	23,688	23,688	23,688
FEDERAL GRANTS	6,000	6,000	65,274
FOUNDATION & OTHER GRANTS	76,500	78,000	140,229
SELF-GENERATED FEES	133,000	73,750	99,974
TRANSFER TO/FROM DEF REVENUES	20,000	(20,000)	(58,166)
TRANSFER TO/FROM RESERVES	(15,000)	(15,000)	(93,500)
	<u>429,300</u>	<u>397,603</u>	<u>428,664</u>
WAGES & BENEFITS	275,450	263,100	272,614
OTHER OPERATING/SITE SUPPLIES/PROF SERVICES	105,850	84,853	109,068
INTERNAL RECOVERIES FOR SHARED SVCS/FLEET	48,000	49,650	46,131
	<u>429,300</u>	<u>397,603</u>	<u>427,813</u>
SURPLUS/(DEFICIT)	-	-	851

CATEGORY 3 NON MANDATORY SERVICES - FUNDRAISING/COMMUNITY EVENTS & GRANT FUNDED TERM PROJECTS			
FEDERAL GRANTS	329,000	250	250
FOUNDATION & OTHER GRANTS	30,000	-	7,700
SELF-GENERATED	-	-	7,000
TRANSFERS (TO)/FROM DEFERRED REVENUES	(20,000)	49,600	53,227
	<u>339,000</u>	<u>49,850</u>	<u>68,177</u>
WAGES	60,450	15,250	34,354
TREES/SUPPLIES	278,550	34,600	33,970
	<u>339,000</u>	<u>49,850</u>	<u>68,324</u>

CORPORATE SERVICES

CATEGORY 1 MANDATORY SERVICES- CORPORATE & SUPPORT FUNCTIONS			
ADMINISTRATION, GOVERNANCE, RISK, COMPLIANCE, HR, FINANCE & IM/IT			
GENERAL LEVY	540,500	502,550	492,550
RECOVERIES/CHARGEBACKS	596,400	631,600	632,808
INTEREST & INVESTMENT INCOME	105,000	30,000	86,268
OTHER	-	-	34,884
TRANSFERS (TO)/FROM DEFERRED REVENUES	-	-	(25,000)
TRANSFERS (TO)/FROM RESERVES	-	-	(35,000)
	<u>1,241,900</u>	<u>1,164,150</u>	<u>1,186,510</u>
WAGES	865,000	816,000	833,315
MEMBER EXPENSES/CO DUES	55,500	57,500	51,944
AUDIT/LEGAL/CONSULTING	54,000	48,000	23,791
SUPPLIES/EQUIPT/NETWORK	93,400	71,150	73,064
OCCUPANCY/PHONE	150,000	146,500	145,417
TRAVEL & BD/STAFF MEETINGS	2,000	3,000	3,015
RETIREE BENEFITS	22,000	22,000	21,094
	<u>1,241,900</u>	<u>1,164,150</u>	<u>1,151,641</u>

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
CORPORATE SPECIAL PROJECTS (RECORDS/IS/IT)			
TRANSFERS FROM RESERVES	-	43,000	-
	-	43,000	-
CONSULTING/OTHER	-	43,000	10,000
	-	43,000	10,000
RESERVES- MANDATORY PROGRAMS			
GENERAL LEVY	325,000	200,000	200,000
TRANSFER TO/FROM RESERVES	(325,000)	(200,000)	(200,000)
GAIN ON DISPOSAL OF ASSETS/OTHER INCOME	-	-	-
	-	-	-
SUMMARY CATEGORY 1 MANDATORY SERVICES - CORPORATE SERVICES			
GENERAL LEVY	865,500	702,550	692,550
RECOVERIES/CHARGEBACKS	596,400	631,600	632,808
INTEREST	105,000	30,000	86,268
OTHER	-	-	34,884
TRANSFER TO/FROM DEF REVENUES	-	-	(25,000)
TRANSFER TO/FROM RESERVES	(325,000)	(157,000)	(235,000)
	1,241,900	1,207,150	1,186,510
WAGES & BENEFITS	865,000	816,000	833,315
OTHER OPERATING/SUPPLIES/PROF SERVICES	376,900	391,150	328,326
	1,241,900	1,207,150	1,161,641
SURPLUS/(DEFICIT)	-	-	24,869
NON MANDATORY SERVICES- ESSEX REGION CONSERVATION GOVERNANCE & FINANCE SUPPORTS			
FOUNDATION SUPPORT GRANT	55,000	55,000	55,000
ERCF-RELATED WAGE SUPPORTS	55,000	55,000	56,123
NET FINANCIAL SUPPORT OF/(PROVIDED BY) ERCF	-	-	(1,123)
RESERVES- NON-MANDATORY PROGRAMS			
CWGS LEVY	500,000	-	-
TRANSFER TO/FROM RESERVES	(500,000)	-	-
	-	-	-

AUTHORITY FINANCIAL SUMMARY OF PROGRAMS & SERVICES BY CATEGORY

Programs & Services associated with Risks of Hazards, Conservation of Lands*, & Drinking Water Source Protection			
Total Municipal Levies associated with mandatory programs & services	2,895,123	2,499,388	2,486,422
Municipal special project	(163,200)	97,000	245,225
Other Government \$	505,317	391,917	182,976
Self-generated/Other grants	805,800	992,900	1,079,558
Shared services recoveries - Non-Mandatory Programs	311,500	328,000	378,822
Deferred Revenue Transfers	74,750	4,000	(24,946)
Reserve transfers	(106,000)	(94,000)	(284,585)
Total revenues associated with mandatory programs & services	4,323,290	4,219,205	4,063,471
Operational Expenses associated with mandatory services			
Wages & benefits -ERCA operations	2,968,650	2,858,300	2,711,292
Plant material, removals and landowner subsidies - ERCA operations	17,000	48,071	36,245
Site & operational supplies/services - Conservation Areas	60,550	53,415	56,214
Office supplies & expenses - other ERCA programs	25,865	14,480	12,954
Occupancy, taxes, utilities & waste removal	300,010	266,510	262,373
Maintenance, repairs & security-sites	111,750	86,700	38,849
Maintenance, repairs & supplies-fleet/equipment	119,400	94,500	121,129
Equipment, software/hardware & website- ERCA operations	91,415	68,800	68,051
Technical & sub-contracted services/consulting - ERCA operations	132,000	405,500	303,948
Insurance	138,700	80,150	125,661
Audit & Legal	34,000	33,000	28,510
Dues & memberships	45,300	50,229	45,502
Travel, training & professional development	11,250	14,950	6,901
Board ,committee & meeting expenses	20,600	20,000	17,760
Bank, credit card charges and interest	14,800	17,600	14,512
Fleet/Equipment replacement	210,000	85,000	86,193
Other	22,000	22,000	33,417
Total operational expenses -mandatory programs	4,323,290	4,219,205	3,969,511
Operating surplus/(Deficit) - mandatory programs/services	-	-	93,960

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
Capital projects associated with conservation areas infrastructure			
Total Municipal Levies associated with capital projects/infrastructure	-	23,500	36,466
Transfers from Infrastructure Reserve	576,500	27,000	(173,200)
Grants from ERCF/Other funders	816,200	842,000	971,867
Total revenues associated with capital projects/infrastructure	1,392,700	892,500	835,133
Construction/engineering-ERCA capital projects (transferred to TCA at y/e)	1,368,450	878,500	806,416
Wages	24,250	14,000	36,299
Capitalized Infrastructure replacement			-
Total ERCA infrastructure investment	1,392,700	892,500	842,715
Surplus/(Deficit) - capital projects	-	-	(7,582)
TOTAL SURPLUS/(DEFICIT)-MANDATORY PROGRAMS/SVCS	-	-	86,378

CATEGORY 3 NON MANDATORY PROGRAMS & SERVICES			
On-going recurring core watershed programs & services			
Total Municipal Levies associated with NM programs & services	873,112	1,017,415	1,017,415
Municipal Special Project	-	-	549,793
Other Government \$	249,688	139,688	1,280,067
Self-generated/Other grants	895,100	874,950	2,216,904
Deferred Revenue Transfers	179,200	(447,400)	33,651
Reserve Transfers	(515,000)	(15,000)	(96,316)
Total revenues associated with ERCA-ongoing non-mandatory programs & services	1,682,100	1,569,653	5,001,514
Expenses associated with ERCA ongoing non-mandatory programs & services			
Wages & benefits -non mandatory operations	792,100	814,000	803,875
Construction& consulting engineering	80,500	13,700	84,404
Plants, removals and landowner subsidies	254,500	255,500	341,539
Supplies	96,807	53,215	90,484
Maintenance, repairs & security	32,200	22,272	27,219
Occupancy, taxes, utilities & waste removal	75,053	67,303	77,089
Equipment, software/hardware & website	16,400	13,723	13,869
Lab, data, technical & sub-contracted services	19,000	18,250	18,645
Insurance	42,350	34,500	46,925
Audit & legal	5,000	10,000	98,144
Dues & memberships	4,650	650	4,330
Travel, training & professional development	2,590	3,590	1,272
Bank, credit card charges and interest	11,700	10,700	11,081
In-kind supplies & services	30,000	20,000	5,845
Land acquisition & acquisition assistance	-	-	3,121,675
Shared services allocations	219,250	232,250	252,926
	1,682,100	1,569,653	4,999,439
Surplus/(Deficit) associated with ERCA-ongoing NM programs & services	-	-	2,075
Category 2 & 3 Municipal and Non Mandatory Term-limited projects with special grants and fixed terms			
Municipal Special Project/Fee For Service	17,100	1,015,500	1,990,955
Other Government \$	782,959	469,250	1,235,711
Self-generated/Other grants	100,000	82,250	105,722
Deferred Revenue Transfer	56,600	223,500	347,606
Total Revenues associated with term limited 3rd-party funded projects & services	956,659	1,790,500	3,679,994
Expenses associated with term limited 3rd-party funded projects & services			
Wages & benefits -special grant & municipal projects	323,534	435,050	501,902
Construction& consulting engineering-special grant & municipal	330,300	1,020,000	2,806,611
Plants, removals and landowner subsidies-special grant projects	99,500	101,000	139,473
Program supplies- special grant projects	46,000	16,150	34,888
Occupancy, taxes, utilities & waste removal	600	1,000	679
Equipment, software/hardware & website-special grant projects	58,400	20,000	43,889
Lab, data, technical & sub-contracted services -special grant	14,800	32,000	12,344
Insurance, audit & legal	5,500	3,500	4,392
Travel, training & professional development	500	-	2,167
Bank, credit card charges and interest	-	-	1,272
In-kind supplies & services	-	70,000	20,313
Shared services allocations	77,525	91,800	113,031
	956,659	1,790,500	3,680,961
Surplus/(Deficit) associated with term limited 3rd party funded projects &	-	-	(967)
SURPLUS/(DEFICIT) ASSOCIATED WITH ALL NMS & ACTIVITIES	-	-	1,108

Consolidated Surplus(Deficit)	-	-	87,486
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	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
Municipal Levies associated with mandatory services	2,895,123	2,522,888	2,522,888
Municipal Levies associated with non-mandatory services	873,112	1,017,415	1,017,415
Total Municipal Levies	3,768,235	3,540,303	3,540,303

Levy - Operations	\$ 2,895,123	\$ 2,712,453	\$ 2,712,453
Levy - Clean Water-Green Spaces	873,112	827,850	827,850
Total Municipal Levy	3,768,235	3,540,303	3,540,303
Water & erosion control infrastructure and special projects	(163,200)	1,097,000	2,768,996
Risk management services	17,100	15,500	16,977
	3,622,135	4,652,803	6,326,276
Provincial			
Section 39 Flood/Erosion Program	104,417	104,417	104,417
Drinking Water Source Protection	96,900	95,500	70,258
Other (CMOG, SEO etc.)	536,672	806,188	704,778
	737,989	1,006,105	879,454
Federal			
	1,372,975	341,750	2,270,500
Total Government Transfer Payments & Fees-For-Services	5,733,099	6,000,658	9,476,230
Other revenues			
Permit and applicant fees - mandatory services	599,000	823,500	812,285
Admissions, program fees & other services	744,300	662,100	820,545
Leases & property rentals	83,100	85,500	88,125
Donations and other grants			
General	51,500	113,000	188,602
Essex Region Conservation Foundation grants	218,000	467,000	684,122
In-kind contributions	30,000	90,000	1,076,158
Interest income	105,000	30,000	89,518
Gain on sale of assets	-	-	-
Total other revenues	1,830,900	2,271,100	3,759,354
Transfers from/(to) deferred revenues	506,750	(45,900)	399,126
Interdepartmental recoveries	796,100	758,200	837,393
TOTAL REVENUES	\$ 8,866,849	\$ 8,984,058	\$ 14,472,103
EXPENSES BY CLASSIFICATION			
Wages & benefits -all programs	4,129,784	4,143,350	4,085,787
Construction-municipal projects	58,000	246,500	249,043
Construction-special grant projects	357,800	1,000,000	2,798,721
Construction-ERCA capital projects	1,328,300	835,200	754,349
Plant material, removals and landowner subsidies-special grant projects	352,000	343,571	455,829
Plant material, removals and landowner subsidies - ERCA operations	24,000	61,000	62,808
Program supplies- special grant projects	48,485	39,750	72,186
Site & operational supplies - Conservation Areas	133,450	92,273	121,257
Office supplies & expenses - other ERCA operations	63,487	23,737	23,323
Occupancy, taxes, utilities & waste removal	375,663	334,813	340,140
Maintenance, repairs & security-sites	103,950	108,972	55,909
Maintenance, repairs & supplies-fleet/equipment	119,400	94,500	121,129
Equipment, software/hardware & website-special grant projects	9,900	24,000	46,467
Equipment, software/hardware & website- ERCA operations	157,515	86,523	79,342
Lab, data, technical & sub-contracted services -special grant	57,800	66,750	33,788
Lab, data, technical & sub-contracted services - ERCA operations	74,500	42,500	69,875
Insurance	186,550	118,150	176,977
Audit, legal & consulting services	84,000	163,000	142,188
Dues & memberships	49,950	50,879	49,832
Travel, training & professional development	14,340	18,540	10,348
Board ,committee & meeting expenses	20,600	20,000	17,880
Bank, credit card charges and interest	26,500	28,300	26,864
In-kind supplies & services	30,000	90,000	26,158
Land acquisition & acquisition assistance	-	-	3,121,675
Amortization	375,500	317,500	-
Internal recoveries included in revenues	806,375	784,750	837,393
TOTAL EXPENSES	\$ 8,987,849	\$ 9,134,558	\$ 13,779,271

	2023 DRAFT BUDGET	2022 BUDGET	2022 UNAUDITED
Total Revenues	8,866,849	8,984,058	14,506,987
Total Expenses	8,987,849	9,134,558	13,779,271
SURPLUS/(DEFICIT) (ACCRUAL BASIS)	(121,000)	(150,500)	727,716
ADD/SUBTRACT: NON CASH ITEMS			
Donation of land to ERCA	-	-	-
Gain/loss on asset disposal	-	-	-
Amortization	375,500	317,500	-
Transfers from Reserves (Per Schedule)	-	-	-
DEDUCT: CAPITAL ITEMS			
Land acquisition	-	-	-
Purchased fleet/equipment	(210,000)	(85,000)	(86,193)
Infrastructure additions	-	-	-
(DECREASE)/INCREASE IN NET SURPLUS (prior to reserve transfers)	44,500	82,000	641,523
TRANSFER (TO)/FROM RESERVES (Per Schedule)	(44,500)	(82,000)	(554,101)
FUND SURPLUS	\$ -	\$ -	\$ 87,422

APPENDIX B: MUNICIPAL LEVIES

MUNICIPAL LEVIES

MUNICIPALITY	CVA %	CVA %	GENERAL LEVY		CW~SP LEVY		TOTAL LEVIES			
	2023 DRAFT	2022	2023 DRAFT	2022	2023 DRAFT	2022	2023 DRAFT	2022	2023-2022	%
			DRAFT \$ 2,895,123	APPROVED \$ 2,712,453	DRAFT \$ 873,112	APPROVED \$ 827,850	DRAFT \$ 3,768,235	APPROVED \$ 3,540,303	\$ 227,932 \$ Difference	CHANGE 6.4%
TOWN OF AMHERSTBURG	6.07%	6.00%	\$ 175,773	\$ 162,713	\$ 53,010	\$ 49,660	\$ 228,783	\$ 212,373	\$ 16,410	7.7%
TOWN OF ESSEX	4.86%	4.76%	140,591	129,173	42,400	39,424	182,991	168,597	14,394	8.5%
TOWN OF KINGSVILLE	6.44%	6.34%	186,474	171,975	56,237	52,487	242,711	224,462	18,249	8.1%
MUNICIPALITY OF LAKESHORE	9.77%	9.69%	282,974	262,878	85,339	80,231	368,313	343,109	25,204	7.3%
TOWN OF LASALLE	9.03%	8.95%	261,314	242,710	78,807	74,076	340,121	316,785	23,335	7.4%
MUNICIPALITY LEAMINGTON	6.21%	6.17%	179,796	167,404	54,223	51,092	234,019	218,497	15,523	7.1%
TOWNSHIP OF PELEE	0.27%	0.28%	7,910	7,490	2,385	2,286	10,295	9,776	519	5.3%
TOWN OF TECUMSEH	8.22%	8.27%	238,054	224,440	71,792	68,500	309,846	292,940	16,906	5.8%
CITY OF WINDSOR	49.13%	49.54%	1,422,238	1,343,671	428,919	410,093	1,851,156	1,753,764	97,393	5.6%
TOTALS	100%	100%	\$ 2,895,123	\$ 2,712,453	\$ 873,112	\$ 827,850	\$ 3,768,235	\$ 3,540,303	\$ 227,932	6.4%

Appendix C: Schedule of Projected Reserves

ESSEX REGION CONSERVATION AUTHORITY											
2023 PROJECTED RESERVES	INFRASTRUCTURE / MAJOR MAINTENANCE	REVENUE STABILIZATION	GRANT MATCHING	VEHICLE / CA EQUIP'T	SUITE/F&F/IT/IS	HUMAN RESOURCES / ADMIN	LEGAL / INSURANCE	HISTORIC PROPERTIES RESERVE	TREE WARRANTY & SELF INSURANCE	OTHER WATERSHED	TOTAL RESERVES
PROJECTED OPENING BALANCE -01/01/2023	\$ 512,124	\$ 148,342	\$ 100,000	\$ 187,287	\$ 274,508	\$ 139,685	\$ 50,000	\$ 225,469	\$ 90,000	\$ 47,857	\$ 1,775,271
Transfers to reserves	325,000	-	-	-	-	-	-	515,000	-	-	840,000
Interest	-	-	-	-	-	-	-	-	-	-	-
AVAILABLE BALANCE	\$ 837,124	\$ 148,342	\$ 100,000	\$ 187,287	\$ 274,508	\$ 139,685	\$ 50,000	\$ 740,469	\$ 90,000	\$ 47,857	\$ 2,615,271
RESERVE FUND EXPENSES/TRANSFERS											
JRPH Museum repairs	-							157,000			157,000
JRPH Connectivity								22,000			22,000
Greenways culvert/bridge remediation	242,500										242,500
Parking lot(s) resurfacing	100,000										100,000
Emergency infrastructure repair contingency	30,000										30,000
Conservation Areas signage	25,000										25,000
Train Station maintenance & repairs								20,000			20,000
Fleet/Equipment replacement & maintenance				153,000							153,000
Cloud development (S28) permitting system					46,000						46,000
TOTAL EXPENSES	397,500	-	-	153,000	46,000	-	-	199,000	-	-	795,500
PROJECTED CLOSING BALANCE 12/31/2023	\$ 439,624	\$ 148,342	\$ 100,000	\$ 34,287	\$ 228,508	\$ 139,685	\$ 50,000	\$ 541,469	\$ 90,000	\$ 47,857	\$ 1,819,771
											\$ 44,500

APPENDIX D: FUNDING SOURCES BY SERVICE DELIVERY AREA



CVA in the watershed
Population in the watershed

2023
46,471,165,642
327,543

FUNDING SOURCES BY SERVICE DELIVERY AREA

Dept/Category of Program	Program Sub-Unit	Budgeted Expenses/Transfers	General Levy	CW~GS Levy	Municipal Special	Provincial Transfer Payments	Other Provincial	Federal	Fees/Grants/Def Rev	(To/From) Reserves	Total	Levy %	Levy Per Household (\$300k)
Watershed Management Programs & Services													
Cat 1 - Risks of Natural Hazards	Development Services	\$ 932,800	\$ 413,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 519,000	\$ -	\$ 932,800	44%	\$ 2.67
Cat 1 - Risks of Natural Hazards	Planning- Hazards	244,850	164,850	-	-	-	-	-	80,000	-	244,850	67%	\$ 1.06
Cat 1 - Risks of Natural Hazards	Flood Forecasting & Warning	211,080	106,663	-	-	104,417	-	-	-	-	211,080	51%	\$ 0.69
Cat 1 - Risks of Natural Hazards	Watershed Resources Management Strategies/Policies	119,000	48,500	-	-	-	-	-	24,500	46,000	119,000	41%	\$ 0.31
Cat 1 - Risks of Natural Hazards	WECI/Municipal Special Projects	54,050	-	-	(163,200)	-	182,000	-	35,250	-	54,050	0%	\$ -
Watershed Management Summary		1,561,780	733,813	-	(163,200)	104,417	182,000	-	658,750	46,000	1,561,780	47%	\$ 4.74
Conservation Programs & Services													
Cat 1 - Conservation of Lands	Conservation Areas Infrastructure Projects	1,392,700	-	-	-	-	-	573,000	243,200	576,500	1,392,700	0%	\$ -
Cat 1 - Conservation of Lands	Conservation Areas & Infrastructure Maintenance	876,910	775,110	-	-	-	-	-	81,800	20,000	876,910	88%	\$ 5.00
Cat 1 - Conservation of Lands	Transfer to Infrastructure Reserve - Cons Areas/Greenways	325,000	325,000	-	-	-	-	-	-	-	325,000	100%	\$ 2.10
Cat 1 - Conservation of Lands	Cons Areas Management Plans, Land Strategies and Operations Oversight	296,715	204,715	-	-	-	-	92,000	-	-	296,715	69%	\$ 1.32
Cat 1 - Conservation of Lands	Tree Planting & Restoration - Conservation Areas	158,100	113,100	-	-	-	30,000	-	15,000	-	158,100	72%	\$ 0.73
Cat 1 - Conservation of Lands	Fleet/Equipment	352,700	-	-	-	-	-	-	199,700	153,000	352,700	0%	\$ -
Cat 3 - Non Mandatory Services	Land Acquisition (Property surveys-CASO)/Legal)	40,000	-	40,000	-	-	-	-	-	-	40,000	100%	\$ 0.26
Cat 3 - Non Mandatory Services	Tree planting/Restoration- Non ERCA Properties	607,000	-	75,000	-	-	150,000	40,000	342,000	-	607,000	12%	\$ 0.48
Cat 3 - Non Mandatory Services	Holiday Beach Recreation/Camping	352,600	-	-	-	-	-	-	352,600	-	352,600	0%	\$ -
Cat 3 - Fee for Service/ Contracts	Special Term Projects (Muni/Other)	162,000	-	-	-	-	24,000	75,000	63,000	-	162,000	0%	\$ -
Cat 3 - Fee for Service/ Contracts	Fee For Service Property Maintenance	12,000	-	-	-	-	-	-	12,000	-	12,000	0%	\$ -
Conservation/Lands Summary		4,575,725	1,417,925	115,000	-	-	204,000	780,000	1,309,300	749,500	4,575,725	34%	\$ 9.90

Dept/Category of Program	Program Sub-Unit	Budgeted Expenses/Transfers	General Levy	CW~GS Levy	Municipal Special	Provincial Transfer Payments	Other Provincial	Federal	Fees/Grants/ Def Rev	(To/From) Reserves	Total	Levy %	Levy Per Household (\$300k)
Water Quality Programs & Services													
Cat 1 - Drinking Water Source Protection	Mandatory Drinking Water Source Protection (SPA)	96,900	-	-	-	96,900	-	-	-	-	96,900	0%	\$ -
Cat 1 - Provincial Ground and Source Water Monitoring PGM	Mandatory Provincial Ground and Source Water Monitoring PGM	21,285	21,285	-	-	-	-	-	-	-	21,285	100%	\$ 0.14
Cat 2 - Municipal Services	Risk Management Services	17,100	-	-	17,100	-	-	-	-	-	17,100	0%	\$ -
Cat 3 - Non Mandatory Services	ERCA Water Quality Program/Site Monitoring	35,200	-	-	-	-	-	-	35,200	-	35,200	0%	\$ -
Cat 3 - Non Mandatory Services	Demo/ Research Farm	53,000	-	-	-	-	30,000	-	23,000	-	53,000	0%	\$ -
Cat 3 - Non Mandatory Services	Agricultural Stewardship/Extension Services	93,000	-	73,000	-	-	-	-	20,000	-	93,000	78%	\$ 0.47
Cat 3 - Special/Term Projects	Detroit River CDN Coalition	169,300	-	-	-	-	73,500	70,000	25,800	-	169,300	0%	\$ -
Cat 3 - Special/Term Projects	Water Quality Research Studies	214,284	-	-	-	-	23,484	145,000	45,800	-	214,284	0%	\$ -
Cat 3 - Special/Term Projects	Fee for Service WQ Monitoring/Sampling	42,975	-	-	-	-	42,975	-	-	-	42,975	0%	\$ -
Water Quality Summary		743,044	21,285	73,000	17,100	96,900	169,959	215,000	149,800	-	743,044	13%	\$ 0.61
Community Outreach/Heritage Programs & Services													
Cat 1 - General Programs/Services	Mandatory Corporate Communications	201,600	181,600	-	-	-	-	-	20,000	-	201,600	90%	\$ 1.17
Cat 3 - Non Mandatory Services	John R Park Homestead-Museum Operations/Education Program	301,150	-	135,962	-	-	23,688	6,000	135,500	-	301,150	45%	\$ 0.88
Cat 3 - Non Mandatory Services	Transfer to John R Park Homestead Preservation Reserve Fund	515,000	-	515,000	-	-	-	-	-	-	515,000	100%	\$ 3.32
Cat 3 - Non Mandatory Services	Outreach & Partnerships	64,150	-	34,150	-	-	-	-	30,000	-	64,150	53%	\$ 0.22
Cat 3 - Non Mandatory Services	Outdoor & Conservation Education	64,000	-	-	-	-	-	-	64,000	-	64,000	0%	\$ -
Cat 3 - Non Mandatory Projects	Grant -funded Projects/Events	339,000	-	-	-	-	-	329,000	10,000	-	339,000	0%	\$ -
Community Outreach Summary		1,484,900	181,600	685,112	-	-	23,688	335,000	259,500	-	1,484,900	58%	\$ 5.60
Administration & Corporate Services													
Mandatory	Corporate Services	1,241,900	540,500	-	-	-	-	-	701,400	-	1,241,900	44%	\$ 3.49
Non Mandatory Services	Essex Region Conservation Foundation (grant-funded) Supports	55,000	-	-	-	-	-	-	55,000	-	55,000	0%	\$ -
Administration & Corporate Services Summary		1,296,900	540,500	-	-	-	-	-	756,400	-	1,296,900	42%	\$ 3.49
		\$ 9,662,349	\$ 2,895,123	\$ 873,112	\$ (146,100)	\$ 201,317	\$ 579,647	\$ 1,330,000	\$ 3,133,750	\$ 795,500	\$ 9,662,349	39%	\$ 24.33
Mandatory Services (BOLDDED)		\$ 6,525,590	\$ 2,895,123	\$ -	\$ (163,200)	\$ 201,317	\$ 212,000	\$ 665,000	\$ 1,919,850	\$ 795,500	\$ 6,525,590	44%	\$ 18.69
Non Mandatory Services		\$ 3,136,759	\$ -	\$ 873,112	\$ 17,100	\$ -	\$ 367,647	\$ 665,000	\$ 1,213,900	\$ -	\$ 3,136,759	28%	\$ 5.64

Appendix E: Where Does Your Levy Go?



From: Minister, MECP (MECP) <Minister.MECP@ontario.ca>

Sent: Wednesday, April 19, 2023 10:58 AM

To: Minister, MECP (MECP) <Minister.MECP@ontario.ca>

Subject: Save the date - Provincial Day of Action on Litter - (May 9, 2023) / Invitation à prendre date de la Journée provinciale d'action contre les détritrus, le 9 mai 2023

Hello,

We are excited to invite you to save the date to celebrate the fourth annual Provincial Day of Action on Litter, taking place on Tuesday, May 9, 2023! Ontario's annual Day of Action on Litter encourages individuals, students, municipalities and businesses across the province to work together to raise awareness about the impacts of litter and waste and take part in a litter cleanup.

We hope you will be able to join us in promoting and supporting the 2023 Day of Action.

Specifically, we welcome your support for a successful 2023 Day of Action by:

- promoting public participation in a cleanup on Tuesday, May 9 or on the weekends surrounding the Day of Action on Litter and educate participants on the impact of litter and waste using your communications channels.
- hosting a litter cleanup and inviting the public, volunteers, employees, or members to participate.
- posting to your social media accounts on May 9, 2023 to officially recognize the day, using the hashtag #actONlitter, and follow us for more posts to share.

The Ministry of the Environment, Conservation and Parks will provide further resources to support the 2023 Day of Action on Litter shortly, including a litter clean up reporting form closer to the date.

We know there is still more to do to reduce waste and litter and keep our land and water clean and healthy, and that Ontarians will do their part to make this happen. We hope you will help us continue to build awareness and to keep our communities clean!

If you have any questions, please reach out to actONlitter@ontario.ca.

Thank you for your support in working together to keep our province clean.

David Piccini
Minister of the Environment, Conservation and Parks



Luanne Patterson
Senior System Manager
Environmental Assessment

Directrice de l'analyse des systèmes
Évaluation environnementale

Box 8100
Montréal, Québec Canada
H3C 3N4

Boîte 8100
Montréal, Québec/Canada
H3C 3N4

April 12, 2023

RE: CN RIGHT-OF-WAY VEGETATION CONTROL

Dear Mayor,

CN remains committed to running its railway sustainably, as well as building a level of trust and collaboration with the communities in which we operate.

To that end, we are reaching out to advise you of our vegetation control activities in your area between April and October 2023. A regularly updated schedule is available at:
[CN.ca/vegetation](https://www.cn.ca/vegetation)

If not managed properly, trees, brush or other vegetation can severely compromise rail and public safety. Vegetation can impede the view motorists have of oncoming trains and increase the risk of crossing accidents. Unwanted vegetation can damage the integrity of the railbed, interfere with signals and switches, contribute to track side fires, compromise employee and citizens safety, reduce visibility for train crews at road crossings/train control signals and track side warning devices, to name a few of the potential risks.

CN's annual vegetation control program is designed to mitigate these risks by managing brush, weeds, and other undesirable vegetation. This program is critical to ensure safe operations and contributes to the overall safety of your community.

Control Measures

CN manages vegetation using both chemical and mechanical methods. We are sensitive to concerns your community may have regarding chemical vegetation control and I would like to assure you that at CN, we strive to safeguard our neighbouring communities and the environment.

The track infrastructure is composed of two main sections, the ballast section typically ranging from 16-24 feet (which is primarily gravel and supports the track structure) and the right of way portion (which is the area outside of the ballast section to the CN property boundary).

The 16–24-foot ballast section and the areas around signals and communications equipment that are critical for safe railway operations will be managed using chemical methods. Application in these safety critical areas is done by spray trucks or spray trains with downcast nozzles that spray a short distance above the ground surface with shrouded booms, specially designed to limit the chemicals from drifting. The right-of-way section is maintained using mechanical control methods such as mowing, or brush cutting and may be chemically treated to control noxious or invasive weeds or brush.



CN will use chemical control techniques on the ballast section and specific locations of the right of way throughout the network for safety reasons. Furthermore, when chemicals are applied via spray train or truck, as outlined in the photo below, additives called surfactants are included to make the chemical work better.



CN has retained professional contractors qualified to undertake this work. They are required to comply with all laws and regulations applicable to CN. In addition, the contractors will ensure that vegetation control is performed with consideration of the environment and in accordance with the highest industry standards.

Inquiries

Should your community have any noxious weed removal requests, we ask that you contact CN's Public Inquiry Line at contact@cn.ca or fill out the form at [CN.ca/vegetation](https://www.cn.ca/vegetation) before June 1, 2023 with the specific information and location. CN will make every effort to include those locations as part of our 2023 Vegetation Management Program. All notices sent after the above-mentioned date will be included in the 2024 Vegetation Management Plan.

We look forward to working with you and answering any questions you may have regarding our vegetation control activities in your community.

Please find attached the notices CN is publishing in local papers to advise the public. We would kindly ask that you post copies on your community's website and at City Hall or other central locations for a wider distribution.

For any questions or more information, please contact the CN Public Inquiry Line by telephone at 1888-888-5909, or by email at contact@cn.ca.

Please also find attached a list of FAQs regarding the program that may be of further assistance.
Best regards,



Luanne Patterson



Annual Vegetation Management Program Frequently Asked Questions (FAQs)

Where can I get more information about CN's Vegetation Management Program?

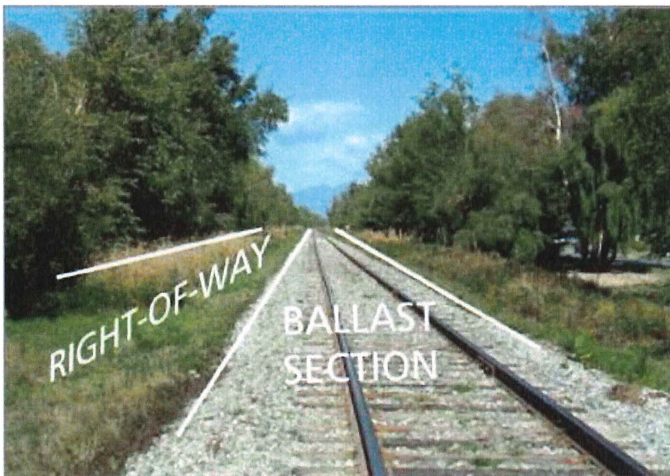
For more details, please visit our website at [CN.ca/vegetation](https://www.cn.ca/vegetation)

Why does CN need to remove vegetation along its train tracks annually?

At CN, safety is a core value. Part of maintaining and operating a safe railway is ensuring vegetation is managed along our corridors. CN also has an obligation, pursuant to the *Rules Respecting Track Safety*, adopted under the *Railway Safety Act*, to ensure that vegetation on or immediately adjacent to the railway roadbed is controlled. More specifically, the rules require federal railways to ensure the track is free of vegetation that could create fire hazards, affect the track integrity, or obstruct visibility of operations and inspections. Separate regulations also require removal of vegetation to ensure every grade crossing meets sightline requirements.

Where does CN remove vegetation?

For the purposes of vegetation control, CN divides its rail lines into two components: the ballast section and the right-of-way. The ballast section (gravelled area) covers a 16 to 24ft width (4.9 to 7.3m). The right-of-way section covers a 42ft width (13m) on each side of the ballast section.





Vegetation in the right-of-way section needs to be controlled to protect sight lines for train crews to see signal systems and at road crossings, prevent trees from fouling the track during storms, reduce fuel loading to prevent fires, minimize wildlife mortality, ensure good drainage along ditches and culverts, amongst other safety requirements and is primarily controlled mechanically, by mowing and cutting of vegetation. Certain herbicide products are used (excluding glyphosate) to encourage grass rather than shrubs and trees.

The ballast section, on the other hand, is the most critical area as it supports the track infrastructure that supports the movement of freight and passengers and provides an area for train crew to safely inspect their train. Given the crucial role it plays in ensuring the safety and integrity of rail operations, this section must be clear of all vegetation. The only proven way to effectively completely remove vegetation in the ballast section is through chemical application.



How will you manage dry plants that remain once the spraying is completed?

Ensuring vegetation is controlled on an annual basis is the best method to reduce larger volumes of dead and dry plants. This is because it eradicates vegetation before it grows, reducing the amount of dead plant material. CN's program has been developed specifically with this in mind. Most vegetation, once dead, will naturally decay leaving little debris. As for the right-of-way, the herbicides used are selective and the grass cover will remain intact while shrubs or noxious weeds will be controlled.



What herbicides will CN be using?

The choice of chemicals used depends on the specific plants targeted. All pesticides used in Canada are approved for use in Canada and the province in which they are applied. The chemicals for 2023 may include:

Name	Ingredient(s)	PCP #
Aspect	Picloram & 2,4-D	31641
Clearview	Aminopyralid & Metsulfuron-Methyl	29752
Credit Xtreme	Glyphosate	29888
Esplanade	Indaziflam 200g/l	31333
Milestone	Aminopyralid	28517
Navius Flex	Metsulfuron-Methyl & Aminocyclopyrachlor	3092228840 31333 32773 30203 30922 31470 31760 27736
Round Up Weather Pro	Glyphosate	27487
Hasten	Adjuvant	N/A
Gateway	Adjuvant	N/A

Will you be using Glyphosate. If so, is it dangerous for us or my pets?

All pesticides CN uses in Canada are registered by Health Canada's Pest Management Regulatory Agency (PMRA) and have been approved for use in the province in which they are applied. Protection of human health and the environment is Health Canada's primary objective in the regulation of pesticides and all pesticides must undergo rigorous science-based assessments before being approved for sale in Canada. The PMRA also re-evaluates registered pesticides on a cyclical basis to ensure they continue to meet modern health and environmental standards. The PMRA re-evaluated glyphosate in 2017 and reconfirmed that products containing glyphosate do not present risks to human health or the environment when used in accordance with revised label directions. CN's vegetation control contractor uses glyphosate in accordance with label directions.



Has CN tried any non-chemical weed control options in the past, such as weed whacking? Have they worked?

CN has used weed cutting in the past to control vegetation, but this does not remove the roots, and actually encourages more growth. It is not an effective long-term solution for vegetation removal along railway tracks. The application of steam injection has also been investigated; however, it has proven ineffective in killing the roots, which, if left to continue growing, could compromise the integrity of the rail bed, causing unsafe operating conditions.

CN has also explored other options, such as high concentrate vinegar (acetic acid). However, this was deemed not to be a viable option as the acid reacts negatively with steel and the sensitive electronic monitoring equipment used to regulate the safe movement and operation of our trains.

I am an organic farmer adjacent to your tracks, should I be worried?

Most of the vegetation control focuses on the ballast section (gravelled area) which is 16 – 24 feet (4.9 to 7.3 meters) wide, leaving about 42 feet (13 meters) of right-of-way on each side of the ballast. The equipment used for application is a shrouded boom which focuses the spray downward to reduce potential drift. Application must also be done during appropriate weather conditions, including low wind levels.

Many properties back onto the railway. Are Aspect, Clearview, Credit Xtreme, Esplanade, Milestone, Navius Flex, Round Up Weather Pro, Hasten, and Gateway safe to use in close proximity to people and pets?

All pesticides used in Canada must be registered by Health Canada's Pest Management Regulatory Agency (PMRA), which has one of the toughest regulatory requirements in the world for approving products for safe use. CN only uses pesticides that have been approved for use in Canada and the province in which they are applied. When used according to label directions, PMRA has evaluated them to be safe.

Can I request my area not be sprayed?

At CN, safety is a core value. CN is governed by the Railway Safety Act and must comply with the laws and regulations. Vegetation control is a key component of keeping our employees and the communities in which we operate safe. Ensuring vegetation is kept clear of our infrastructure, signals, road crossing sight lines and enabling our teams to inspect and maintain the track is critically important. As a result, all areas of the CN ballast section will be treated to control vegetation.

Court of Revision Meeting

Minutes

Date: Tuesday, March 28, 2023
Time: 5:00 pm
Location: Tecumseh Town Hall - Council Chambers
917 Lesperance Road
Tecumseh, Ontario N8N 1W9

Present: Mayor, Gary McNamara - Chair
Councillor, James Dorner
Councillor, Tania Jobin
Councillor, Rick Tonial

Absent: Councillor, Alicia Higgison

Also Present: Chief Administrative Officer, Margaret Misek-Evans
Director Legislative Services & Clerk, Robert Auger
Director Community Safety & Fire Chief, Wade Bondy
Director Technology & Client Services, Shaun Fuerth
Director Financial Services & Chief Financial Officer, Tom Kitsos
Deputy Clerk & Manager Legislative Services, Jennifer Alexander
Deputy Clerk - Clerks Services & Policy Advisor, Christina Hebert
Manager Engineering Services, John Henderson
Drainage Superintendent, Alessia Mussio

Others: Joe Lappalainen, Assistant Drainage Superintendent

A. Roll Call

B. Call to Order

The Mayor calls the meeting to order at 5:00 pm.

C. Land Acknowledgement

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Lenni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are

dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

D. Disclosure of Pecuniary Interest

Councillor Jobin declares a pecuniary interest on the Sullivan Creek Drain as she is an affected property owner.

E. Introduction and Purpose of Meeting

The purpose of the meeting is to hear from any affected owner who wishes to appeal his/her assessment for:

1. **Shuttleworth Drain** or any part thereof as set out in the Drainage Report, prepared by Rood Engineering Inc, dated December 14, 2022, or
2. **Sullivan Creek Drain** or any part thereof as set out in the Drainage Report, prepared by Rood Engineering Inc, dated January 9, 2023.

Shuttleworth Drain

The Drainage Superintendent provides a background on the Shuttleworth Drain and advises that one landowner contacted the Town and was a delegation at the meeting to consider. Since this meeting, no affected landowners have contacted the Town with questions or concerns. There is one delegation for the Shuttleworth Drain, Ms. Fortier, who would like to appeal their assessment as outlined in the Drainage Report as appended on the agenda. Mr. Gerard Rood is present virtually to answer any questions.

Mr. Gerrard Rood, Drainage Engineer, advised that he has received some inquiries by the Town on the assessments proposed, some of the drainage works provided, and changes in costs between the 2022 report and the current report appended on the agenda. He believes that these inquiries have been properly addressed and does not see any reason to make any adjustment to the assessment schedule by the Court for this Drainage Report.

Sullivan Creek Drain

The Chair advises that there are no delegations or concerns received on the Sullivan Creek Drain assessments as appended on the Agenda.

F. Delegations

1. Gerard Rood, P.Eng., Drainage Engineer, Rood Engineering Inc for Shuttleworth and Sullivan Creek Drains

He advises that there are no cost adjustments required for the assessments in the report.

2. Vittoria Fortier, Affected Property Owner on Shuttleworth Drain

Vittoria Fortier, is joined by her husband Adam, and advises that they are not in support for the proposed drainage works as appended on the

agenda. She states that the cost assessment for the proposed drainage work is overpriced. She raised concern with the assessment regarding the breakdown of costs compared to her neighbor for the identical work in the work description outlined in the Drainage Report.

She advises that there are some errors in the Drainage Report and provides details with the assessments.

The Drainage Engineer responds to the cost escalation stating that it is due to inflation rates and the recent Ontario regulation on excess soil sampling which has increased the overall costs to the project. He explains that the differences in costs between the Fortier property and their neighbours is because they are upstream of the neighbours in question. The cost sharing for upstream owners is assessed at a higher rate than downstream owners since downstream landowners have no contribution to the Fortier parcel. Plus, the enclosure costs add significant costs to their final assessment. He did not notice any errors in the assessment values. The tender price will be the actual costs that will be pro-rated and billed to the affected property owners. The cost estimate is much closer to what inflationary prices are showing in tenders within the last year.

Councillor Higgison joins the meeting at 5:09 pm.

3. Emile Nabbout, Affected Property Owner for Shuttleworth Drain

Mr. Nabbout disputes the assessment and the inconsistency of pricing of the proposed works. There are descriptions of work varies from property owners and are not consistent. He requests that his assessment be reassessed. He challenges the engineering and assessment and would like to see the lowest prices based on the description of work in the Drainage Report.

Secondly, he advises that he will launch an appeal for the complete works as he does not see a drainage issue on the property.

Ms. Fortier comments on the pipe costs per meter and not the prices of the assessment going upstream/downstream. She does not see the cost decrease on the assessments for those properties downstream in the report. She would like the report to be transparent on cost calculations.

The Chair asks the Drainage Engineer to explain the assessment and flow rate calculations since there are additional costs associated with enclosures which are typically borne by the landowner. Any enclosure costs are 100 percent assessed to the affected owners that have requested these works to be completed on their behalf.

The Drainage Engineer explains the cost sharing factors that are calculated for the proposed works. He explains that the cost sharing for the bridges is based on the location of the bridge or enclosure along the length of the drain. For the enclosures at the upper end of the drain, the

owner bears a higher cost because there is less upstream area contributing to flows. For the open drain portion, upstream landowners pay a higher cost since they have to take their flows through the entire length of the drain to a sufficient outlet. Any enclosure costs are assessed 100 percent to the requesting owners for anything beyond the standard 6.1 meter top width.

The Drainage Superintendent highlights that these costs were discussed at the Public Information Centre (PIC) in March 2022 and the culvert at their driveway. After the PIC, Ms. Fortier emailed the Drainage Engineer for an estimate for the enclosure, which is the costs outlined in the Drainage Report. She advised that Ms. Fortier approved for the Drainage Engineer to include the enclosure as part of the drainage works. She explains that the costs assessed is not far off from the tendered results.

Ms. Fortier explains that the assessments do not make sense given the downstream explanation and the description of works provided. The Drainage Engineer explains downstream water flows downstream the amount of water may increase which results in larger pipe sizes, which increases costs.

Mr. Nabbout comments on the downstream and that his costs should be lower. It is not specified in the report and description of work. We will request for the reassessment as we should be paying less money. He states that there are some inconsistencies' within the Drainage Report and the description of work; and the reassessment costs should be to the engineer. The property owners should not be burden with the recalculation costs.

The Chair comments on the professionalism of the Drainage Engineer. He adds that if Mr. Nabbout has concerns, there is a Tribunal process that can be pursued. The Chair further notes that when there is an extra request on the Drain, it can be put back 100 percent on the landowner. The Chair supports the Engineer's assessment schedule as being assessed as equitably as possible.

The Drainage Superintendent explains the appeal processes if the delegates would like to pursue this option. It is recommended that if the delegation would like to pursue these options of appeal to contact the Drainage Superintendent for further information.

Mrs. Fortier confirms that she understands that she is responsible for the enclosure costs. It was not transparent in the Drainage Report. She understands the appeal options available but she wonders if the Court is asking not to go to tribunal.

The Drainage Superintendent advises that its Ms. Fortier's right to go to the Tribunal under the Drainage Act and explains the tribunal process.

She adds that in the description of work lists enclosure in the Drainage Report.

A Member asks Ms. Fortier to clarify if she wants the enclosure. Ms. Fortier confirms she wants the enclosure but the assessment rates does not make sense. She is requesting more transparency in the Drainage Report description of work.

The Chair responds that there is an opportunity to get clarity on the Drainage Report and the Drainage Act. The Drainage Engineer can clarify some of your concerns with the information.

Mr. Nabbout states he is not in agreement that the drainage works are required at this time with high inflation rates. He states that mistakes have been made in the report. He inquires on the process of appeal if it begins at the Town.

The Chair explains the appeal process and the potential costs associated with a reassessment at this time. He states that reassessment costs would be incurred by affected property owners on the drain. The Chair explains that as time goes on, inflation will play a roll and that needs to be considered.

A Member inquires if the Drainage Engineer could provide some literature on how properties are assessed without having to go through the appeal process. The Drainage Superintendent explains that the construction estimates were provided to the delegates when they requested the enclosure estimates back in March of 2022.

A Member expresses that she would not like to see the delegates go through an appeal process since it delays the project and inflation will play a roll with the delays. She requests that the Drainage Engineer provide some literature on how assessments are created to try to resolve the concerns.

The Chair explains that changing individual assessments may affect everyone's assessment. He suggests that more conversations be held with the delegates within the 21 day appeal period to help explain their assessment.

Motion: CR - 07/23

Moved By Councillor Rick Tonial
Seconded By Councillor James Dorner

That the Court of Revision confirm the assessment as presented the Shuttleworth Drain Drainage Report;

And that By-Law 2023-027, being a by-law to provide for the repair and improvements to the Shuttleworth Drain be considered for third and final reading at the April 25 Regular Council meeting **be approved.**

Carried

Motion: CR - 08/23

Moved By Councillor Alicia Higgison
Seconded By Councillor Rick Tonial

That the Court of Revision confirm the assessment as presented the Sullivan Creek Drain Drainage Report;

And that By-Law 2023-028, being a by-law to provide for the repair and improvements to the Sullivan Creek Drain be considered for third and final reading at the April 25 Regular Council meeting **be approved.**

G. Communications

1. Shuttleworth Drain:
 - a. Public Notice dated March 14, 2023
 - b. By-Law 2023-027 Shuttleworth Drain - First and Second Readings
Being a by-law to provide for the repair and improvements to the Shuttleworth Drain
 - c. PWES-2023-12 Request to Consider Engineer's Report for Shuttleworth Drain
2. Sullivan Creek Drain:
 - a. Public Notice dated March 14, 2023
 - b. By-Law 2023-028 Sullivan Creek Drain - First and Second Readings
Being a by-law to provide for the repair and improvements to the Sullivan Creek Drain
Councillor Jobin having declared an interest on the Sullivan Creek Drain.
 - c. PWES-2023-15 Request to Reconsider Engineers Report - Sullivan Creek Drain

Motion: CR - 09/23

Moved By Councillor Rick Toniai
Seconded By Councillor Alicia Higgison

That Communications - For Information items as listed on the Tuesday, March 28, 2023 Court of Revision Agenda, **be received**.

Carried

H. Adjournment

Motion: CR - 10/23

Moved By Councillor Tania Jobin
Seconded By Councillor James Dorner

That there being no further business, the Tuesday, March 28, 2023 meeting of the Court of Revision **be adjourned** at 5:55 pm.

Carried

Chair Gary McNamara, Mayor

Robert Auger, Clerk

Policies and Priorities Committee Meeting

Minutes

Date: Tuesday, April 11, 2023
Time: 3:30 pm
Location: Tecumseh Town Hall - Council Chambers
917 Lesperance Road
Tecumseh, Ontario N8N 1W9

Present: Mayor, Gary McNamara
Deputy Mayor, Joe Bachetti
Councillor, James Dorner
Councillor, Alicia Higgison
Councillor, Brian Houston
Councillor, Tania Jobin
Councillor, Rick Tonial

Also Present: Chief Administrative Officer, Margaret Misek-Evans
Director Legislative Services & Clerk, Robert Auger
Director Public Works & Engineering Services, Phil Bartnik
Director Community Safety & Fire Chief, Wade Bondy
Director Technology & Client Services, Shaun Fuerth
Director Community & Recreation Services, Beth Gignac
Director Development Services, Brian Hillman
Director Financial Services & Chief Financial Officer, Tom Kitsos
Deputy Clerk & Manager Legislative Services, Jennifer Alexander
Deputy Clerk - Clerks Services & Policy Advisor, Christina Hebert

A. Roll Call

B. Call to Order

The Mayor calls the meeting to order at 3:30 pm.

C. Land Acknowledgement

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Leni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are

dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

D. Disclosure of Pecuniary Interest

There is no pecuniary interest declared by a Member of Council.

E. Delegations

There are no Delegations presented to Council.

F. Communications

There are no Communication items presented to Council.

G. Reports

1. LCS-2023-11 Council Vacancy Policy Update

The Director Legislative Services & Clerk reviews the changes in the policy to streamline the Councillor and Deputy Mayor/Mayor appointment processes.

The Mayor opens the floor for questions.

A Member inquires on a by-election option if there is substantial time left in the term. The Clerk provided the legislative process for a by-election and the policy requires a resolution of Council to proceed with this option.

Motion: PPC - 01/23

Moved By Councillor Tania Jobin

Seconded By Councillor Rick Tonial

That Report LCS-2023-11 entitled "Council Vacancy Policy Update," **be received;**

And that Attachment 1 of the Report entitled "Policy 89: Council Vacancy" **be approved** with the proposed revisions.

Carried

2. LCS-2023-12 Licensing of Mobile Food Vendors

The Director Legislative Services & Clerk provides an overview of the draft by-law as appended to the agenda. The Mayor opens the floor to questions.

A Member inquires on eating establishments that have a food truck located on their property and if they would have to apply for this licence. The Clerk confirms that any mobile refreshment vehicle would require a licence as drafted in the by-law. It is requested that the by-law be revised to capture this scenario where owners of an eating establishment are

operating a refreshment vehicle on their property be permitted when serving its customers.

Discussion ensues on the proposed fee and a Member inquires why the fee is higher than area municipalities. The CAO explains the administrative costs associated with this service to be a reasonable cost for vendors. Members request public consultation on the program after the first year, and that Administration report to Council on the consultation and program costs.

A Member asks about Town events and sporting groups serving food on Town property. The Clerk advises that the vendor would require permission from the Town to operate at these events and additional fees may be associated.

Motion: PPC - 02/23

Moved By Councillor Rick Toniai
Seconded By Councillor Brian Houston

That Report LCS-2023-12 Licensing of Mobile Food Vendors **be received;**

And that By-Law 2023-047 be considered for first, second, third and final readings at the April 25, 2023 Regular Council Meeting;

And that By-Law 2022-099, the administrative fees and charges by-law for 2023, be amended accordingly at the April 25, 2023 Regular Council Meeting to allow for the licensing fees proposed in By-law 2023-047;

And further that Administration be directed to implement the licensing program to authorize mobile refreshment vehicles to operate within the Town upon the passing of the By-law.

Carried

3. LCS-2023-13 Town of Tecumseh New Fireworks By-Law

The Director Legislative Services & Clerk provides an overview of the revisions to the by-law as appended on the agenda. The Mayor opens the floor to questions.

A Member inquires on the types of events where fireworks are permitted and the new process. The Clerk indicated that the by-law was drafted to allow for flexibility for various holidays with fireworks and the approvals required. It is requested that firework safety tips should be made available for all applicants.

Motion: PPC - 03/23

Moved By Councillor Rick Toniai
Seconded By Councillor Tania Jobin

That Report LCS-2023-11 entitled "Town of Tecumseh Fireworks By-Law Review" **be received**;

And that proposed By-Law 2023-045 attached hereto and being a by-law to prohibit and regulate the sale and setting off of fireworks in the Town of Tecumseh **be read** a first, second and third time and be finally adopted at the April 25, 2023 regular meeting of Council;

And further that Council direct Administration **to review** the feasibility of an appropriate fee relating to the processing of an Application for Fireworks Display.

Carried

4. LCS-2023-14 Town of Tecumseh Seasonal Patios By-Law

The Director Legislative Services & Clerk provides an overview of the new by-law as appended on the agenda. The Mayor opens the floor for questions.

A Member inquires on the scope of the by-law and the types of seasonal patios. The Clerk responds that the by-law is drafted for all patios, seasonal and permanent, located on private and public lands. It is requested to have provisions in the by-law to waive fees for a permanent patios that would be up year round. The Clerk advises that the draft by-law is reasonable and discretionary as these structures will need to be inspected for compliance.

The Mayor inquires on the parking spaces and the allocation permitted during COVID with patios as some businesses may see the advantage in having an extension of the patios. The Clerk indicates that by-law provides for some flexibility and ability to extend into the parking lot to increase their size.

Motion: PPC - 04/23

Moved By Councillor Brian Houston
Seconded By Councillor James Dorner

That Report LCS-2023-14 entitled "Town of Tecumseh Seasonal Patios By-Law" **be received**;

And that By-Law 2023-046 be considered for first, second, third and final readings at the April 25, 2023 Regular Council Meeting;

And that By-Law 2022-099, the administrative fees and charges by-law for 2023, **be amended** accordingly at the April 25, 2023 Regular Council Meeting to allow for the licensing fees proposed in By-law 2023-046;

And further that Administration **be directed** to implement the Application for Approval Program to authorize Seasonal Patios and Seasonal Patio Expansions within the Town of Tecumseh commencing May 1, 2023.

Carried

5. PWES-2023-30 Culvert Condition Assessment Policy No. 82.6

The Director Public Works & Engineering Services outlines the policy as appended in the report on the agenda. The Mayor opens the floor to questions. There are no questions raised.

Motion: PPC - 05/23

Moved By Councillor Tania Jobin

Seconded By Councillor Brian Houston

That the Culvert Condition Assessment Policy, Policy 82.6, **be adopted** to provide a clear, consistent method for determining the condition rating of all culverts (with spans less than 3.0m) within the Town of Tecumseh.

Carried

H. Unfinished Business

There are no Unfinished Business items presented to Council.

I. New Business

There are no New Business items presented to Council.

J. Next Meeting

The next meeting will be at the call of the Chair.

K. Adjournment

Motion: PPC - 06/23

Moved By Councillor Brian Houston

Seconded By Councillor Alicia Higgison

That there being no further business, the Tuesday, April 11, 2023 meeting of the Policies and Priorities Committee **be adjourned** at 4:39 pm.

Carried

Gary McNamara, Mayor

Robert Auger, Clerk

Tecumseh Accessibility Advisory Committee
Minutes

Date: Thursday, April 6, 2023
Time: 1:30 pm
Location: Electronic meeting live streamed at:
<https://video.isilive.ca/tecumseh/live.html>.

Present:
Chair, Alicia Higgison
Member, Melissa Bloomfield
Member, Tracey Crow
Councillor, Ron Matysek
Member, Patrick Strong

Absent:
Member, Ron Doherty
Member, Christine Quaglia

Also Present:
Director Legislative Services & Clerk, Robert Auger
Deputy Clerk & Manager Legislative Services, Jennifer Alexander

A. Roll Call

B. Call to Order

The Clerk calls the meeting to order at 1:30 pm.

C. Election of a Position

1. Position of Chair

Motion: TAAC - 01/23

Moved By Councillor Ron Matysek
Seconded By Member Melissa Bloomfield

That Alicia Higgison be appointed Chair for the Tecumseh Accessibility Advisory Committee.

Carried

D. Land Acknowledgement

We acknowledge that we are on land and surrounded by water, originally inhabited by Indigenous Peoples who have travelled this area since time immemorial. This territory is within the lands honoured by the Wampum Treaties; agreements between the Anishinaabe, Haudenosaunee, Lenni Lenape and allied Nations to peacefully share and care for the resources around the Great Lakes. Specifically, we would like to acknowledge the presence of the Three Fires Confederacy Ojibwe, Odawa, Potawatomi and Huron/Wendat Peoples. We are dedicated to honouring Indigenous history and culture while remaining committed to moving forward respectfully with all First Nations, Inuit and Métis.

E. Disclosure of Pecuniary Interest

There is no pecuniary interest declared by a Member of the Committee.

F. Delegations

There are no delegations presented to the Committee.

G. Communications

There are no Communication items presented to the Committee.

H. Reports

There are no Reports presented to the Committee.

I. Unfinished Business

There are no Unfinished Business items presented to the Committee.

J. New Business**1. National AccessAbility Week**

Re: May 29- June 4

The Deputy Clerk advised the Members on past events in honour of the week. The Members agreed to continue to have a social media awareness campaign, a flag raising ceremony, and encourage Town staff to wear red on a designated day.

Discussion ensues on items for the social media campaign. Members will email their ideas to the Deputy Clerk by April 21, 2023.

Motion: TAAC - 02/23

Moved By Councillor Ron Matysek

Seconded By Chair Alicia Higgison

That Council give consideration to support the following initiatives in honour National AccessAbility Week (May 29th to June 4) to include:

- A flag raising ceremony at the Tecumseh Town Hall on Monday May 29, 2023 at 10 am and that the flag be raised for the duration of the week (May 29 to June 4);
- Administration in collaboration with TAAC Members develop a social media campaign to raise public awareness on accessibility in the community to be post during the week;
- Illuminate Town Hall the colour red.

Carried

2. Accessible Parking at St. Clair Beach Optimist Club

The Clerk presents an accessible parking concern the Town received regarding St. Clair Beach Optimist Club parking lot. He advises on the current allocations of accessible parking spots and notes that the Town is adding an additional accessible parking spot for a total of three spots. He explains that the current allocations meet regulations with the Town's Zoning By-laws. The Clerk asks the members if there are any additional considerations to consider with the current parking lot.

A Member inquires on the curb separating the two lots as it could present a barrier. It is requested that Administration follow up on the curb and access points for better flow to the entrance of the building.

A Member inquires on the Optimist Club's trailer parked at the front of the building and if it could be moved in the future if parking availability becomes an issue.

K. Next Meeting

The next meeting will be held on Thursday May 18, 2023 at 1:30 pm.

L. Adjournment

The meeting adjourned at 2:07 pm.

Alicia Higgison, Chairperson

Robert Auger, Clerk

Police Services Board for the Town of Tecumseh

Minutes

Date: Monday, April 3, 2023
Time: 4:30 pm
Location: Tecumseh Town Hall - Council Chambers
917 Lesperance Road
Tecumseh, Ontario N8N 1W9

Present:

Chair, Christopher Hales
Vice-Chair, Paul Sweet
Mayor, Gary McNamara
Councillor, Rick Tonial
Member, Marc Gomes

Also Present:

OPP Inspector Angela Ferguson
Secretary, Margaret Misek-Evans, CAO
Recording Secretary, Ellen Preuschat

Others:

OPP Superintendent Franka Campisi (West Region)
Police Services Advisor Ron LeClair, Ministry of the Solicitor General

A. Call to Order

Chair Christopher Hales called the meeting to order at 4:39 pm.

B. Roll Call

C. Disclosure of Pecuniary Interest

There was no pecuniary interest declared by a member of the Board.

D. Approval of the Agenda

Motion: PSB - 12/23

Moved by Member Marc Gomes
Seconded by Vice-Chair Paul Sweet

That the Agenda for the Police Services Board Meeting, dated Monday, April 3, 2023, as duplicated and delivered to the members thereof, **be accepted**.

Carried

E. Approval of the Previous Minutes

1. Police Services Board Regular Meeting - January 16, 2023

Motion: PSB - 13/23

Moved by Councillor Rick Tonial
Seconded by Vice-Chair Paul Sweet

That the Regular Minutes of the January 16, 2023 Police Services Board Meeting, as duplicated and delivered to the members thereof, **be adopted.**

Carried

F. Delegations

There were no delegations presented to the Board.

G. OPP Monthly Report

1. OPP Police Services Board Monthly Overview - December 2022 to February 2023

2. OPP Report to Tecumseh PSB - December 2022 to February 2023

Inspector Angela Ferguson provided a summary of the OPP Report for the months of December 2022 to February 2023. Mayor McNamara indicated he was pleased to see the increase in foot patrol hours. With respect to high numbers of false alarms, Inspector Ferguson explained that recent storms were responsible for some alarms, but the detachment will continue to monitor this data. Chair Hales inquired about bike patrols during the warmer weather, and the Inspector confirmed that the detachment bicycles are being serviced and a bike course is planned for the spring. Councillor Tonial offered to assist with the course.

Councillor Tonial inquired if false alarms are still issued fine notices. Inspector Ferguson responded that the information is passed on to the Town, and Councillor Tonial then proposed a higher fine. CAO Margaret Misek-Evans noted that these fines are evaluated annually as part of the budget process and that would be the most suitable time to re-evaluate the amount. She added that, in the 2023 budget, this revenue was split between fire and policing.

Chair Hales stated that the emphasis on traffic enforcement during these months is appreciated by the board. He then invited Supt. Campisi of West Region to address the board. Supt. Campisi advised that she is retiring in May and this would be her last meeting. Mayor McNamara thanked her for her leadership, noting the improved results around community safety and policing in the most recent Citizen Satisfaction Survey. On behalf of the board and residents he wished Supt. Campisi a good retirement.

Inspector Ferguson introduced the new Community Safety Officer, PC Lisa Whitelaw, to the board. Constable Whitelaw looks forward to increasing the visibility of the OPP in the community. With respect to school-based programs, she noted that they are currently running in the French and Catholic schools, but not in public schools as the public board is still reviewing the matter. The Chair and Mayor welcomed Constable Whitelaw to her new role.

Motion: PSB - 14/23

Moved by Mayor Gary McNamara
Seconded by Member Marc Gomes

That the OPP Report for the months of December 2022 to February 2023 **be received.**

Carried

H. Reports

1. PWES-2023-03 - Traffic Radar Speed Survey for 2022

Motion: PSB - 15/23

Moved by Vice-Chair Paul Sweet
Seconded by Member Marc Gomes

That Report PWES-2023-03 -Traffic Radar Speed Survey for 2022 **be received.**

Carried

I. Communications - Action Required

There were no Communications – Action Required presented to the board.

J. Communications - For Information Purposes

1. Chair Christopher Hales dated January 31, 2023

Re: Letter to Attorney General re Bail Reform

Chair Hales reported that members of the board, along with Town Council and Administration, recently met with Mr. Gary Anandasangaree, the Parliamentary Secretary to the Minister of Justice, to discuss reform of the federal bail system.

2. Ministry of the Solicitor General dated February 7, 2023

Re: 23-0008 All Chiefs Memo re Inspector General of Policing

Motion: PSB - 16/23

Moved by Councillor Rick Tonial

Seconded by Member Marc Gomes

That correspondence detailed as Items 1-2, Communications for Information, **be received**.

Carried

K. Old Business

There was no old business presented to the board.

L. New Business**1. Ministry of the Solicitor General - Updates**

Ron LeClair, Zone 6 Police Services Advisor

Ron LeClair, Zone 6 Police Services Advisor with the Ministry of the Solicitor General, outlined his background and explained that his role is to support the board, answer questions, and act as a liaison with the province. He requested that he be sent meeting invitations and agendas, and indicated he plans to attend meetings when available.

In response to an inquiry from Chair Hales, Mr. Le Clair noted that he does not see a conflict between OAPSB plans for board training and the training provided by the Ministry, which will continue to be mandated by legislation. He encouraged board members to attend the training session hosted by the Essex PSB on April 25, 2023.

With respect to the establishment of detachment boards, Mr. LeClair noted that he has limited information but that the board likely would have been advised by now if there was an issue with the submission made to the Ministry. The Ministry's goal is to establish the boards by December 2023/January 2024. CAO Margaret Misek-Evans advised that the board's financial year is from January to December, with budget planning typically underway by September. Our board would appreciate confirmation of the detachment board structure by September so it can be planned for in the budget. Mr. LeClair committed to forwarding this request to his supervisor at the Ministry.

2. 2022 Annual Performance Review - Essex County OPP Detachment Commander

Chair Hales reminded the board of its legislated responsibility to complete an annual performance review of the OPP detachment commander. The Recording Secretary will circulate the review form for members to complete and submit to Chair Hales, who will collate the responses into one document representative of the whole board's input. It will then be

reviewed with Inspector Ferguson and, when complete, forwarded to West Region command.

3. Other New Business

a. Citizen Satisfaction Survey

CAO Margaret Misek-Evans reported that the Town completed its biennial Citizen Satisfaction Survey in March. The rating of Tecumseh as a safe place to live scored 94%. With respect to importance of services provided, policing scored 91% overall, in the top 10. Traffic continues to be raised as a priority concern. Overall, this was a much better result than in the previous survey.

b. Traffic and Safety Issues

Mayor McNamara raised the issue of speeding on County Road 22 (EC Row) and requested that a coordinated enforcement campaign with Windsor and LaSalle be considered, similar to last fall. He also suggested a spring safety tips campaign reminding residents to close garage doors and keep valuables locked away to deter property crimes.

c. OAPSB Spring Conference and AGM

The Chair confirmed that board members and the CAO will be participating in this year's OAPSB Spring Conference and Annual General Meeting, taking place in Niagara Falls from May 30 to June 1, and the board has sponsored the event as in past years.

d. OPP Golf Tournament

Constable Lisa Whitelaw announced that the annual cOPPs for Charity Golf Tournament will take place on July 12, 2023, at the Kingsville Golf and Country Club. This tournament is open to the public and tickets can be purchased at any OPP detachment.

M. Next Meeting

June 26, 2023 at 4:30 pm

N. Adjournment

Motion: PSB - 17/23

Moved by Vice-Chair Paul Sweet
Seconded by Councillor Rick Tonial

That there being no further business to discuss, the Monday, April 3, 2023 meeting of the Tecumseh Police Services Board **adjourn** at 5:40 pm.

Carried

Christopher Hales, Chair

Margaret Misek-Evans, Secretary



The Corporation of the Town of Tecumseh

Community & Recreation Services

To: Mayor and Members of Council

From: Beth Gignac, Director Community & Recreation Services

Date to Council: April 25, 2023

Report Number: CRS-2023-06

Subject: E Scooter Pilot Program

Recommendations

It is recommended:

That Report CRS-2023-06 E Scooter Pilot Program **be received;**

And that Council **consider for approval** an E Scooter Pilot Program from May – September 2023 with services to be provided by Bird Canada, Inc.;

And further that a by-law to authorize the Mayor and Clerk to execute a Service Agreement between the Town of Tecumseh and Bird Canada, Inc., in a form satisfactory to the Town Solicitor, to provide an E Scooter Pilot Program, **be considered** at the May 9, 2023 Regular Council Meeting.

Background

At the Regular Council meeting of September 13, 2022, a Notice of Motion directed Administration to investigate the possibility of a pilot project with vendors that offer public access to utilize their e-scooters or e-bikes as an alternative mode of transportation on a pay-to-ride basis, and report back to Council with options and budget implications.

Research has concluded that a stand-up E Scooter or E Bike vendor would only be interested in a pilot project in Tecumseh if there was an opportunity to leverage an

existing program in Windsor or if there was a county-wide program involving all other communities in Essex County.

In 2022, the City of Windsor entered into an agreement with Bird Canada, Inc. to provide stand-up E Scooters and E Bikes in a limited pilot project. In 2023, the City of Windsor entered into an agreement with Bird Canada Inc. to provide E Scooters and E Bikes throughout Windsor, up to the shared boundaries between Windsor and Tecumseh.

Consequently, Staff have had discussions with both the City of Windsor and Bird Canada, Inc. to determine the feasibility of operating a pilot program for E Scooters in Tecumseh to leverage the new agreement between the City of Windsor and Bird Canada, Inc and provide the opportunity for residents of Tecumseh to experience E Scooters within a limited geographic boundary with speed limits that comply with existing speed limits on pathways (20 km/h).

Comments

Based on an evaluation of the opportunity, Staff are recommending that a limited number (30) of E Scooters be provided by Bird Canada, Inc. for the residents of Tecumseh from May 19 – September 30, 2023 for a pilot program. Expansion into E Bikes would be evaluated as part of the pilot program assessment in October 2023.

Bird Canada, Inc would be responsible for supplying, operating, maintaining, managing, marketing, financing and reporting on the E Scooter sharing system under the guidelines of a service agreement with the Town of Tecumseh for a 4-month pilot program to operate on Town property at agreed upon locations with the geo fenced limited speed service area described below:

- The service area is bound by the riverfront pathway to the north, Brighton Road to the east, Tecumseh Road and/or County Road 22 to the south and a seamless boundary to the Town to facilitate users accessing trails and pathways that traverse both Tecumseh and Windsor (Attachment 1: Boundary Map)
- E Scooter parking stations would be provided at Tecumseh Town Hall and Lakewood Park South

The pilot would provide that the Town of Tecumseh will grant exclusive access to sidewalks and other agreed upon municipal lands for carrying out the pilot program in accordance with Town by-laws and governed by the rules applying to bicycles and applicable provincial laws.

Bird Canada, Inc. will:

- Provide the pilot program at no cost to the Town of Tecumseh and will provide proof of insurance coverage exclusively for the operation of stand-up E Scooters

including: (a) Commercial General Liability Insurance coverage with a limit of no less than \$2,000,000.00 aggregate; (b) Automobile Insurance coverage with a limit of no less than \$1,000,000.00 each occurrence and \$1,000,000.00 aggregate;

- Provide an education plan to educate customers on user services, proper riding behaviour, how to operate and park devices, traffic and helmet laws;
- Maintain all devices in a safe, functional state and will inspect parking stations at least once per day to ensure that devices identified as damaged, unsafe or non-functioning will be removed from public property and that the devices and parking stations are kept in safe, tidy and sanitary conditions;
- Respond to pedestrian obstructions and safety concerns within 4 hours of receiving notification and should communicate by text or alert to let customers know if a device is parked in a non-permitted area described below:
 - In a 2-meter pedestrian zone (sidewalk)
 - Blocking a sidewalk, vehicle parking space, travelled portion of a roadway, curb ramp or a pedestrian push-button for a traffic signal
 - Within 0.5 m of trees or shrubs or within a designated bus stop zone (within 10 m of a bus stop sign)
 - Tipped devices should be upright within 1 hour
 - Ensure that devices which have traversed the boundary between Tecumseh and Windsor and parked in Windsor are relocated/rebalanced to the Town of Tecumseh within 24 hours
 - Be responsible for any and all costs associated with operating the pilot program in 2023

A detailed service agreement will outline these and other operational matters related to the pilot program, including geo-fence limited speed zones.

Lastly, the provision of E Scooters follows the goals of the Town of Tecumseh's Active Transportation Plan.

Consultations

Development Services
Public Works & Engineering Services
Legislative Services & Clerk
Financial Services

Financial Implications

The e-scooter pilot program will be offered to the residents on a user-pay basis through Bird Canada. There is no cost or revenue to the Town of Tecumseh.

User fees projected for 2023 are an initial trip fee of \$2.50 and a 0.42 per minute charge. This is in alignment with the City of Windsor. There is an opportunity to provide an Equity Pricing Program for discounted rides to specific groups to increase equity whereby rides would be discounted by 50 percent for low-income residents, veterans and seniors. An application form will be available through the Bird Canada app for program qualification. Proof of documentation is required by Bird Canada to verify eligibility.

Bird also has a ride pass program available, allowing riders to purchase daily, 3 days, weekly and monthly passes and providing users with unlimited rides of up to 30 minutes.

All fees are managed by Bird Canada through their mobile app and would not be managed by the Town of Tecumseh.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Beth Gignac, BA Hons
Director Community & Recreation Services

Reviewed by:

Brian Hillman, MA, MCIP, RPP
Director Development Services

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

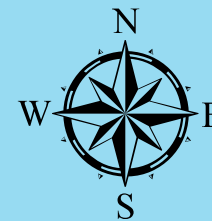
Reviewed by:

Robert Auger, LL.B.
Director Legislative Services & Clerk

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	Bird Canada, Inc. E Scooter Pilot Program Boundary



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The Corporation of the Town of Tecumseh

Community & Recreation Services

To: Mayor and Members of Council

From: Beth Gignac, Director Community & Recreation Services

Date to Council: April 25, 2023

Report Number: CRS-2023-07

Subject: Golden Age Club Relocation

Recommendations

It is recommended:

That Report CRS-2023-07 titled “Golden Age Club Relocation” **be received;**

And that Council approve the accommodation plan for Golden Age Club activities, existing user groups and rental clients to be temporarily relocated to the St. Clair Beach Community Centre for the period of time required to support the Cada Library use of 12420 Lanoue Street during renovations to the Cada Library building;

And further that Council waive the fees for the Golden Age Club (GAC) for use of the St. Clair Beach Community Centre and that, as part of the accommodation, the Town of Tecumseh honours the GAC fees for existing user groups and rental clients through the temporary relocation period;

And furthermore that the Golden Age Club and all existing user groups and rental clients thereof be subject to Town of Tecumseh User Agreements for facility use going forward;

And furthermore that Council direct Administration to engage in a year-long consultation period with the Golden Age Club in developing a long-term plan to accommodate the programs and activities of the Club to determine future facility location.

Background

Cada Library is the Town of Tecumseh's Essex County Library branch which is located at 13675 St. Gregory's Road. Renovations to the Cada Library are planned for 2023. During the renovation period, temporary accommodation of the library is required. Under the Agreement between the Town and the Essex County Library Board, the Town is responsible to provide physical space to accommodate the library branch, including any temporary accommodation, as required.

During the fall of 2022, Administration reviewed several options for temporary accommodation of the library, inclusive of Town-owned facilities and local commercial space. The most favoured option was the building located at 12420 Lanoue Street, currently occupied by the Golden Age Club (GAC), due to its central location, size, layout, accessible features (entry, washrooms, grade), parking availability, transit access and cost to the Town.

The Chief Librarian for the County of Essex concurred with the recommendation.

On February 14, 2023, Council approved [Report CRS-2023-01 Cada Library Renovation – Final Concept Design](#).

Comments

On March 8, 2023, a meeting was held with members of the Executive of the GAC along with the Mayor, Ward 3 Councillor Rick Tonial, the Chief Administrative Officer and the Director, Community and Recreation Services to discuss the temporary relocation of the GAC from the Town facility at 12420 Lanoue Street to the St. Clair Beach Community Centre (SCBCC) located at 13675 St. Gregory's Road, for the period of the Cada Library renovation.

Since that meeting, Administration has been in continuous communication with the Executive of the GAC regarding the details of the relocation. In addition, Administration has spoken directly with all sub-renters of the GAC facility to transfer bookings to other Town facilities. The current schedule of programs and activities of the GAC has been fully accommodated, without change, at the SCBCC for the duration of the relocation period and this includes use of the kitchen and storage for necessary supplies and equipment related to these programs and activities. Similarly, all sub-rentals have also been fully accommodated, without change, at other Town facilities. Due to the imposition of the move, Administration is recommending that during the temporary relocation period, the GAC continue their rent-free status and that GAC-arranged sub-rentals be accommodated at the rental rate established by the GAC.

In addition, Administration will be supporting the relocation of the GAC by assisting with the vacating of 12420 Lanoue St and will move and install, as necessary, equipment and supplies from the Lanoue facility to the SCBCC.

The Town plans to consult with the GAC over the next year to understand the programming plans of the GAC going forward and to determine the Club's ongoing space requirements.

Further to a meeting with the membership of the GAC and the Town of Tecumseh, the following items were raised and have been addressed as follows:

- An Open House and tour of the SCBCC was held on April 19 so that GAC members and rental groups could view the facility;
- The SCBCC was reviewed by the Town of Tecumseh's Accessibility Advisory Committee on April 7 and deemed to be equivalent to the facility at 12420 Lanoue Street;
- The total number of parking spaces at SCBCC is 3 Accessible spaces and 57 general use parking spaces. The total number of parking spaces at 12420 Lanoue Street is 3 Accessible spaces and 44 general use parking spaces. Both are in compliance with parking allocations as per Town of Tecumseh Zoning By-law 2065, Section 5.22 Parking Requirements and Section 5.22a Barrier Free Parking;
- A privacy lock will be installed on both washroom exterior doors at SCBCC to ensure comfort of use for members of the GAC;
- During the meeting with the GAC Executive, it came to light that the GAC is not a registered charity. Whilst the Town offered to assist the GAC with non-profit registration, should the GAC wish to do so, the Town would also need to know the details of the GAC membership. It has since been confirmed by the GAC that they are not willing to disclose their membership to the Town.

Consultations

Legislative Services & Clerk
Development Services
Chief Administrative Officer
St. Clair Beach Optimist Club
Golden Age Club

Financial Implications

The GAC has had use of the Town owned facility at 12420 Lanoue St, without charge, since 1975. The GAC has sub-rented the space to various groups and private rental clients over the years using a GAC fee schedule, without a Town User Agreement and

without adhering to Town fee schedules. Revenues from these rentals have contributed to the annual revenue of the GAC to support activities.

Administration is recommending that GAC user fees for the groups and private rental clients be honoured for the duration of the temporary relocation. These arrangements will be reflected in the User Agreements with the GAC, and their sub-rental groups and private rental clients for the temporary relocation period.

As the facility at 12420 Lanoue Street is a Town of Tecumseh owned facility, the Town provides supports, without charge to the GAC, for utilities, snow removal/grass cutting, repairs and maintenance. In 2021/2022, the cost of these supports was \$15,700.

As previously stated, the Golden Age Club currently is not a registered non-profit within the Province of Ontario and, as such, is not qualified to seek government grant funding on its own. Accordingly, the Town has assisted the GAC with grant funding support. The Town will continue to administer and report on the Seniors Active Living Grant, of which the GAC is the sole beneficiary of a projected \$21,000, during the relocation period.

Since 2014, the Town of Tecumseh has submitted and managed the reporting for a Seniors Active Living Grant to the Ministry of Tourism, Culture and Sport to support the activities offered by the GAC. The grant has provided \$223,828 to support the GAC's operational expenses and to purchase program related equipment not covered by the Town of Tecumseh.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Beth Gignac, BA Hons
Director Community & Recreation Services

Reviewed by:

Robert Auger, LL.B.
Director Legislative Services & Clerk

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
None	None



The Corporation of the Town of Tecumseh

Chief Administrative Officer

To: Mayor and Members of Council

From: Brian Hillman, Director Development Services

Date to Council: April 25, 2023

Report Number: DS-2023-09

Subject: Federal Housing Accelerator Fund Program
Funding for a Planning Consultant to Assist in Preparation of a
Housing Action Plan and Grant Application
OUR FILE: L11 FED

Recommendations

It is recommended:

That Report DS-2023-09 entitled “Federal Housing Accelerator Fund Program – Funding for a Planning Consultant to Assist in Preparation of a Housing Action Plan and Grant Application” **be received**;

And that the cost of \$30,000 for the hiring of a planning consultant to assist in the preparation of a Housing Action Plan and the submission of an application for funding to the Housing Accelerator Fund in June 2023, in accordance with the program requirements, **be authorized and funded** from the Tax Rate Stabilization Reserve.

Background

On March 17, 2023, the Federal government launched the \$4 billion Housing Accelerator Fund (HAF), which will provide funding to local governments to fast-track the creation of new homes in Canada. The objective is to accelerate the supply of housing across Canada, resulting in at least 100,000 more housing units being constructed than would have occurred without the program.

In addition to creating more supply of housing at an accelerated pace, the program is also supporting the following priorities:

- the development of complete communities that are walkable, consisting of appropriate residential densities and a diverse mix of land uses, providing access to a wide variety of amenities and services through public and active transportation;
- the development of affordable, inclusive, equitable and diverse communities through the provision of housing across the entire housing spectrum;
- supporting the development of low-carbon and climate-resilient communities.

If funding to a municipality were approved, it can be used in the following four categories:

1. investments in any initiative included in the municipality's Housing Action Plan and approved by Canada Mortgage and Housing Corporation ("CMHC");
2. investments in affordable housing, including construction, repair or modernization of affordable housing and land or building acquisition for affordable housing;
3. investments in housing-related infrastructure that supports housing, including:
 - a. drinking water and wastewater infrastructure;
 - b. public transit; and
 - c. capacity building;
4. investments in community-related infrastructure that supports housing, including:
 - a. local roads and bridges;
 - b. sidewalks, lighting, bicycle lanes;
 - c. firehalls; and
 - d. landscaping and green space.

The preparation and submission of a Housing Action Plan is a mandatory requirement for a community to be eligible for funding under the HAF. The Housing Action Plan must include:

1. housing supply growth targets, which reflect the total number of permitted housing units projected with the support afforded by the HAF;
2. additional targets related to the type of housing projected, as well as affordable housing; and
3. a minimum of seven proposed initiatives that will help achieve the committed targets, speed up approvals and support the objectives of the program.

The framework for determining the amount of incentive funding includes base funding, top-up funding and an affordable housing bonus. The HAF is an application-based program that may open as soon as June 2023.

Comments

HAF Eligibility Requirements

To be eligible for HAF funding, the Town will need to:

1. present an application, including a housing action plan that outlines supply growth targets and specific initiatives to grow the housing supply and speed up housing approvals;
2. have a minimum of seven initiatives in the action plan;
3. commit to a housing supply growth target within the action plan that increases the average annual rate of growth by at least 10%;
4. complete or update a housing needs assessment report, which will require extrapolation of relevant data and findings from the recently completed Windsor-Essex housing needs assessment; and
5. agree to follow the program's reporting requirements.

HAF Application Process

In order to apply for HAF funding, the Town will need to complete the following by June of 2023:

1. Assessment of the municipality's local context, including housing challenges, opportunities and projected rate of housing development;
2. Development of a Housing Action Plan that aligns with program requirements;

3. Obtain Council Approval of the action plan; and
4. Submission of all relevant material (noted above) to CMHC through the client portal intake.

HAF Approval Process

Once submitted, CMHC will evaluate and prioritize applications. Municipalities will be notified of the status of their application in Summer/Fall 2023.

The application will be reviewed to determine if it meets the program requirements. The criteria used to assess the application are:

- the commitment to increase housing supply (exceeding minimum growth expectations);
- the relevance of proposed initiatives to the objectives of the HAF;
- the effectiveness of proposed initiatives in increasing the supply of housing; and
- a current housing needs assessment report (considered an asset).

Approved applicants will be notified (with confirmed funding amount and the contribution agreement for signature) by Summer/Fall 2023.

Municipalities with approved applications will receive the first scheduled funding advance shortly after the contribution agreement has been executed (anticipated for Fall 2023).

Preparation of Housing Action Plan

Considering the amount of work to be undertaken in a very short period for the Town to be able to file a funding application, it is recommended that a planning consultant be hired to assist in the preparation of a Housing Action Plan and the submission of an application for funding to the HAF. With the anticipated opening of the grant portal in June, the Housing Action Plan needs to be completed expeditiously and approved by Council by late May.

The costs associated with the preparation of this document or in the preparation of a funding application by a consultant were not considered as part of the approved 2023 Budget (as the HAF was not announced until March of 2023). The allocation of support funding at this time will strategically position the Town to be able to make a complete application to access grant funding from the HAF.

It is therefore recommended that Council authorize funding of \$30,000 for the hiring of a planning consultant to assist in the preparation of a Housing Action Plan and the submission of an application for funding to the HAF in June 2023, in accordance with the HAF program requirements, and that the costs be funded from the Tax Rate Stabilization Reserve.

Consultations

Financial Services
Public Works & Engineering Services

Financial Implications

The estimated cost for a consultant to assist in the preparation of a Housing Action Plan and the submission of an application for funding to the HAF in June 2023, in accordance with the HAF program requirements, is \$30,000. It is recommended that this cost be funded from the Tax Rate Stabilization Reserve. This Reserve has a sufficient balance to support this recommendation.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐ Social Media ☐ News Release ☐ Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Chad Jeffery, MA, MCIP, RPP
Manager Planning Services & Local Economic Development

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Reviewed by:

Brian Hillman, MA, MCIP, RPP
Director Development Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
None	None



The Corporation of the Town of Tecumseh

Legislative & Clerk Services

To: Mayor and Members of Council

From: Robert Auger, Director Legislative Services & Clerk

Date to Council: April 25, 2023

Report Number: LCS-2023-15

Subject: Revisions to By-Laws 2023-046 and 2023-047

Recommendations

It is recommended:

That Report LCS-2023-15 Revisions to By-Laws 2023-046 and 2023-047 **be received** as information;

And that By-Law 2023-046 Outdoor Temporary Patio and Extensions and By-Law 2023-047 Mobile Food Vendors each be considered for first, second, third and final readings;

And further that By-law 2022-099 Fees and Charges for 2023 **be amended in Schedule A** to include the fees of \$350.00 for Mobile Food Vendors, and \$250.00 for Outdoor Temporary Patio and Extensions.

Background

At the April 11, 2023, Policies & Priorities Committee meeting (Committee meeting), Council received reports [LCS-2023-12 Licensing of Mobile Food Vendors](#) and [LCS-2023-14 Town of Tecumseh Seasonal Patios By-law](#). Discussion was held on both reports and arising from the discussion the Committee recommended that certain revisions be considered prior to returning the respective by-laws for adoption at the Regular Council meeting on April 25, 2023. This report outlines the major revisions to

By-law 2023-046 Temporary Outdoor Patios and Extensions and By-Law 2023-047 Mobile Food Vendors.

Comments

By-Law 2023-046 Being a by-law to adopt Requirements for Patios and Authority for Temporary Patios and Temporary Patio Extensions in the Town of Tecumseh:

At the Committee meeting, it was discussed as to whether existing permanent patios on private lands should be subject to a yearly application and approval process including having to make fee payment for each annual renewal under the By-law. Upon further review, it is now recommended that permanent patios on private lands that are licensed by the Alcohol and Gaming Commission of Ontario (AGCO) should not be subject to the annual application and fee under the proposed by-law.

While the AGCO as of January 1, 2023, no longer provides the authorization for temporary patios and temporary extensions of existing patios for AGCO licensees located in municipalities, the AGCO does still receive applications and provide authorizations for patios that are to be a permanent physical extension of an AGCO licensed premises. As part of receiving AGCO approval for that permanent physical extension of their liquor license the applicant already undergoes an inspection process including obtaining requisite municipal inspections/approvals and so to subject the permanent patios to a yearly application and approval process would be redundant.

However, while permanent patios licensed by the AGCO will not have to apply and be subject to an annual fee such patios must still otherwise remain in compliance with the By-law specifically as it relates to the stated Patio Requirements in Schedule 'A' to the proposed By-law. This will help to ensure that such patios remain in a satisfactory condition and in compliance with the by-law such that any concerns or complaints about the state of condition of such patios can be reviewed.

On the other hand, temporary patios or temporary extensions of an existing permanent patio will still require an annual approval and payment of associated fee as the transient and /or changing nature of these structures from year to year will require the requisite application process and inspections to ensure yearly compliance with the By-law.

The other significant change made to the proposed By-law is the authorized period of time for temporary patios. Under the new AGCO guidelines, temporary patios of AGCO licensees can be authorized for a period of up to eight months total in a calendar year (does not need to be eight consecutive months) for liquor sales licensees and by-the-glass endorsement holders. The By-law previously proposed an authorization period of May 1 to October 31.

A red-lined version of the proposed By-law is provided in Attachment 1 which displays the changes made to the By-law since the Committee meeting.

By-Law 2023-047 Being a by-law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh:

At the Committee meeting it was discussed as to whether it was just to charge a fee to the owner /operator of a Refreshment Vehicle if the private property location being applied for is an eating establishment owned/operated by the same person. To that end the following provision was added to the proposed By-law:

If, as determined by the Municipal Clerk acting reasonably, the owner/operator of the Refreshment Vehicle is one and the same as the owner/operator of an existing food premises or eating establishment that sells or offers food or drink for consumption on the private property location that is the subject of the application then, provided permission has otherwise been obtained from the Owner of the private property location (if different than the operator), the licensing fee shall not be applicable but the applicant will otherwise still continue to be subject to the terms and conditions of this By-law as applicable.

A red-lined version of the proposed By-law is provided in Attachment 2 which displays the changes made to the By-law since the Committee Meeting.

Consultations

Community Safety
Development Services
Community & Recreation Services

Financial Implications

The By-laws are proposing an application fee of \$350.00 for Mobile Food Vendors and \$250.00 for Outdoor Temporary Patio and Extension. These fees will be reviewed, if required, after the first year of implementation.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Robert Auger, LL.B.
Director Legislative Services & Clerk

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	By-Law 2023-047 Mobile Food Vendors (Tracked Changes)
2	By-Law 2023-046 Temporary Outdoor Patios and Extensions (Tracked Changes)

The Corporation of the Town of Tecumseh

By-Law Number 2022-047

Being a By-Law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh

Whereas under subsection 11(2) of the *Municipal Act, 2001*, a municipality may pass by-laws for protecting the health, safety, and well-being of persons; and for the protection of persons and property, including consumer protection;

And whereas under Section 151(1) of the *Municipal Act, 2001*, a municipality may provide for a system of licences with respect to any business and may,

- a) prohibit the carrying on or engaging in the business without a licence;
- b) refuse to grant a licence or suspend a licence; impose conditions as a requirement to obtaining or continuing to hold and renew a licence;
- c) impose conditions as a requirement of obtaining, continuing to hold or renewing a licence;
- d) impose special conditions on a business in a class that have not been imposed on all of the businesses in that class in order to obtain, continue to hold or renew a licence;
- e) impose conditions, including special condition, as a requirement of continuing to hold a licence at any time during the term of the licence; and
- f) license, regulate or govern real and personal property used for the business and the persons carrying it on or engaged in it.

And whereas Section 391 on the *Municipal Act, 2001*, enables a municipality to pass a by-law imposing fees or charges for services and activities provided or done by or on behalf of it;

And whereas the Council of the Corporation of the Town of Tecumseh deems it appropriate to regulate Food Vendors within the Town.

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1. Definitions

Applicant means a Person seeking a Licence or renewal of a Licence and is the Person who is managing or responsible for the overall operations of a Refreshment Vehicle.

Eating Establishment means a restaurant or building that prepares and/or sells Food or drink for public consumption.

Fire Chief means the Fire Chief of the Town.

Food means food or drink for human consumption and includes refreshments and confections but shall not include the sale of alcohol or cannabis.

Food Vendor means a person who sells or offers food or drink for consumption inclusive of refreshments and confections including pre-packaged, prepared, wholesale, bulk or catered food or the Food of an operator or proprietor of food premises or eating establishment (the "Food") who sells or offers such Food from a Refreshment Vehicle as further defined in this By-law

Frozen Treat Vehicle means a Refreshment Vehicle which only provides ready-to-eat frozen dessert type refreshments (such as popsicles, ice cream bars, and slushies) which are prepared and/or sold for consumption to the public.

Health Inspector means a Public Health Inspector acting under the direction of the Medical Officer of Health for the Windsor-Essex County Health Unit.

Highway shall have the same meaning as "highway" in the *Highway Traffic Act* R.S.O. 1990, C.H8 as amended or successor thereto.

Licence means a licence issued by the Municipal Clerk to operate a Refreshment Vehicle or Frozen Treat Vehicle in accordance with this by-law.

Licensee means a Food Vendor to whom a Licence has been issued.

Motor Vehicle means a motor vehicle as defined by the *Highway Traffic Act*, R.S.O 1990, C. H.8, as amended or successor thereto.

Municipal Clerk means the Clerk of the Town of Tecumseh or a designate.

Municipal Property means all property owned, leased or under control of the municipality and without limitation this term shall include all Parks, open spaces, open and unopened road allowances, sidewalks, pathways, trails and parking lots.

Officer means a police officer, provincial offences officer, a municipal by-law enforcement officer or any other person as may be appointed by Council to enforce this by-law.

Private Property means all property in the Town of Tecumseh but does not include any Highway or Municipal Property.

Person means an individual, a partnership, or a corporation and the heirs, executors, administrators or other legal representatives of the Persons, as the case may be.

Refreshment Vehicle means a Food Vendor who sells or offers Food primarily based from any 'motor vehicle as defined by the Highway Traffic Act and includes but is not limited to catering trucks, chip trucks, Frozen Treat Vehicles (motorized or non-motorized) and includes any trailers hauled by a motor vehicle AND/OR the selling or offering of Food primarily based from any non-motorized, muscular powered or stationary equipment and shall include but not be limited to bicycle refreshment carts, portable barbecues to grills, tables or coolers.

Special Event means an event held by the Town or sponsored by the Town for which a Special Event Permit or such other License and/or such other authorization from the Town is required, ~~or the requirement of which has been waived in writing by the Town.~~

Town means The Corporation of the Town of Tecumseh.

Waste means any food, disposable eating utensils, paper, wooden, cardboard, plastic, glass or metal products used in the preparation, serving or consumption of the food or beverage offered for sale from a refreshment vehicle.

Zone means a zone defined in the Town of Tecumseh Zoning by-law, as amended from time to time.

2. General

Prohibitions

- 2.1 No Food Vendor shall operate without a Licence issued under this by-law.
- 2.2 No Food Vendor shall operate with a suspended or revoked Licence.
- 2.3 The Licensee shall conform to the requirements and any conditions of the Licence throughout the duration of the Licence.
- 2.4 Each Refreshment Vehicle location must be licensed separately. If there is more than one Refreshment Vehicle to be licensed at one location then each Refreshment Vehicle at such location shall require a license.
- 2.5 No Person shall sell or offer Food from a Refreshment Vehicle between the hours of 11:00 pm to 7:00 am, seven (7) days a week.

- 2.6 Every Person providing Food from a Refreshment Vehicle shall do so in accordance with the applicable provisions of the *Health Protection and Promotion Act*, R.S.O, 1990, c.H.7, as amended, and regulations made there under any successor legislation in substitution thereof.
- 2.7 Every Person who has been issued a Licence for a Refreshment Vehicle ~~and its location~~ may additionally require a such further ~~Special Event Permit and/or License and/or~~ Town authorization for each Special Event location where the Refreshment Vehicle wishes to carry ~~carries~~ on business.

Licensing Procedures

- 2.8 Every application for a Licence shall be completed and submitted on forms prescribed by the Municipal Clerk as may be amended from time to time, and such other information or documentation as the Clerk may require and shall include the required licensing fee of \$350.00 per license (as may be amended and prescribed further from time to time in accordance with the Town's Fees and Charges By-law). Additional Fees or charges may be applicable for Special Event locations.
- 2.9 Every application to request a location shall include a site plan drawn to scale showing the proposed vehicle location, adjacent structures, entrance and exit from adjacent street(s), proposed additions to the vehicle, signs, the location and proposed hook-up of all utilities and setback distances from the street, all as required by the provisions of this by-law.
- 2.10 A Licence issued under the provisions of this by-law shall not be assigned, transferred, leased or granted the right to use to any other Person.
- 2.11 Every change of address or telephone number of any Person licensed under this by-law shall be reported to the Clerk within fifteen (15) days.
- 2.12 Licences are valid from the date of issuance and expire on December 31st of each year, unless revoked, suspended, or otherwise issued for a shorter or different period of time.
- 2.13 Licence fees will not be prorated.
- 2.14 Licence fees are not refundable.

Licensing Requirements – Refreshment Vehicle

- 2.15 Every Licence application to operate a Refreshment Vehicle shall include the following:
- 2.15.1 the applicable fee as set out herein or as may be amended and prescribed further from time to time in accordance with the Town's Fees and Charges By-law);

- 2.15.2 a photograph of the Refreshment Vehicle;
- 2.15.3 a current list of the location (s) at which the Refreshment Vehicle shall operate;
- 2.15.4 A current list containing the name, address, and phone number of every Person who will be operating the Refreshment Vehicle, which may be used for notification purposes in respect of health and /or public safety matters;
- 2.15.5 a copy of the Refreshment Vehicle registration, where applicable;
- 2.15.6 If the Refreshment Vehicle is a Motor Vehicle, a valid safety standards certificate issued by a provincially authorized Motor Vehicle Inspection mechanic certifying that the Motor Vehicle to which the license application relates to, and complies in all respects with the applicable equipment and performance standards set out in the regulations made under the *Highway Traffic Act, R.S.O. 1990, c.H18*, as amended, or any successor thereto;
- 2.15.7 Indemnification and proof of Commercial General Liability insurance in the amount of two million dollars (\$2,000,000) for the sale of prepackaged foods or five million dollars (\$5,000,000) for when raw food is being cooked. In addition to:
 - 2.15.7.1 Proof of Automobile Liability Insurance in the amount of two million dollars (\$2,000,000), coverage against claims for bodily injury and/or property damage for all licensed Motor Vehicles and related equipment owned or leased by the Applicant.
- 2.15.8 Such policy or policies shall be in the name of the owner and shall name The Corporation of the Town of Tecumseh as an additional insured thereunder, and shall state that The Corporation of the Town of Tecumseh shall be indemnified by the owner of the Licence so that if a lawsuit is filed against the Town, notwithstanding that the operator or owner of the Licence or vehicle will be required to pay the Town any and all costs it incurred, or losses suffered by the Town as a result of any legal proceeding. All policy or policies shall also contain a cross liability of interest clause protecting the Town against any actions, causes of actions, claims and demands whatsoever which may arise resulting from the Town's insurance of the permit to use in the designated area;
- 2.15.9 It shall be the responsibility of the Licensee to ensure that all such insurance is renewed and kept in force and effect without interruption during the term of the Licence, and evidence of such insurance renewal must be submitted to the Town within thirty (30) days of expiration.

- 2.15.10 The proof of insurance shall include a provision that the Municipal Clerk will be given at least ten (10) days' notice in writing of any cancellation, expiration or variation in the policy;
- 2.15.11 No Licensee shall fail to have proof of insurance on site while operating the Refreshment Vehicle;
- 2.15.12 The Town or the Municipal Clerk may require additional types of insurance coverage or higher limits of insurance coverage;
- 2.15.13 Proof of an inspection conducted by the Windsor-Essex County Health Unit dated within thirty (30) days of the Application for a Licence of both the Refreshment Vehicle and any premises used to prepare Food;
- 2.15.14 A copy of a valid Food Handler Certification Card for at least one (1) employee supervising the preparation, processing, packaging, service, and storage of Food;
- 2.15.15 the Licensee and any Person operating a Refreshment Vehicle shall provide a Criminal Record Check;
- ~~2.15.14~~
- ~~2.15.15~~2.15.16 Where the Refreshment Vehicle is fitted with propane or natural gas (except for 20 pound or smaller sized propane or natural gas tanks), a current certificate issued within thirty (30) days of the date of the Refreshment Vehicle licence application, on the prescribed Technical Standards and Safety Authority (TSSA) form, by a provincially authorized propane or natural gas fitter, as the case may be, certifying that the Refreshment Vehicle complies with the applicable equipment and performance standards as prescribed by the Province of Ontario;
- ~~2.15.16~~2.15.17 Proof of inspection conducted by the Fire Chief of the Town of Tecumseh dated within thirty (30) days of the Application for the Licence of both the Refreshment Vehicle to comply with the NFPA 96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations) and any premises used to prepare Food must comply with the Ontario Fire Code. If the Food premises is located outside of the Town of Tecumseh, an inspection of the food premises is required by the Fire Services of the municipality.
- 2.15.18 Written permission ~~from the owner and operator~~ is required for a Refreshment Vehicle location if the location is on private property. ~~such as an Eating Establishment, School, or Municipal Property;~~
- ~~2.15.17~~2.15.19 If, as determined by the Municipal Clerk acting reasonably, the owner/operator of the Refreshment Vehicle is one and the same as the owner/operator of an existing food premises or eating

establishment that sells or offers food or drink for consumption on the private property location that is the subject of the application then, provided permission has otherwise been obtained from the Owner of the private property location (if different than the operator), the licensing fee shall not be applicable but the applicant will otherwise still continue to be subject to the terms and conditions of this By-law as applicable.

~~2.15.18~~ 2.15.20 Not operate at a Special Event or on any Municipal Property without a ~~Special Event~~ license issued under this By-law ~~Permit~~ or ~~not operate on any Municipal Property unless the license requirement has been waived by the Municipal Clerk~~ authorized by ~~the Town~~;

~~2.15.19~~ 2.15.21 Such other conditions as the Municipal Clerk may impose that are not otherwise specified in this by-law as a requirement of obtaining or renewing a Licence under this by-law.

- 2.16 Every Licensee shall produce the Licence issued in accordance with this by-law when requested to do so by an Officer.
- 2.17 Every Licensee shall affix the Licence to the Refreshment Vehicle so it is clearly visible to the public and customers at all times.
- 2.18 The Refreshment Vehicle and immediate surrounding location shall be kept in a clean and sanitary condition at all times and free from grease, papers, rubbish and debris.
- 2.19 Every Licensee shall equip the Refreshment Vehicle with a hard sided garbage receptacle with lid and recycling bin of sufficient size to accommodate waste and all waste generated by the operation of the Refreshment Vehicle. The Licensee shall ensure that all garbage be removed daily from the site to maintain cleanliness.
- 2.20 Every Licensee shall ensure that no waste generated by the operation of the Refreshment Vehicle is deposited in any Town-owned waste containers.
- 2.21 No Refreshment Vehicle shall be equipped with any flashing lights or sounding device for attracting attention except those required by the Highway Traffic Act for vehicles on the road.

Licensing Requirements - Frozen Treat Vehicle

- 2.22 Every Licence application to operate a Frozen Treat Vehicle shall include and be subject to the following conditions:

2.22.1 To the extent applicable, as determined by Municipal Clerk acting reasonably, the licensing requirements applicable to a Refreshment Vehicle shall apply to the licensing requirements for a Frozen Treat Vehicle.

~~2.22.12~~2.22.2 the applicable fee of \$350.00 per vehicle as set out herein and as may be further amended and prescribed in the Town's Fees and Charges By-law. Additional Fees or charges may be applicable for Special Event locations.

~~2.22.22~~2.22.3 a photograph of the Frozen Treat Vehicle;

~~2.22.32~~2.22.4 a current list containing the name, address, and phone number of every Person who will be operating the Frozen Treat Vehicle, which may be used for notification purposes in respect of health and /or public safety matters;

~~2.22.42~~2.22.5 the Licensee and any Person operating a Frozen Treat Vehicle shall provide a Criminal Record Check;

~~2.22.52~~2.22.6 Indemnification and proof of Commercial General Liability insurance in the amount of two million dollars (\$2,000,000) for the sale of prepackaged foods;

~~2.22.62~~2.22.7 Where a Frozen Treat Vehicle is not a Motor Vehicle, section 2.14.6.1.5 shall not apply, and shall be maintained and in good state of repair;

~~2.22.72~~2.22.8 Proof of Inspection conducted by the Windsor-Essex County Health Unit dated within thirty (30) days of the Application for a Licence;

~~2.22.82~~2.22.9 Not operate at a Special Event or on Municipal Property without a license ~~Special Event Permit or otherwise operate on Municipal Property~~ unless otherwise authorized by the Municipal Clerk~~Town~~;

~~2.22.92~~2.22.10 Notwithstanding the Town's Noise By-law or any successor thereto, no Person operating a Frozen Treat Vehicle shall operate any type of auditory signaling device or electronic amplification /speaker system (including but not limited to: ringing bells or gongs, blowing horns, sirens, whistles; playing of music; or the use of a loud speaker) within a Residential Zone between the hours of 10:00 pm to 8:00 am any day of the week;

~~2.22.102~~2.22.11 Stop for longer than 10 minutes at one location;

~~2.22.112~~2.22.12 Not visit the same location within the same two-hour period.

Location Requirements

2.23 The location (s) of the Refreshment Vehicle shall be permitted on:

- a) private property that is either commercially, industrially, institutionally zoned or within a business park zone.as identified on applicable Schedules of the Town's Zoning By-law(s); or
 - b) Curbside on the municipal road allowance within the Tecumseh Road Main Street Community Improvement Area (CIP) provided that written permission has been obtained by the property ~~O~~wner of the land that the Refreshment Vehicle is proposing to be located in front of.
- 2.24 No Person shall operate a Refreshment Vehicle within 60 meters of a school unless authorized to do so by the applicable school or school board. A copy of the school or school board permission must be submitted to the Municipal Clerk.
- 2.25 No Person shall operate a Refreshment Vehicle within 60 meters from the front entrance of an Eating Establishment unless authorized to do so by the owner of the Eating Establishment.
- 2.26 No Person shall operate a Refreshment Vehicle or Frozen Treat Vehicle at a Special Event or within 100 meters of a Special Event unless authorized by the ~~Town~~Municipal Clerk
- 2.27 Where a Refreshment Vehicle or Frozen Treat Vehicle is authorized to operate at a Special Event or otherwise on Town Property , the Licensee shall be required to obtain a ~~Refreshment Vehicle~~ Licence ~~in accordance with this By-law~~ at the prescribed fee unless the Municipal Clerk~~Town~~ has specifically exempted in writing the requirement to obtain a License to operate at a Special Event or otherwise on Town Property.
- 2.28 Unless otherwise authorized to operate at a Special event or otherwise on Town property by the Municipal Clerk, a Licensee shall only be permitted to operate a Frozen Treat Vehicle from a municipal road in all Residential Zones identified under the Town's Zoning By-law.
- 2.29 No Licensee shall operate a Refreshment Vehicle from Private Property unless the Licensee has obtained written permission of the property owner. A copy of written permission shall be submitted to the Municipal Clerk.
- 2.30 No Refreshment Vehicle shall be located where it can obstruct the entrance or exit to any building, or obstruct the accessibility of a sidewalk.
- 2.31 No Refreshment Vehicle Licensee shall place tables or chairs at the designated location as an eating area for customers.
- 2.32 The location of the Refreshment Vehicle will be parked or stored when not in operation and the location shall otherwise be in compliance with the Town's Zoning By-law.

3. Enforcement and Penalties

Inspections

- 3.1 Any Officer may, at any reasonable time, enter upon any Refreshment Vehicle or Frozen Treat Vehicle for the purpose of carrying out an inspection to determine whether or not the provisions of this by-law are being complied with.
- 3.2 No Person shall prevent or interfere, or attempt to prevent or interfere with an inspection undertaken by an Officer.

Suspension of Licence

- 3.3 The Municipal Clerk may suspend a licence if the Licensee fails to comply with any provision of this by-law and such non-compliance is not remedied following notice from the Town specifying the particulars of the non-compliance.

Offences and Penalties

- 3.4 Every person who is convicted of an Offence is liable to a fine or penalty as provided for in the Provincial Offences Act, R. S.O. 1990, Chap. P.33. including any Part 1 offences/set-fines thereof that may be assessed and approved pursuant to Schedule A to this By-law as may be amended from time to time.
- 3.5 Every Person who contravenes any provision of this By-law or any provision of a Licence issued under this by-law is guilty of an offence and upon conviction is liable up to a maximum fine, as provided for in the *Provincial Offences Act, R.S.O 1990*.
- 3.6 In addition to section 3.4, the Municipal Clerk shall refuse to issue a Licence to any Person, or shall refuse to renew a Licence, or shall revoke a Licence where:
- 3.6.1 a Person or Licensee has any unpaid fines arising from a conviction for an offence under the By-law;
 - 3.6.2 a Person or a Licensee has submitted false information or documents in support of an application for a Licence;
 - 3.6.3 in sole and absolute discretion of the Municipal Clerk, a suspension under section 3.5 is not appropriate or sufficient given the nature of the non-compliance with this by-law;
 - 3.6.4 after a period of suspension under section 3.5 there is continued non-compliance with the provisions of this by-law.

4. Effective Date

4.1 This by-law shall come into force and effect on the date of final passage.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule A

By-Law 2023-047

Being a By-Law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh

Set Fines under Part I – Provincial Offences Act

Item	Short Form Wording	Offence Creating Provision or Defining Offence	Set Fine
1.	TBD		\$100.00
2.			\$100.00
3.			\$100.00
4.			\$250.00
5.			\$100.00
6.			\$100.00
7.			\$100.00
8.			\$300.00
9.			\$200.00
10.			\$300.00
11.			\$100.00
12.			\$100.00
13.			\$100.00
14.			\$200.00
15.			\$200.00
16.			\$100.00
17.			\$100.00
18.			\$100.00

The Corporation of the Town of Tecumseh

By-Law Number 2023-046

Being a by-law to adopt ~~Requirements~~Guidelines for ~~Seasonal~~ Patios and ~~Seasonal~~Authority for Temporary Patios and Temporary Patio ~~Extensions~~spansions in the Town of Tecumseh and to ~~delegate authority for inspections of Seasonal Patios and Seasonal Patio Extensions~~

Whereas the Alcohol and Gaming Commission of Ontario (AGCO) as of January 1, 2023, no longer accepts applications or provides the authorization for ~~temporary or Seasonal~~Temporary Patios and extensions of ~~Seasonal~~ Patios for AGCO licensees located in municipalities;

And Whereas as of January 1, 2023 AGCO-licensed establishments, as a condition of being permitted to create a licensed ~~Seasonal~~Temporary Patio adjacent to their premises and/or to extend the size of their Licensed ~~Seasonal~~Temporary Patio must ensure that they have municipal approval and meet all other applicable requirements;

And Whereas Council deems it appropriate to permit the Owner of a commercial establishment that serves food and beverages to apply to establish and use a ~~Seasonal~~Temporary Patio or create a ~~seasonal~~Temporary extension of an existing ~~Seasonal~~ Patio whether on municipal or private property (if zoning compliant) as an accessory use to the commercial establishment provided the commercial establishment has obtained municipal approval and meets all other applicable requirements;

And Whereas Section 11 of the Municipal Act, 2001, S.O. 2001, Chapter 25, as amended, (herein, the Act) authorizes a municipality to pass by-laws regulating matters on lands within its jurisdiction;

And Whereas Section 23.1 of the *Municipal Act, 2001*, authorizes Council to delegate its power and duties;

And Whereas Council considers it to be in the Corporation's best interest to delegate authority to the Chief Building Official, or designate, to inspect ~~Seasonal~~Temporary

Patios and require adjustments to the ~~Seasonal~~Temporary Patio if need be, in order to achieve compliance with the Corporation's Guidelines;

And Whereas under Section 5 of the *Municipal Act 2001, S.O. 2001 c.25*, the powers of a municipality shall be exercised by its Council by by-law;

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1.0 DEFINITIONS

"AGCO" means the Alcohol and Gaming Commission of Ontario.

"Application" means an application submitted pursuant to Section 2 of this by-law.

"Authorized Time Period" means ~~means~~ a temporary patio authorization period of up to eight months total in a calendar year (does not need to be eight consecutive months) for liquor sales licensees and by-the-glass endorsement holders.

"Clerk" means the Municipal Clerk of The Corporation of the Town of Tecumseh and shall include a Deputy Clerk or anyone designated by the Clerk to carry out duties of the Municipal Clerk.

"Council" means the Council of the Corporation of the Town of Tecumseh.

"Eligible Business" means a commercial operation that is legally authorized to sell and/or serve food and beverages.

"Approval Manager(s)" means as and where appropriate, the Chief Building Official or their designate(s); the Fire Chief or their designate(s); the Manager of

Public Works or their designate(s), and the Municipal Clerk or their designate ~~all~~ of the Corporation of the Town of Tecumseh.

"Mayor" means the Mayor of the Corporation of the Town of Tecumseh.

"Town" means The Corporation of the Town of Tecumseh.

"Town Solicitor" means the person appointed as Town Solicitor by Council.

"Officer" means any person authorized by the Corporation of the Town of Tecumseh to enforce by-laws.

"Owner" means the Owner and/or operator of an Eligible Business.

"Patio" means a Permanent Patio or a Temporary Patio as defined by this By-law.

"Permanent Patio" means a clearly delineated area upon private lands that is a permanent physical extension of an AGCO licensed premises which is designed for a group of tables and chairs and other accessories for the use and consumption of food and beverages sold to the public from, or in, an Eligible Business in the Town of Tecumseh for which approval from the AGCO -has been obtained.

"~~Seasonal~~Temporary Patio" means a clearly delineated area upon private lands (if zoning compliant) or municipal lands that is designed for a group of tables and chairs and other accessories for the use and consumption of food and beverages sold to the public from, or in, an Eligible Business in the Town of Tecumseh for which an annual approval from the Approval Manager has been obtained for the ~~a~~Authorized ~~t~~Time ~~p~~Period ~~of May 1 to October 31~~ of a particular each year.

2.0 APPROVAL

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2.1 An Owner shall not be permitted to construct and/or operate a ~~Seasonal~~ Patio, create a ~~seasonal~~Temporary extension of an existing ~~Seasonal~~ Patio, or obtain a annual renewal of approval of such a Patio whether on municipal or private property (if zoning compliant) unless the Owner complies with and remains in compliance with all of the provisions contained in this by-law and all of its schedules, the approval(s) granted by the Approvals Manager and all attached conditions, and all other municipal by-laws and provincial and federal legislation. For greater certainty the ~~Seasonal~~ Patio ~~Requirements~~Guidelines attached hereto in Schedule "A" to this By-law shall apply and form an integral part of this By-law. For any renewal of the Annual Approval Application, the Approvals Manager shall have the discretion to dispense with some and/or all of the requirements outlined in this By-law Schedule "A" hereto if, and when, deemed appropriate to do so.

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2.2 An Owner shall not construct and/or operate and/or extend a ~~Seasonal~~Temporary Patio unless the Owner has firstly made an **Annual Approval Application** to construct and/or operate and/or extend a ~~Seasonal~~Temporary Patio in the form and manner required by the Approval Manager and as may be further amended from time to time.

2.2.3 An Owner of a Permanent Patio shall not be required to submit an Annual Approval Application nor pay the Application fee if such eOwner has obtained the requisite approval for a Permanent Patio from the AGCO, remains in good standing with the requirements of such AGCO approval and is otherwise in compliance with the Patio Requirements as applicable in Schedule 'A' to this By-law.

2.32.4 The Owner shall submit with the Annual Approval Application an application fee of \$250 to cover administration application processing and inspection time in connection with said Application. This application fee may be subject to amendment from time to time if so prescribed by the Town's Fees and Charges By-Law.

2.42.5 The Applicant may be subject to payment of other fees if and when applicable as a condition of the Approval Application.

2.52.6 The Approval Manager shall have the authority to approve an application in writing on behalf of the Town which decision shall be based upon the guidelines included in Schedule "A" of this by-law.

2.62.7 The Approval Manager may make the approval subject to any additional conditions the Approval Manager deems advisable for the protection of municipal property or to help ensure the safety of the public.

2.72.8 The Owner shall construct and/or maintain the ~~Seasonal~~Temporary Patio in compliance with the conditions of the Town-approved application and shall operate the ~~Seasonal~~Temporary Patio in a safe manner and shall, if requested, provide securities satisfactory to the Town to ensure compliance with the terms of the approved application and/or this by-law.

3.0 INDEMNIFICATION

3.1 The Owner shall indemnify and save harmless the Town, Council and municipal employees from all claims of any kind including, but not limited to, personal injury or property damage suffered by any person which the Town may suffer, incur or be held liable for resulting directly or indirectly from the issuance of Application approval under this by-law or from the actions or performance of the Owner, or that of their employees, directors or agents, under this by-law whether with or without negligence on the part of the Owner or their employees, directors and agents.

3.2 The Owner shall provide satisfactory proof of insurance in accordance with

Schedule "A" of this by-law.

- 3.3 The Owner shall compensate the Town for all costs incurred by the Town related to the construction, operation, maintenance, or removal of the ~~Seasonal~~Temporary Patio and all such costs may form a lien upon the real property of the Owner and can be collected in any lawful manner including authority provided by Section 446 of the Act.

4.0 REVOCATION

- 4.1 The Approval Manager may revoke the approval given to an Owner at any time but shall not revoke the approval without giving the Owner at least 48 hours notice that the Owner has the right to appear before Council and make representations as to why the approval should not be revoked. The Town shall not be liable to pay any compensation for any loss, costs or damages which may be incurred by the Owner or any person claiming under the Owner by reason of such revocation.

5.0 NOTICE

- 5.1 In the event of an emergency or if a situation arises that the Approval Manager deems dangerous or unsafe, then the Approval Manager may, without notice to the Owner, take whatever steps the Approval Manager deems necessary to respond to the emergency or to eliminate the dangerous or unsafe situation and recover costs incurred by the Town from the Owner as provided in Section 3.
- 5.2 In the event that the Town requires a portion of the roadway or right-of way encroached upon at any time for its purposes, the Owner shall remove the ~~Seasonal~~Temporary Patio and restore the said roadway to the condition of the surrounding area at their expense upon receipt of fourteen (14) days notice to do so from the Manager ~~of~~ Public Works & Transportation or their designate. If the Owner fails to remove the ~~Seasonal~~Temporary Patio and restore the lands

encroached within the time period required or to the satisfaction of the Manager ~~of~~ Public Works & Transportation or their designate, then such removal and restoration shall be completed by the Town and the Town shall recover all costs incurred by the Town from the Owner as provided in Section 3.

5.3 Where notice is required to be given by the Town pursuant to this by-law, the notice is deemed complete if:

- 5.3.1 Written notice is left with an adult person at any address provided on the application or at any address subsequently provided by the Owner;
- 5.3.2 Three (3) days after written notice is mailed by first class regular mail to the Owner at any address provided on the application or to any address subsequently provided by the Owner; or,
- 5.3.3 Sent by email to any email address provided by the Owner on the application.

6.0 INSPECTION

- 6.1 In accordance with Section 436 of the Act, an Officer may, at any reasonable time, enter upon land to inspect any premise or place where a business which is subject to this by-law is carried on or where there are reasonable or probable grounds to believe a business subject and pursuant to this by-law was or is being carried on for the purposes of ensuring compliance with this by-law.
- 6.2 It shall be an offence to obstruct or permit the obstruction of the entry upon land and the inspection of the Officer.

7.0 ORDER

7.1 Where an Officer has reasonable grounds to believe that a contravention of this by-law has occurred, the Officer may serve an order on the Owner setting out the reasonable particulars of the contravention and directing:

7.1.1 Compliance within a specified time frame.

7.1.2 Any work that is required to be done, and in default of such work being done, the work may be done at the Owner's expense and the Town may recover the expense in the same manner as municipal taxes; or,

7.1.3 The activity be discontinued.

7.2 Any Person who contravenes an order under this by-law is guilty of an offence.

8.0 OFFENCES

8.1 Every Person who contravenes any provision of this by-law, including failing to comply with an order made under this by-law, is guilty of an offence and upon conviction is liable to a fine, and other such penalties or fines including any Part 1 offences/set-fines thereof that may be assessed and approved pursuant to Schedule B to this By-law as may be amended from time to time all as provided for in the *Provincial Offences Act, R.S.O. 1990, c. P.33*, as amended.

8.2 In accordance with Section 398(2) of the Act, the Town may add unpaid fees, charges, and fines under this By-Law to the tax roll and collect them in the same manner as property taxes.

9.0 EFFECTIVE DATE

9.1 This by-law shall come into force and take effect upon its enactment.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule "A"

The Corporation of the Town of
Tecumseh**SEASONAL PATIO**
GUIDELINES REQUIREMENTS

Approval Requirements: The Approval Manager will circulate ~~Seasonal~~Temporary Patio applications to the appropriate Town Departments and/or agencies to determine whether the ~~Seasonal~~Temporary Patio design and location is acceptable. As a result of such circulation the Approval Manager may refuse to grant approval or impose such terms and conditions as are consistent with the guidelines contained herein.

Other Approvals: Approval for a ~~Seasonal~~Temporary Patio must comply with other approvals as may be applicable such as the Health Unit, the Alcohol and Gaming Commission of Ontario (AGCO) and any other regulatory bodies governing the sale of food and/or beverages or the public health. Approval by the property owner is also required by written consent. The business owner is responsible for obtaining all relevant permissions, including but not limited to the Alcohol and Gaming Commission of Ontario and their landlord. Owners shall provide their liquor license for confirmation, if requested by the ~~Town~~Chief Building Official.

Security Deposit: Prior to the Temporary Patio application being approved and if requested, the Owner shall pay to the Town a security fee in the amount of \$1,000.00 cash to ensure the Owner completes the Owner's obligations imposed by this By-law and any conditions attached to the application approval. If the Owner fails to comply with said obligations, the Town may use all or part of the security deposit toward correcting the non-compliance. If the Owner completes all of the Owner's obligations in a manner satisfactory to the Approval Manager, then the Town shall refund all or part of the security deposit, as applicable, to the Owner.

Indemnity and Liability: As part of the Temporary Patio application process ~~The~~ Owner will covenant and agree in writing that the Town shall not be liable for any damage or injury to any property or person at any time arising from any cause

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whatsoever in relation to the ~~Seasonal~~Temporary Patio. The Owner covenants and agrees to indemnify and save harmless the Town of Tecumseh, its agents, employees and Council members from and against any and all liabilities, suits, claims, demands, fines, actions, costs, losses, expenses, or proceedings of any kind (including legal costs of a solicitor and his own client basis), including without limitation claims to property damage, personal injury or death, suffered or incurred by the Town of Tecumseh arising out of or in any way connected, directly or indirectly to the ~~Seasonal~~Temporary Patio.

Information Requirements: Business owners desiring to expand their outdoor patios are to submit a site plan drawn to scale illustrating the location, limits and dimensions of the ~~seasonal~~Temporary patio, and all associated features (i.e. barricades, fencing, tables, chairs) for the Town Administration to review and ensure compliance with these guidelines, as well as track for ongoing compliance purposes. An inspection may be required prior to opening the ~~seasonal~~Temporary patio for use.

Required on-site parking may be used for a ~~seasonal~~Temporary patio. The required number of designated Accessible Parking Spaces must remain available for parking use and designated fire routes and sight triangles must be maintained. A reasonable number of standard parking spaces should be maintained to serve patrons and the use of legal on-street parking may be taken into account as part of this consideration.

Further Conditions of Approval:

1. **Insurance:** The Owner shall purchase and maintain in force, at their own expense (including the payment of all deductibles) and for the term of the permit, the following policies of insurance underwritten by insurers licensed to conduct business in the Province of Ontario and shall be considered primary coverage of any existing Town insurance coverage:

a) Commercial General Liability Insurance, including coverage for bodily injury, personal injury, property damage, products and completed operations coverage, and cross liability with a minimum amount of \$2,000,000.00 for each occurrence, and including:

i. As it relates to Temporary Patios An endorsement certifying that the Town is

included as an additional insured,

ii. Liquor Liability for premises licensed by the Owner to serve alcohol. The policies shall be endorsed to the effect that such insurance policies shall not be altered, cancelled or allowed to expire without thirty (30) days advance written notice to the Town. As it relates to Temporary Patios~~Prior to the exercise of the rights in this permit,~~ the Owner shall deliver to the Town of Tecumseh a certificate of insurance to evidence the foregoing insurance.

Accessory Use: ~~Seasonal~~Temporary Patios shall be located adjacent to an existing food and beverage establishment and shall be considered an accessory use.

~~Seasonal~~Temporary Patios shall not extend beyond the in front of adjacent tenant spaces, exits, or beyond business frontage without written permission from affected adjacent property owners and tenants; this includes any overhanging elements. ~~This~~ permission shall be provided to the Town in writing.

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iii. The Owner is responsible for obtaining all relevant permissions, including but not limited to the Alcohol and Gaming Commission of Ontario and their landlord. Owners shall provide their liquor license for confirmation, if so requested by the ~~Town~~Chief Building Official.

2. Operation Criteria

i. Design Criteria

a) For patios on municipal or Town land all work shall conform to the approved standards and specifications of the Town of Tecumseh.

ii. Installation and Operation Criteria

A ~~Seasonal~~ Patio on Municipal or private lands shall:

a) For Temporary patios ~~Be~~ permitted ~~seasonally~~ for operation during the Authorized Time p~~Period of May 1 to October 31st if applicable or such other specified time period.~~

b) Unless otherwise authorized all works in relation to ~~the Seasonal~~Temporary Patios that are on Municipal Lands are to be removed from the right-of-way by November 30th of each year~~30th~~.

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c) Be restricted to operational hours between 7am to 2am subject to further compliance with Liquor License regulations for licensed premises and other applicable laws, including but not limited to the applicable municipal Noise Control By-laws, as amended;

d) Be setback a minimum of 2m from a fire hydrant or fire department connection and shall not obstruct the use of the hydrant or fire department connection in any way;

A fire extinguisher (minimum 2A-10BC) must be available within 15.2 m (50 ft.) of any part of the ~~seasonal~~ patio.

e) Provide for a minimum of 1.5m from the curb to the enclosure, to allow for wheelchair passage when a vehicle door is opened;

f) Be located outside the daylight triangle where adjacent to an intersection, as determined by the Town;

g) The perimeter of the ~~seasonal~~ patio shall be delineated with any combination of fencing, landscape planters, roping or other decorative methods (the "fencing") as approved by the Town provided they are secured without endangering any underground utilities. However the patio shall not be enclosed by any structure other than the fence unless otherwise approved by the Town.

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h) The fencing shall be secure and not fixed to a Town sidewalk or boulevard surface, and may be subject to review and approval by the Town;

i) The fence shall not enclose nor impede any portion of a required fire access route and shall be easily removable for emergency or operational needs;

j) The fence shall have an opening to provide access to the patio and access to the main entrance of the business, which shall be a minimum of 1.2m wide. The fence shall not impede emergency access to any building and a clear path shall be maintained

between the area outside of the fence and the exit from the building. Where the posted capacity of the patio is greater than 60 persons, the enclosed area shall have at least two exits.

- k) ~~Have/Install~~ signage at designated exit points to ensure alcohol does not travel outside of designated spaces.
- l) If the ~~Seasonal~~Temporary Patio is on municipal lands-, the patio to be completely removed and stored off-site before the permit is issued and immediately following the expiration of the permit;
- m) CSA-certified electric or propane patio heaters (with max 20 lb. tank) are permitted where located at least 3 m (10 ft.) away from tree branches and other combustibles , operated per the manufacturer's directions and not stored on the road right-of-way when not in use. Solid-, gel- or liquid-fuel fire features, open flames (ie candles, barbeques, fire pits etc.) of any kind are not permitted.
- n) Not permit smoking and/or vaping.
- o) ~~All Existing and seasonal~~ patios must adhere to all ~~applicable~~applicable, health and safety requirements inclusive of current provincial and local public health guidelines ~~and~~ including ~~those~~as related to COVID-19.
- p) All ~~Seasonal~~ Patios should be barrier free and in compliance with the Accessibility for Ontarians with Disabilities Act and any and all other Municipal and provincial -regulatory requirements as may be applicable including compliance with zoning, Fire Code and Building Code requirements;
- q) Be permitted to have ~~seasonal~~ lighting subject to review and approval of the method of wiring / source of power. Where permitted, lighting shall be installed to avoid glare and light spill to adjacent properties, roads and public areas;
- r) Any signage, whether on town or private property shall further be subject to and in compliance with the Town's Zoning and/or Sign By-laws as applicable;
- s) Be permitted to include umbrellas or awnings provided a minimum vertical

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clearance of 2.4m above grade is provided and maintained without interfering with other street furniture;

- t) Be prohibited from causing removal of or damage to any municipal street tree. No person shall use a municipal street tree for the purpose of securing patio fencing or attaching cables, awnings or other paraphernalia associated with a ~~seasonal~~ patio; and
- u) Where a fire safety plan is required, said plan shall address requirements for inclement weather.
- v) The use of live music or a sound system are subject to the Town's Noise By-Law
- w) Comply with all other applicable laws.

3. **Repairing Utilities:** The Owner covenants and agrees to further hold the Town and any other agencies, having utilities or services on or in the Town Lands, harmless from any claims, suits, actions or demands whatsoever which may in any manner be affected in any work of constructing, altering, relocating or repairing any public service or utility rendered necessary or desirable by or on account of any maintenance work required to be carried out on the Town Lands, including, but not limited to, ~~seasonal~~ fencing, traffic devices, landscaping, furniture, and other patio amenities.

4. **Utility Access:** The Town and all public utility agencies retain the right of access to the approved ~~Seasonal~~Temporary Patio area that is on Town property- for the installation, maintenance and repair of infrastructure such as but not limited to pipes, cables, wires, poles, hydrants, etc. as necessary. In case of emergency, no notice may be given. For scheduled work, a minimum notice of forty-eight (48) hours will be given. ~~Seasonal~~Temporary Patio improvements shall be removed and reinstalled at the ~~Seasonal~~Temporary Patio operator's expense.

5. **Emergency Vehicle Access:** The Town retains the right of access to the approved ~~Seasonal~~Temporary Patio for emergency vehicle access.

6. **Health and Safety:** All works shall be carried out and all patios in conformity with the Occupational Health & Safety Act. The Owner shall be solely responsible for any fines or charges laid under the Occupational Health and Safety Act.

7. **Enforcement:** In the event that a patio has been placed, installed or maintained in a manner that is not in compliance or if the patio presents an immediate risk to public safety, the matter shall be referred to By-law Enforcement.

8. **Maintenance Criteria**

- a) Every person who owns or controls a ~~seasonal~~ patio shall ~~for the duration of the permit period:~~
- i. Ensure that all patio furniture is neatly stacked and/or safely secured each night;
 - ii. Maintain the patio in a safe, tidy and clean condition at all times, including the removal of any graffiti, posters and third party advertising however affixed to the patio furniture or fencing, within twenty-four (24) hours of becoming aware of the condition;
 - iii. Immediately remove any spill, garbage or litter accumulation in and around the patio;
 - iv. Regularly monitor the condition and arrange for maintenance and repair of any damaged sections of Town Lands, sidewalk, fence, broken patio furniture, umbrellas or awnings; and
 - v. Maintain and replace, when required, any floral displays or plantings within the area of the patio or mounted on the fence.
- b) In the event that an Owner abandons a ~~Temporary p~~Patio, the Owner is responsible for the total removal of all components associated with the patio, including but not limited to the fence, furniture, lighting, waste receptacles, umbrellas or awnings and restoration of the site back to its original condition to the satisfaction of the Town The Town may undertake the removal work by whatever means deemed necessary. The Owner agrees to reimburse the Town of Tecumseh for all costs involved.
- c) If applicable The Town or any public utility may enter the area occupied by a ~~Temporary p~~Patio for the purpose of doing any work within the road and/or

highway.

- d) The Chief Building Official and/or Town By-law enforcement is authorized to inspect all ~~seasonal~~ patios as and when determined to be necessary and require adjustments to the patio in order to address compliance issues if applicable

Schedule B

By-Law 2023-046

~~B. Being a by-law to adopt Requirements for -Patios and Authority for Temporary Patios and Temporary Patio Extensions in the Town of Tecumseh~~ ~~eing a by law to adopt Guidelines for Seasonal Patios and Seasonal Patio Expansions and to delegate authority for inspections of Seasonal Patios and Seasonal Patio Extensions~~

Set Fines under Part I – Provincial Offences Act

Item	Short Form Wording	Offence Creating Provision or Defining Offence	Set Fine
1.	TBD		\$100.00
2.			\$100.00
3.			\$100.00
4.			\$250.00
5.			\$100.00
6.			\$100.00
7.			\$100.00
8.			\$300.00
9.			\$200.00
10.			\$300.00
11.			\$100.00
12.			\$100.00
13.			\$100.00
14.			\$200.00
15.			\$200.00
16.			\$100.00
17.			\$100.00
18.			\$100.00



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: April 25, 2023

Report Number: PWES-2023-36

Subject: Larviciding for the 2023 West Nile Virus Program

Recommendations

It is recommended:

That Report PWES-2023-36 Larviciding for the 2023 West Nile Virus Program **be received** for information;

And that correspondence **be forwarded** to the Ministry of the Environment, Conservation and Parks (MECP), and Pestalto Environmental Health Services Inc. through the West Nile Virus program secretary at the Windsor-Essex County Health Unit;

And further that program costs in the amount of \$6,000 **be funded** from the Public Works operating budget as approved in the 2023 Operational Budget.

Background

Ontario Regulation 199/03 requires the Medical Officer of Health to conduct a risk assessment in order to determine whether action is required by municipalities to decrease the risk of West Nile Virus (WNV).

Since 2003, the Windsor-Essex County Health Unit (WECHU) has conducted an annual comprehensive surveillance program. The number of WNV human cases in Windsor-Essex County from 2006 to 2022 is provided in Appendix A of Attachment 1.

Comments

Given that the WNV continues to be found in the mosquito population in Windsor-Essex County, the WECHU Medical Officer of Health has therefore issued a formal Notice of Action dated April 4, 2023 (Attachment 1) to decrease the risk of WNV to persons in the Windsor-Essex County area.

The Notice of Action mandates action by the municipalities for lands under their jurisdiction and supports applications to the Ministry of Environment, Conservation and Parks (MECP) for larviciding on private lands.

The WECHU has selected Pestalto Environmental Health Services Inc. (Pestalto) as the Consultant/Provider for the 2023 WNV Larviciding Program for Windsor-Essex County. Correspondence to the MECP and Pestalto authorizing the application of larvicides in water bodies found to contain mosquito species known to transmit the WNV within the Town of Tecumseh is requested in accordance with the request from the Medical Officer of Health. The required letter of authorization template is included in the notice from the Medical Officer of Health (Page 7- Attachment 1).

Consultations

Financial Services
Windsor Essex County Health Unit

Financial Implications

Municipalities will be required to pay for the entire program up front. Once the program funding budget is formally approved, the WECHU will reimburse municipalities for their share of the Provincial contributions.

Similar to past practice, the WECHU will coordinate this program and invoice each municipality for their share of the costs.

The 2023 Public Works Operation Budget includes \$6,000 to maintain the risk management program to help combat WNV, which historically has been sufficient to fund the Town's share of the program costs.

The budge was set at \$6,000 based on the historic 75%-25% cost sharing between the province and municipality respectively.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input checked="" type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input checked="" type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input checked="" type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Dana Reid
Public Works & Engineering Services Assistant

Reviewed by:

Kirby McArdle, P.Eng.
Manager Public Works & Transportation

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Engineering Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1.	WECHU Notice of Action Letter dated April 4, 2023

April 4, 2023

To: Mayors and Chief Administrative Officers

RE: **Notice of Action under Ontario Regulation 199/03
West Nile Virus Response – Larviciding**

On May 31, 2003, the Province of Ontario published Ontario Regulation 199/03 that requires the Medical Officer of Health to make a determination based on a local risk assessment whether action is required by municipalities to decrease the risk of West Nile Virus (WNV). Ontario Regulation 199/03 provides a table to guide in the determination of a WNV response. A copy of this Regulation and Table is attached.

From 2003 through 2022 the Health Unit conducted a comprehensive West Nile Virus (WNV) surveillance program that included human, mosquito and larvae. The exact number of WNV human cases in Windsor-Essex County from 2005-2022 is presented in the attached Appendix A.

The majority of humans infected with WNV are asymptomatic; however, some can have non-neurological symptoms, such as fever or rash, while very few will progress to neurological symptoms such as encephalitis. It is estimated that less than one percent of infections will have neurological complications.

In accordance with Ontario Regulation 199/03, the WECHU is making a formal Notice of Action required to decrease the risk of West Nile Virus to persons in the Health Unit area of Windsor-Essex County. Given the virus continues to be found in the mosquito population, larviciding is a prudent measure to undertake at this time. It has been determined that, in accordance with Table 1 of Ontario Regulation 199/03, it is appropriate to larvicide catch basins and standing/surface water indicated as potential breeding sites within two kilometres of an urban area. This Notice of Action mandates action by the municipalities for lands under their jurisdiction and supports applications to the Ministry of Environment for the application of larvicide on private lands.

Pestalto Environmental Health Services Inc. has been selected as the Consultant/Provider for the 2023 WNV Larviciding Program for Windsor-Essex. As in previous years, Municipalities will be required to pay for the program in advance. Once the program funding/budget is formally approved by the Ministry, the Health Unit will then be able to reimburse the municipalities for a portion of cost, consistent with the provincial contribution. As in past years, the Health Unit is willing to coordinate this program and invoice each municipality for their shared costs. Any cost above and beyond the approved ministry budget will be billed at one hundred percent of the cost to the municipalities.

Please find enclosed a template that can be used to document your municipality's consent for larviciding. This will be needed by Pestalto to support the specific permit application to the Ministry of Environment. The application to the Ministry of Environment will form the details of the requirements for action under Ontario Regulation 199/03. If you would forward a copy of your signed letter to the WNV program secretary at etroy@wechu.org by Friday, April 28th, 2023 that would be appreciated.

continued...

Page 2

Letter to Mayors and Chief Administrative Officers
Re: Notice of Action under Ontario Regulation 199/03
West Nile Virus Response – Larviciding

As was the case in previous years, the WECHU will continue with a coordinated strategy for larviciding.

Please note that if Windsor-Essex continues to experience record-breaking milder than normal weather conditions, this will impact the strategy/commencement of the program.

Furthermore, the WECHU will continue to steer the WNV program planning meetings consisting of members of the health unit management team, the service provider 'Pestalto', and a representative(s) from your municipality.

Thank you for your continued assistance in this important issue. If you have any questions, please do not hesitate to reach out to Kristy McBeth, Program Director at 519-258-2146, ext. 3402.

Sincerely,



Dr. Kenneth Blanchette
Chief Executive Officer

Attachments: Ontario Reg. 199/03
Appendix A
Municipal Template to Support Larviciding/Pesticide Application (email to etroy@wechu.org
by April 28th, 2023).

cc: WNV Program Planning Representatives
Windsor – Mayor, CAO
Tecumseh – Mayor, CAO
Amherstburg – Mayor, CAO
Essex – Mayor, CAO
Kingsville – Mayor, CAO
Lakeshore – Mayor, CAO
LaSalle – Mayor, CAO
Leamington – Mayor, CAO
County of Essex – CAO
Pestalto Environmental

**Health Protection and Promotion Act
Loi sur la protection et la promotion de la santé**

**ONTARIO REGULATION 199/03
CONTROL OF WEST NILE VIRUS**

Consolidation Period: From December 15, 2017 to the [e-Laws currency date](#).

Last amendment: [500/17](#).

Legislative History: [231/03](#), [322/04](#), [413/06](#), [422/07](#), [229/08](#), [241/09](#), [500/17](#).

This Regulation is made in English only.

Determination if action required

1. A medical officer of health shall make a determination whether action is required by a municipality to decrease the risk of West Nile Virus to persons either inside or outside the health unit served by the medical officer of health, based upon a local risk assessment. O. Reg. 231/03, s. 1; O. Reg. 322/04, s. 1; O. Reg. 413/06, s. 1; O. Reg. 422/07, s. 1; O. Reg. 229/08, s. 1; O. Reg. 241/09, s. 1.

Notice to municipality

2. (1) Where the medical officer of health has determined that action is required, he or she may give notice to the municipality of the required action. O. Reg. 199/03, s. 2 (1).

(2) In determining required actions under subsection (1), the medical officer of health shall have regard to,

- (a) the guidelines published by the Minister under section 7 of the Act; and
- (b) the generally accepted practices in the field of public health with regard to decreasing the risk of West Nile virus to persons. O. Reg. 199/03, s. 2 (2); O. Reg. 241/09, s. 2.

Must comply

3. A municipality shall comply with any requirements set out in the notice. O. Reg. 199/03, s. 3.

What may be required

4. Action required under this Regulation may include, without being limited to,

- (a) requirements respecting source reduction measures;
- (b) requirements respecting surveillance;
- (c) requirements respecting public awareness campaigns about personal protection;
- (d) requirements respecting control measures for larviciding and adulticiding; and
- (e) requirements respecting the time within which the action shall be taken.

TABLE 1
LARVICIDING AND ADULTICIDING IN ONTARIO — WEST NILE VIRUS RESPONSE

“Triggers” based on surveillance of WNV positive humans, birds, mosquito pools or mammals (horses)

Current-Year WNV findings in Health Unit or municipality	Last Year's WNV findings in Health Unit or municipality	Preparatory Status (Larval surveys, mosquito trapping, mapping, training, etc.)	Larviciding ACTION	Adulticiding ACTION
No West Nile virus found yet	No West Nile virus found; virus found in adjacent Health Unit(s)	Not yet done	Do the preparatory work, then larvicide where indicated	Not indicated
No virus found yet	Virus found	Not yet done	Do the preparatory work, then larvicide where indicated	Not indicated
No virus found yet	Virus found	Done last year and under way this year	Larvicide where indicated	Not indicated
Virus found in <u>non</u> -human (dead bird, mosquito pool or mammal) — isolated or as a “hot spot”	Virus found or not found	Done or under way this year	If a “hot spot” and larvae are present, larvicide around this “hot spot” (if not too late in the season)	Adulticide a 3-km “Zone” ONLY IF there are high-risk indicators of transmission to humans*
<u>Human</u> case(s) — one or a few in a space-time “cluster”	Virus found or not found	Done or under way this year	Larvicide around the case or cluster if larvae are present (and if not too late in season)	Adulticide a 3-km radius Zone around the case or cluster
Human cases continue to occur; continued high-risk indicators*	Virus found or not found	Done or under way this year	Larvicide widely where larvae are found (if not too late in season)	Adulticide 3-km Zones — may be contiguous or overlapping

Note: Public education efforts and non-pesticide means of mosquito source reduction should be in place, and increased as increasing evidence of virus is found (especially human cases) in the current year.

* **High-risk indicators of transmission to humans:** increasing dead bird sightings; high mosquito infection rates; abundant bridge vector populations; increasing mammal (horse) cases; proximity of mosquito breeding sites to human populations (especially large population centres) and weather conditions that favour mosquito breeding.

1. These are minimum activity standards. Medical Officers of Health may increase the Zone size to be treated or take additional mosquito control actions, if justified by scientific data or recommendations.
2. Medical Officer of Health will maintain a means to record, investigate, and report any confirmed or likely adverse or unintended human health effects attributed to mosquito control actions, and will report any non-human environmental adverse effects that he or she knows about to the Ministry of the Environment and/or other relevant local or provincial authorities.

O. Reg. 199/03, Table 1.

APPENDIX A

Confirmed and probable cases of West Nile virus illness in humans in Windsor-Essex County, Ontario, and Canada (2005-2020).

Year	Number of cases in Windsor-Essex	Number of cases in Ontario	Number of cases in Canada
2005	23	101	238
2006	6	43	151
2007	3	18	2,401
2008	0	10	37
2009	2	4	14
2010	1	9	5
2011	6	81	124
2012	22	271	454
2013	5	57	114
2014	1	13	23
2015	1	34	84
2016	4	54	162
2017	20	159	202
2018	13	138	437
2019	1	19	43
2020	3	77	Not Available
2021	3	23	35
2022	2	23	22
Total	111	1090	4489

Note (1): National WNV data make no distinction between confirmed and probable case count. Since 2002, both confirmed and probable cases have been included in analyses of WNV in Ontario.

Note (2): In addition to clinical cases, provincial analyses include asymptomatic infections. For comparability, the national counts reported here also include asymptomatic infections. National counts have been ascertained from the various sources listed below.

Source (Windsor-Essex and Ontario): Public Health Ontario. Surveillance of West Nile virus. Last updated 10 July 2021. Accessed Mar 20, 2023.

Source (Canada-2005 to 2019): Public Health Agency of Canada: Surveillance of West Nile virus. Last updated 21 Oct 2022. Accessed Mar 20, 2023.

MUNICIPALITY LETTERHEAD

Date : [Insert Date]

Ministry of Environment Conservation and Parks
Southwestern Region
733 Exeter Road
London, ON
N6E 1L3

Attention: Regional Pesticide Specialist

To Whom It May Concern:

Re: West Nile Virus – Application of Larvicides

The [name of town, city, or municipality.] supports local action by the Windsor-Essex County Health Unit to reduce the risk of West Nile virus. As a result The [name of town, city, or municipality.] authorizes any permit application for West Nile virus control submitted to the Ministry of Environment, Conservation and Parks from an appropriately licensed exterminator to apply a larvicide into the catch basins or surface water:

- Located within and owned by [name of town, city, or municipality.]; and
- Located on municipal and private land that drain into storm drain system or waterways located within [name of town, city, or municipality.]

Sincerely,

[Signature/Title] of official representative of the [name of town, city, or municipality.]



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: April 25, 2023

Report Number: PWES-2023-35

Subject: Tecumseh Hamlet Secondary Plan Area
Northwest Water and Wastewater Infrastructure Project
Tender Award for Consulting Services

Recommendations

It is recommended:

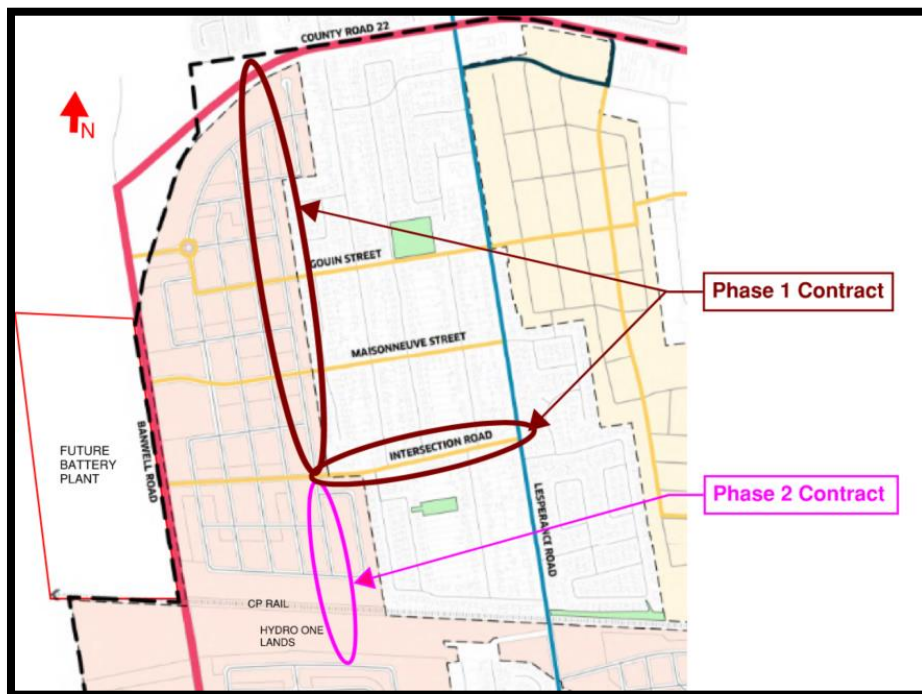
That Council **award** the Consulting Services for the Tecumseh Hamlet Secondary Plan Area – Northwest Water and Wastewater Infrastructure Project in the amount of \$1,155,465 excluding HST to Stantec Consulting Ltd.;

And that By-law 2023-053 **be given** the first, second, third and final reading to authorize the Mayor and Clerk to execute an agreement, satisfactory in form to the Town's Solicitor, with Stantec Consulting Ltd.

Background

At the January 26, 2023 Special Council Meeting, the Members adopted the recommendations contained within report [PWES-2023-01](#) '2023-2027 Public Works & Engineering Services 5-Year Capital Works Plan' (Motion: SCM-04/23), which included the Tecumseh Secondary Plan Area Northwest Water & Wastewater Infrastructure Project (design in 2023 and construction in 2024). The water and wastewater infrastructure includes projects identified in the Town's Water & Wastewater Master Plan 2018 Update, being: W-1 West Tecumseh Watermain, WW-1 West Tecumseh Sanitary Sewer, WW-2 Diversion Sanitary Sewer.

Council was further updated at the February 28, 2023 Regular Council Meeting through report [PWES-2023-21](#) where Administration offered an updated project scope, along with a description of the strategic phasing of the project as two separate contracts as depicted below.



Contract 1: The proposed works will be undertaken within the existing north-south easement (between County Road 22 and Intersection Road) and within the Intersection Road right-of-way. Detailed design is anticipated to be completed by the Fall 2023, with construction to commence in early 2024. This will provide water and wastewater services within the Tecumseh Hamlet along Banwell Road north of Intersection Road.

Contract 2: The proposed works will be from Intersection Road to south of the CP Rail and Hydro One Utility corridors. It is anticipated that obtaining the necessary easements through private property, and approvals from CP Rail and Hydro One, will take some time. It is anticipated that detailed design and obtaining all approvals will be completed by Spring/Summer 2024, with construction commencing in Winter 2024/2025. This will provide water and wastewater services within the Tecumseh Hamlet along Banwell Road south of Intersection Road and to parcels south of the CP Rail and Hydro One corridors.

Additionally, Council approved the full project funding allocations at the February 28, 2023 Regular Council Meeting, thereby charting the path forward for the tendering of Contract 1 by the Fall 2023 and continued works (design, acquisition of easements, obtaining CP Rail and Hydro One approvals) on Contract 2 (Motion: RCM-47/23).

This report provides recommendations regarding the results of the Request for Proposal for the services of qualified professionals to complete the preliminary and detailed design for the Tecumseh Hamlet Northwest Water and Wastewater Infrastructure project.

Comments

In accordance with the Town's Purchasing Policy (Policy No. 17) and Schedule 'A' of By-law 2021-60, projects with a value greater than \$500,000 require a Request for Tender or Proposal process.

On February 10, 2023, the Town posted a Request for Proposal (RFP) on the Town's Bids & Tenders account for the services of qualified professionals to complete the preliminary and detailed design. This includes the procurement of necessary approvals, preparation of tender documents, and construction administration and inspection services for the Northwest Water and Wastewater Infrastructure Project within the Tecumseh Hamlet Secondary Plan Area. Tenders were received up to and including March 23, 2023, at which time three (3) firms had submitted a proposal.

The RFPs were received and reviewed by an Evaluation Committee comprised of Town staff members. The Evaluation Committee evaluated each proposal on its own merit according to the evaluation criteria, which included: Understanding of the Scope, Proposed Implementation Plan, Relevant Project Experience, Project Manager, Project Staff, Contract Administrator and Fees.

After evaluation by the selection committee, the following rankings were determined:

Firm	Stantec Consulting Ltd.	CIMA Canada Inc.	Dillon Consulting Ltd.
Rank	1	2	3

The proposal submitted by Stantec Consulting Ltd. (Stantec) was deemed acceptable and satisfies the requirements of the RFP for Consulting Services for the Tecumseh Hamlet Secondary Plan Area – Northwest Water and Wastewater Infrastructure Project.

These services include:

- Professional services associated with engineering detailed design of road construction, storm, sanitary and watermain construction, utility coordination, limited public consultation, streetlighting and hydro servicing design, streetscaping design and sidewalk/multi-use path design;
- Coordination with CP Rail and Hydro One to obtain utility crossings approvals;
- Professional services to prepare two full tender packages for the Phases 1 and 2 of the project (one in October 2023 and one in early to mid 2024);
- Detailed topographical survey including utility confirmation suitable for detailed design;
- Legal Boundary Survey and Reference Plans prepared by an Ontario Land Surveyor;
- Assistance to the Town in obtaining/coordinating necessary easements and/or property to complete the work;
- Coordination with City of Windsor, County of Essex, Essex Region Conservation Authority (ERCA) and all involved Ministries;
- Professional services associated with the excess soil regulations;
- Geotechnical study covering excess soil, underground services design, road construction, CP Rail crossing, and groundwater mitigation;
- Professional engineering and environmental services associated with all required approvals, and;
- Full construction services during two construction seasons, including contract administration and supervision.

Administration recommends that Council award the RFP for the Tecumseh Hamlet Secondary Plan Area – Northwest Water and Wastewater Infrastructure Project in the amount of \$1,155,465 excluding HST to Stantec Consulting Ltd.

Consultations

Financial Services
Development Services

Financial Implications

Expenditures in the amount of \$1,846,500 for the detailed engineering design and project management for the Tecumseh Hamlet Secondary Plan Area – Northwest Water

& Wastewater Infrastructure Projects was previously approved under Report [PWES-2023-21](#) and funded from the following:

Funding Source	Total
Watermain Reserve Fund	\$465,000
Wastewater Sewer Reserve Fund	\$841,500
Road LC Reserve	\$390,000
Storm Sewer LC Reserve	\$150,000
Total	\$1,846,500

Stantec's proposal of \$1,155,465 is below the budgeted amount for Engineering Consulting Services within the overall project's allocated budget by \$691,035. The Stantec and CIMA bids were competitively priced, while the Dillon bid was over the Town's allocated budget.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐ Social Media ☐ News Release ☐ Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Cheryl Curran, BES
Project Technician

Reviewed by:

Shane McVitty, P.Eng.
Development Engineer

Reviewed by:

Brian Hillman, MA, MCIP, RPP
Director Development Services

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Engineering Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
None	None

The Corporation of the Town of Tecumseh

By-Law Number 2023-045

A by-law to regulate the sale and setting off of fireworks within the Town of Tecumseh.

Whereas Section 121 of the Municipal Act, 2001, 5.0. 2001 c.25 as amended provides that a local municipality may prohibit and regulate the sale of fireworks and the setting off of fireworks and to prohibit such activities unless a permit is obtained from the municipality for those activities and may impose conditions;

And Whereas Section 130 of the Municipal Act, 2001, 5.0. 2001 c.25 as amended provides that a municipality may regulate matters for purposes related to the health, safety and well-being of the inhabitants of the municipality;

Whereas Council deems it necessary to regulate by By-law the sale and setting off of fireworks within the Town of Tecumseh for the protection of persons and property in accordance with the authority set out in subsection 10(2)8. of the Municipal Act, 2001, S.O. 2001, c. 25;

And Whereas Subsection 7.1(4) of the Fire Protection and Prevention Act, S.O. 1997, c.4, as amended, provides that a municipality may appoint an officer to enter upon land and into structures at any reasonable time to inspect the land and structures to determine whether by-laws enacted under this section are being complied with;

And Whereas Subsection 7.1(5) of the Fire Protection and Prevention Act, S.O. 1997, c.4, as amended, provides that the exercise of powers by an officer appointed under this section shall be carried out in accordance with Part XIV of the Municipal Act, 2001, S.O. 2001, c. 25 as amended ("Act") other than clause 431 (a) of that Act;

And Whereas in accordance with Section 425 of the Act, a municipality may pass by-laws providing that a person who contravenes a by-law of the municipality passed under the Act is guilty of an offence;

And Whereas in accordance with Section 429 of the Act, a municipality may establish a system of fines for offences under a by-law of the municipality passed under this Act.

And Whereas Section 444 of the Act states if a municipality is satisfied that a contravention of a by-law of the municipality passed under this Act has occurred, the municipality may make an order requiring the person who contravened the by-law or who caused or permitted the contravention or the owner or occupier of the land on which the contravention occurred to discontinue the contravening activity;

And Whereas Section 426(1) of the Act provides that no person shall hinder or obstruct, or attempt to hinder or obstruct any person who is exercising a power or performing a duty under this Act or a by-law passed under this Act and that any person who contravenes subsection (1) is guilty of an offence;

And Whereas Section 426(4) of the Act states that any person who contravenes subsection (1) is guilty of an offence;

And Whereas Section 446(1) of the Act states that if a municipality has the authority under this or any other Act or under a by-law under this or any other Act to direct or require a person to do a matter or thing, the municipality may also provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense.

And Whereas Section 446(3) of the Act states that the municipality may recover the costs of doing a matter or thing under subsection (1) from the person directed or required to do it by action or by adding the costs to the tax roll and collecting them in the same manner as property taxes.

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1 Definitions

- 1.1 "aerial fireworks" means display fireworks or consumer fireworks that produce an audible or visible effect and is designed to rise into the air and explode or detonate in the air or to fly about above the ground, including but not limited to firework items commonly known as bottle rockets, sky rockets, missile-type rockets, helicopters, torpedoes, roman candles, flying pigs, and jumping jacks.
- 1.2 "business day" means any day, other than a Saturday, Sunday, statutory holiday within the Province of Ontario or any other day on which the municipal offices of the Town are open for business during normal work hours of 8:30 am to 4:30 am.
- 1.3 "consumer fireworks" means an outdoor, low hazard, recreational firework for which a permit is not required that is classed as a subdivision 1 of Division 2 of Class 7 Fireworks under the Explosives Act and includes fireworks showers, fountains, golden rain, lawn lights, pin wheels, Roman candles, volcanoes and sparklers, but does not include Christmas crackers and caps for toy guns containing not in excess of twenty-five one-hundredths of a grain of explosive used per cap but does not include aerial fireworks.
- 1.4 "competent adult" means any person (18 years of age or older) who is capable of exercising the required judgement and capable of performing the necessary actions to control and prevent its unwanted spread.
- 1.5 "Deputy Fire Chief" means a Deputy Fire Chief for the Town of Tecumseh or designate.
- 1.6 "Display fireworks" means an outdoor high hazard, recreational firework that is classed as a subdivision 2 of Division 2 of Class 7 Fireworks under the Explosives Act, for which a permit shall be required and includes rockets, serpents, shells, bombshells, tourbillions, maroons, large wheels, bouquets, bombardos, waterfalls, fountains, batteries, illumination, set pieces and pigeons but does not include consumer fireworks.
- 1.7 "Explosives Act" means the Explosives Act, Revised Statutes of Canada, 1985, Chapter E-17, and the Explosives Regulation, 2013, SOR/2013-211, enacted thereunder as amended from time to time.
- 1.8 "Fire Chief" means the Fire Chief for the Town of Tecumseh or designate.
- 1.9 "Firefighter" means any person or any rank of person employed in, or appointed to the Tecumseh Fire and Rescue Services and assigned to undertake fire protection or fire prevention services.
- 1.10 "Fire Prevention Officer" means a Fire Prevention Officer of the Town of Tecumseh.
- 1.11 "fireworks" means any and all fireworks including consumer fireworks, display fireworks, and firecrackers.
- 1.12 "fireworks operator certificate" means a fireworks operator certificate issued under the Explosives Act for the acquisition and use of display fireworks.
- 1.13 "firecrackers" means a small fused cylinder filled with explosive fireworks composition and designed to produce a sound effect when ignited and that do not create a subsequent visual display.
- 1.14 "firecracker use certificate" means a firecracker use certificate issued under the Explosives Act to use firecrackers.

- 1.15 "Full Cost Recovery Basis" means recovery of any and all charges and costs howsoever incurred by the Town directly or indirectly in responding to or attending the location where fireworks are being or have been set off that contravenes this By-law whether or not services are provided.
- 1.16 "licence" means a licence issued under the Explosives Act to acquire, store and sell display fireworks.
- 1.17 "Officer" means the Fire Chief, Deputy Fire Chief, Fire Prevention Officer, Bylaw Enforcement Officer or such other law enforcement officer appointed by the Town of Tecumseh.
- 1.18 "owner" means the registered owner or any person, firm or corporation having control over, or possession, of any portion of the building or property under consideration.
- 1.19 "permit" means a permit issued by the Fire Chief under this By-law to sell or set off fireworks for a specified location, date, and period of time.
- 1.20 "person" means an individual, business, a partnership or a corporation.
- 1.21 "prohibited fireworks" means any fireworks not listed on the List of Authorized Explosives published by Natural Resources Canada.
- 1.22 "flying lanterns" also known as sky lanterns is a lantern with a paper shell and wire frame that holds a heat or fuel source at the base of the lantern that is ignited. Once released, there is no control over where the lanterns travel or where they land.
- 1.23 "pyrotechnician" means a person who is certified under the Explosives Act as a Theatrical User, an Assistant, a Pyrotechnician or a Special Effects Pyrotechnician and is qualified to purchase and supervise the display of pyrotechnic special effect fireworks under the Explosives Act.
- 1.24 "Pyrotechnic Special Effect Firework" means a high hazard firework that is classed as a subdivision 5 of Division 2 of Class 7 Firework under the Explosives Act for which a permit shall be required and that is used to produce a special pyrotechnic effect for indoor or outdoor performances and includes black powder bombs, bullet effect, flash powder, air bursts, smoke compositions, bergs, lances and wheels.
- 1.25 "tenant" means the occupant having possession or person having control of a property or premises and are not otherwise the owner.
- 1.26 "Town" means The Corporation of the Town of Tecumseh.

2 Administration and Enforcement

- 2.1 The Fire Chief shall be responsible for the administration of this By-law.
- 2.2 Enforcement of this By-law is the responsibility of the Fire Chief, Deputy Fire Chief, Fire Prevention Officer of the Tecumseh Fire and Rescue Services, any Bylaw Enforcement Officer for the Town of Tecumseh, Ontario Provincial Police, or such other law enforcement officer appointed by The Corporation of the Town of Tecumseh.
- 2.3 The Fire Chief may refuse to issue a permit, revoke any or all issued permits or attach any such conditions or requirements to the permit as may be deemed necessary.
- 2.4 Any Officer or Firefighter may, at all times enter and inspect any property or premises in order to ascertain whether the provisions of this By-law are complied with and to enforce or carry into effect the By-law.
- 2.5 Any person who fails to comply with the provisions of this By-law or fails to cease setting off of fireworks once notification to do so has been given to

him by an Officer or a Firefighter shall, in addition to any penalty provided herein, be liable to the Town for all expenses incurred for the purposes of responding to an call for service caused by them setting off of fireworks and such expenses may be recovered by court action or in a like manner as municipal taxes.

3 General Requirements and Prohibitions

- 3.1 Except for Consumer Fireworks no person shall sell, set off or cause to be set off fireworks without first having obtained a permit from the Fire Chief.
- 3.2 No person shall set off or cause to be set off fireworks:
- a) that are prohibited fireworks;
 - b) that are display fireworks or aerial fireworks without holding a valid fireworks operator certificate;
 - c) that are firecrackers;
 - d) during times prohibited by this By-law;
 - e) contrary to any condition attached to a permit issued under this By-law;
 - f) for a period of time during which an air quality health index value forecasted or reported by Environment Canada for the Windsor Region is greater than seven (7); or
 - g) for a period of time during which a municipal burn ban has been issued by the Fire Chief; or
 - h) that are not supervised continuously by a competent adult; or
 - i) that are within four (4) metres of a structure, fence or property line; or
 - j) that are located on any public highway or on any property owned or maintained by the Town without specific written permission; or
 - k) without adequate tools and/or water immediately available to contain or extinguish a fire caused by the fireworks or fireworks debris; or
 - l) after being ordered to cease setting off fireworks by an Officer or Firefighter; or
 - m) where the fireworks pose a hazard, at the sole discretion of the Fire Chief; or
 - n) at any location when wind or other conditions are such that they would likely cause,
 - i) a decrease in visibility on any highway; or
 - ii) a fire in adjacent brush, grassed area, structure or other combustible materials.
- 3.3 Notwithstanding any provisions herein, no person shall sell:
- a) prohibited fireworks or firecrackers; or
 - b) display fireworks or aerial fireworks without holding a valid permit; or
 - c) any fireworks on a property zoned for residential occupancy; or

- d) any fireworks located on any public highway or on any property owned or maintained by the Town;
- 3.4 No person, other than a competent person, shall be in possession of fireworks.
- 3.5 No person shall release flying lanterns (sky lanterns) within the Town.
- 3.6 No person shall display, offer for sale or sell flying lanterns within the Town.

4 Setting Off Consumer Fireworks

- 4.1 A permit shall not be required for the setting off of Consumer Fireworks except for Aerial Fireworks.
- 4.2 No person shall set off Consumer Fireworks in the Town, except on the following designated dates:
 - a) 3 days before and on the third Monday of May, being Victoria Day
 - b) 3 days before and including July 1, being Canada Day, and 3 days after July 1 inclusive of July 4, being Independence Day (U.S.A.)
 - c) 3 days before and on the first Monday of August, being Civic Holiday
 - d) 3 days before and on the first Monday of September, being Labour Day
 - e) December 31, being New Year's Eve;
 - f) Any other day approved in writing by the Fire Chief.
- 4.3 No person shall set off Consumer Fireworks at any time except between dusk and 11:00 p.m. on the designated days as prescribed in this By-Law, and between dusk on New Year's Eve and 12:30 a.m. the following day.
- 4.4 For the celebration of a special event, the Fire Chief may approve in writing the setting off of Consumer Fireworks on a day other than the designated dates in section 4.2, subject to the provisions of this By-Law.
- 4.5 Only a competent person shall be in charge of setting off Consumer Fireworks.
- 4.6 No minor shall set off any fireworks, other than a sparkler where the minor is under the supervision of an adult at all times.
- 4.7 No person shall set off Consumer fireworks in, into or on:
 - a) a building;
 - b) a motor vehicle;
 - c) a highway or street; or
 - d) a park or other public place.
- 4.8 Property damage or injury as a result of Consumer fireworks shall be the responsibility of the person setting off the fireworks.
- 4.9 Consumer Fireworks shall only be permitted to be set off on private property. No person shall set off Consumer Fireworks on any public or municipal property unless the Fire Chief has provided an approval in writing.

- 4.10 No person shall set off Consumer fireworks without a fully operational fire extinguisher ready for emergency access in the immediate area where the fireworks are being set off.
- 4.11 No person shall set off fireworks on any land of which he or she is not the owner, without obtaining the prior written permission of the owner to do so.
- 4.12 No person shall store, handle or set off fireworks in an unsafe manner, taking into account the danger from fire and explosion, and risk of death, injury and damage to property inherent in the storage, handling or use of fireworks.
- 4.13 A person who stores fireworks shall use reasonable care to ensure that those fireworks are not accessible to a minor.

5 Permit General Requirements

- 5.1 No person shall sell or set off Display Fireworks or Pyrotechnic Special Effect Fireworks unless they have applied for and been granted a permit to do so in accordance with the provisions of this By-Law.
- 5.2 Unless otherwise permitted, no person shall set off Display Fireworks or Pyrotechnic Special Effect Fireworks in the Town except on the designated dates mentioned hereafter:
 - a) 3 days before and on the third Monday of May, being Victoria Day
 - b) 3 days before and including July 1, being Canada Day, and 3 days after July 1 inclusive of July 4, being Independence Day (U.S.A.)
 - c) 3 days before and on the first Monday of August, being Civic Holiday
 - d) 3 days before and on the first Monday of September, being Labour Day
 - e) December 31, being New Year's Eve
 - f) Any other day approved in writing by the Fire Chief
- 5.3 Any competent adult may make written application to sell or set off Fireworks to the Fire Chief in the form and manner attached hereto as Schedule "A" to this By-Law (and as may be amended from time to time), and make payment of the applicable permit fee of \$50 or such other Fee as Council may agree to by resolution or as may be further prescribed by Council in its Fees and Charges By-law (as may be amended from time to time)
- 5.4 The application under Section 5 (1) must be submitted to the Fire Chief a minimum of ten full business days prior to the date of the proposed fireworks being set off or sold.
- 5.5 The application for a **Permit to Sell** fireworks must contain,
 - a) the full name, address and telephone number of the applicant; and
 - b) the name and written consent of the owner of the property where the fireworks are proposed to be sold, if the applicant is a tenant; and
 - c) the municipal address of the location where the fireworks are proposed to be sold; and
 - d) the date or dates and time period for which the applicant is requesting to sell fireworks; and

- e) a description of the fireworks proposed to be sold; and
 - f) proof that the applicant holds a valid licence if the applicant is proposing to sell display fireworks or aerial fireworks; and
 - g) any other such information as may be required by the Fire Chief.
- 5.6 The application for a **Permit to Set Off** fireworks (other than Consumer Fireworks) must contain,
- a) the full name, address and telephone number of the applicant; and
 - b) the name and written consent of the owner of the property where the fireworks are proposed to be set off, if the applicant is a tenant; and
 - c) the municipal address of the location where the fireworks are proposed to be set off; and
 - d) a description of the location within the property where the fireworks are proposed to be set off; and
 - e) the date or dates and time period for which the applicant is requesting to set off the fireworks; and
 - f) a description of the fireworks proposed to be set off; and
 - g) a description of the method(s) of extinguishment immediately available at the site to contain or extinguish a fire caused by the fireworks or fireworks debris; and
 - h) any other such information as may be required by the Fire Chief.
- 5.7 The permit shall be kept at the location that the fireworks are proposed to be set off or sold and be produced for inspection when requested by any Officer or Firefighter.
- 5.8 Permits issued under this By-law are valid only for the location, date and time period listed on the permit.
- 5.9 In the event that weather conditions such as rain, fog, smog or wind, on the designated holidays make it impractical and/or unsafe to set off display fireworks, the Fire Chief may further designate and permit an alternate day and time.
- 5.10 If, in the opinion of the Fire Chief, it is necessary for a firefighter or firefighters to be present at the setting off of Fireworks for which a permit is required, the presence of such firefighter(s) shall be a condition of the permit. The firefighter(s) shall have the right to enter any premises for the purpose of ensuring public safety and shall not be hindered or obstructed in any way whatsoever. Such firefighter(s) shall also have the authority to require any precautions for the prevention of fire which in the firefighter(s) opinion is deemed necessary before any Display Fireworks are set off pursuant to the permit issued by the Fire Chief.
- 5.11 If Fireworks are to be held on municipal property, further written approval of the Chief Administrative Officer and/or the Director of Community and Recreation Services (or their designate (s)) for the Town must be obtained in writing prior to applying for a permit.
- 5.12 Permits shall be subject to the additional following restrictions or requirements:
- a) No permit shall be issued for a location within 150 metres of a place where explosives, gasoline or other highly flammable substances are stored.

- b) Every applicant shall provide with the permit, proof of Liability Insurance with a minimum coverage of two million Canadian dollars (\$2,000,000.00 CAD) or such tother amount as may be requested with The Corporation of the Town of Tecumseh to be named as an additional insured.
- c) Every applicant shall sign and provide with the permit an indemnification/liability agreement signed by the applicant or an individual having legal authority to bind the applicant.
- d) The fee for a permit, if applicable, shall be as prescribed and as amended from time to time by Council.

5.13 Every person to whom a permit is issued under this section shall:

- a) provide and maintain approved fully operational fire extinguishing equipment ready for immediate use throughout the time while the Display Fireworks is being set off or displayed and for a reasonable period thereafter, at the location or site of the setting off of fireworks; and
- b) produce the permit on demand by the Fire Department or to any police officer, or any person authorized to enforce this By-Law; and
- c) permit the inspection of any site where the Display Fireworks may be stored, set off or displayed and the fireworks themselves together with all associated equipment, by the Fire Department or anyone authorized to enforce this By-Law, forthwith, upon demand.

6 Setting off Display Fireworks

- 6.1 No person shall set off Display Fireworks in the Town without first receiving a Permit from the Fire Chief.
- 6.2 No person shall set off Display Fireworks without the supervision of a person who is qualified for such purpose to the satisfaction of the Fire Chief.
- 6.3 Every person who sets off Display Fireworks shall take all steps reasonably necessary, as would a reasonable and prudent person, to ensure no harm to persons or property damage.
- 6.4 Conditions set out in the permit as well as legislative requirements at all levels of Government shall be adhered to.
- 6.5 Property damage or injury as a result of Display Fireworks shall be the responsibility of the person setting off the fireworks.

7 Setting off Pyrotechnic Special Effects Fireworks

- 7.1 No person shall set off any Pyrotechnic Special Effect Fireworks in the Town without having first obtained a permit to do so issued by the Fire Chief authorizing the pyrotechnic special effect fireworks.
- 7.2 A complete application in the form and manner attached hereto as Schedule "A" to this By-Law (as may be amended from time to time), including permit fee if prescribed by Council and amended from time to time shall be made to the Fire Chief in accordance with this By-Law at least 30 calendar days prior to the display of Pyrotechnic Special Effect Fireworks. The requirements of this By-law relating to permits shall also apply as applicable to Pyrotechnic Special Effect Fireworks .The Fire Chief may require any additional information of the applicant to ensure the public safety and may impose additional conditions on the issuance of a permit as they deem advisable in the particular circumstances of the application. The additional conditions that may be imposed by the Fire

Chief may include a requirement that the applicant provide the appropriate notice of the upcoming Pyrotechnic Special Effect Fireworks event.

7.3 No person shall set off Pyrotechnic Special Effect Fireworks without the supervision of a pyrotechnician.

7.4 If, in the opinion of the Fire Chief, it is necessary for a firefighter to firefighter(s) to be present at the setting off of any Pyrotechnic Special Effect Fireworks, the presence of such firefighter(s) shall be a condition of the permit. The firefighter(s) shall have the right to enter any premises for the purpose of ensuring public safety and shall not be hindered or obstructed in any way whatsoever. Such firefighter(s) shall also have the authority to require any precautions for the prevention of fire which in the firefighter(s) opinion is deemed necessary before any Pyrotechnic Special Effect Fireworks are set off pursuant to the permit issued by the Fire Chief.

8 Offences

8.1 Any person who contravenes any of the provisions of this by-law is guilty of an Offence;

8.2 Any person who hinders or obstructs a person lawfully carrying out the enforcement of this by-law is guilty of an Offence.

9 Fines

9.1 Every person who is convicted of an Offence is liable to a fine or penalty as provided for in the Provincial Offences Act, R. S.O. 1990, Chap. P.33. including any Part 1 offences/set-fines that may be assessed pursuant to r Schedule B to this By-law as may be amended from time to time.

9.2 Every person who sells, sets off or causes to be set off fireworks within the Town of Tecumseh shall be liable for all costs incurred by the Town, including but not limited to the costs of equipment and personnel required for response by Tecumseh Fire and Rescue Services, including personnel and other agencies called to control and extinguish a fire caused by setting off of fireworks on a Full Cost Recovery Basis. All fees and charges to be paid under this subsection shall be payable in the manner and subject any interest and penalties set forth in the Fees and Charges By-law, as may be amended or repealed from time to time.

9.3 In accordance with Section 398(2) of the Municipal Act, 2001, S.O. 2001, c. 25, the Town may add unpaid fees, charges, and fines under this By-Law to the tax roll and collect them in the same manner as municipal taxes.

10 Severability

10.1 If any section or sections of this by-law or parts thereof are found in any court to be illegal or beyond the power of Council to enact, such section or sections or parts thereof shall be deemed severable and all other sections or parts of this by-law shall be deemed separate and independent there from and enacted as such.

11 Short Title

11.1 The short title of this by-law shall be **Tecumseh Fireworks By-Law**.

12 Effective Date

12.1 This by-law shall come into full force and take effect on the 25th day of April, 2023.

13 Repeal

13.1 By-law No. 2013-50 is hereby repealed.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule “A”

By-Law 2023-045

A by-law to regulate the sale and setting off of fireworks within the Town of Tecumseh.

The Corporation of the Town of Tecumseh Fire Services Equipment and Personnel Rates

Emergency Services Rendered:

- a) Ontario Ministry of Transportation rates for highway response charged per hour per apparatus attending

No Emergency Response

- a) Ontario Ministry of Transportation rate for highway response charged per hour per apparatus attending

Schedule B

By-Law 2023-045

A by-law to regulate the sale and setting off of fireworks within the Town of Tecumseh.

Set Fines under Part I – Provincial Offences Act

Item	Short Form Wording	Offence Creating Provision or Defining Offence	Set Fine
1.	TBD		\$100.00
2.			\$100.00
3.			\$100.00
4.			\$250.00
5.			\$100.00
6.			\$100.00
7.			\$100.00
8.			\$300.00
9.			\$200.00
10.			\$300.00
11.			\$100.00
12.			\$100.00
13.			\$100.00
14.			\$200.00
15.			\$200.00
16.			\$100.00
17.			\$100.00
18.			\$100.00

The Corporation of the Town of Tecumseh

By-Law Number 2023-046

Being a by-law to adopt Requirements for Patios and Authority for Temporary Patios and Temporary Patio Extensions in the Town of Tecumseh

Whereas the Alcohol and Gaming Commission of Ontario (AGCO) as of January 1, 2023, no longer accepts applications or provides the authorization for Temporary Patios and extensions of Temporary Patios for AGCO licensees located in municipalities;

And Whereas as of January 1, 2023 AGCO-licensed establishments, as a condition of being permitted to create a licensed Temporary Patio adjacent to their premises and/or to extend the size of their Licensed Temporary Patio must ensure that they have municipal approval and meet all other applicable requirements;

And Whereas Council deems it appropriate to permit the Owner of a commercial establishment that serves food and beverages to apply to establish and use a Temporary Patio or create a Temporary extension of an existing Patio whether on municipal or private property (if zoning compliant) as an accessory use to the commercial establishment provided the commercial establishment has obtained municipal approval and meets all other applicable requirements;

And Whereas Section 11 of the Municipal Act, 2001, S.O. 2001, Chapter 25, as amended, (herein, the Act) authorizes a municipality to pass by-laws regulating matters on lands within its jurisdiction;

And Whereas Section 23.1 of the *Municipal Act, 2001*, authorizes Council to delegate its power and duties;

And Whereas Council considers it to be in the Corporation's best interest to delegate authority to the Chief Building Official, or designate, to inspect Temporary Patios and require adjustments to the Temporary Patio if need be, in order to achieve compliance with the Corporation's Guidelines;

And Whereas under Section 5 of the *Municipal Act 2001*, S.O. 2001 c.25, the powers of a municipality shall be exercised by its Council by by-law;

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1.0 DEFINITIONS

"AGCO" means the Alcohol and Gaming Commission of Ontario.

"Application" means an application submitted pursuant to Section 2 of this by-law.

"Authorized Time Period" means a temporary patio authorization period of up to eight months total in a calendar year (does not need to be eight consecutive months) for liquor sales licensees and by-the-glass endorsement holders.

"Clerk" means the Municipal Clerk of The Corporation of the Town of Tecumseh and shall include a Deputy Clerk or anyone designated by the Clerk to carry out duties of the Municipal Clerk.

"Council" means the Council of the Corporation of the Town of Tecumseh.

"Eligible Business" means a commercial operation that is legally authorized to sell and/or serve food and beverages.

"Approval Manager(s)" means as and where appropriate, the Chief Building Official or their designate(s); the Fire Chief or their designate(s); the Manager of Public Works or their designate(s), and the Municipal Clerk or their designate of the Corporation of the Town of Tecumseh.

"Mayor" means the Mayor of the Corporation of the Town of Tecumseh.

"Town" means The Corporation of the Town of Tecumseh.

"Town Solicitor" means the person appointed as Town Solicitor by Council.

“Officer” means any person authorized by the Corporation of the Town of Tecumseh to enforce by-laws.

"Owner" means the Owner and/or operator of an Eligible Business.

"Patio" means a Permanent Patio or a Temporary Patio as defined by this By-law.

“Permanent Patio” means a clearly delineated area upon private lands that is a permanent physical extension of an AGCO licensed premises which is designed for a group of tables and chairs and other accessories for the use and consumption of food and beverages sold to the public from, or in, an Eligible Business in the Town of Tecumseh and for which approval from the AGCO has been obtained.

"Temporary Patio" means a clearly delineated area upon private lands (if zoning compliant) or municipal lands that is designed for a group of tables and chairs and other accessories for the use and consumption of food and beverages sold to the public from, or in, an Eligible Business in the Town of Tecumseh and includes a temporary extension of a AGCO licensed premises, a temporary extension of an existing patio or a permanent patio that is not and is not required to be a AGCO licensed premises, all for which an annual approval from the Approval Manager is required under this by-law for the Authorized Time Period of a particular year.

2.0 APPROVAL

2.1 An Owner shall not be permitted to construct and/or operate a Temporary Patio, create a Temporary extension of an existing Patio, or obtain a annual renewal of approval of such a Patio whether on municipal or private property (if zoning compliant) unless the Owner complies with and remains in compliance with all of the provisions contained in this by-law and all of its schedules, the approval(s) granted by the Approvals Manager and all attached conditions, and all other municipal by-laws and provincial and federal legislation. For greater certainty the Patio Requirements attached

hereto in Schedule “A” to this By-law shall apply and form an integral part of this By-law. For any renewal of the Annual Approval Application, the Approvals Manager shall have the discretion to dispense with some and/or all of the requirements outlined in this By-law if, and when, deemed appropriate to do so.

- 2.2 An Owner shall not construct and/or operate and/or extend a Temporary Patio unless the Owner has firstly made an **Annual Approval Application** to construct and/or operate and/or extend a Temporary Patio in the form and manner required by the Approval Manager and as may be further amended from time to time.
- 2.3 An Owner of a Permanent Patio shall not be required to submit an Annual Approval Application nor pay the Application fee if such Owner has obtained the requisite approval for a Permanent Patio from the AGCO, remains in good standing with the requirements of such AGCO approval and is otherwise in compliance with the Patio Requirements as applicable in Schedule ‘A’ to this By-law.

- 2.4 The Owner shall submit with the Annual Approval Application an application fee of \$250 to cover administration application processing and inspection time in connection with said Application. This application fee may be subject to amendment from time to time if so prescribed by the Town's Fees and Charges By-Law.
- 2.5 The Applicant may be subject to payment of other fees if and when applicable as a condition of the Approval Application.
- 2.6 The Approval Manager shall have the authority to approve an application in writing on behalf of the Town which decision shall be based upon the guidelines included in Schedule "A" of this by-law.
- 2.7 The Approval Manager may make the approval subject to any additional conditions the Approval Manager deems advisable for the protection of municipal property or to help ensure the safety of the public.
- 2.8 The Owner shall construct and/or maintain the Temporary Patio in compliance with the conditions of the Town-approved application and shall operate the Temporary Patio in a safe manner and shall, if requested, provide securities satisfactory to the Town to ensure compliance with the terms of the approved application and/or this by-law.

3.0 INDEMNIFICATION

- 3.1 The Owner shall indemnify and save harmless the Town, Council and municipal employees from all claims of any kind including, but not limited to, personal injury or property damage suffered by any person which the Town may suffer, incur or be held liable for resulting directly or indirectly from the issuance of Application approval under this by-law or from the actions or performance of the Owner, or that of their employees, directors or agents, under this by-law whether with or without negligence on the part of the Owner or their employees, directors and agents.
- 3.2 The Owner shall provide satisfactory proof of insurance in accordance with

Schedule “A” of this by-law.

- 3.3 The Owner shall compensate the Town for all costs incurred by the Town related to the construction, operation, maintenance, or removal of the Temporary Patio and all such costs may form a lien upon the real property of the Owner and can be collected in any lawful manner including authority provided by Section 446 of the Act.

4.0 REVOCATION

- 4.1 The Approval Manager may revoke the approval given to an Owner at any time but shall not revoke the approval without giving the Owner at least 48 hours notice that the Owner has the right to appear before Council and make representations as to why the approval should not be revoked. The Town shall not be liable to pay any compensation for any loss, costs or damages which may be incurred by the Owner or any person claiming under the Owner by reason of such revocation.

5.0 NOTICE

- 5.1 In the event of an emergency or if a situation arises that the Approval Manager deems dangerous or unsafe, then the Approval Manager may, without notice to the Owner, take whatever steps the Approval Manager deems necessary to respond to the emergency or to eliminate the dangerous or unsafe situation and recover costs incurred by the Town from the Owner as provided in Section 3.
- 5.2 In the event that the Town requires a portion of the roadway or right-of way encroached upon at any time for its purposes, the Owner shall remove the Temporary Patio and restore the said roadway to the condition of the surrounding area at their expense upon receipt of fourteen (14) days notice to do so from the Manager Public Works & Transportation or their designate. If the Owner fails to remove the Temporary Patio and restore the lands

encroached within the time period required or to the satisfaction of the Manager Public Works & Transportation or their designate, then such removal and restoration shall be completed by the Town and the Town shall recover all costs incurred by the Town from the Owner as provided in Section 3.

5.3 Where notice is required to be given by the Town pursuant to this by-law, the notice is deemed complete if:

- 5.3.1 Written notice is left with an adult person at any address provided on the application or at any address subsequently provided by the Owner;
- 5.3.2 Three (3) days after written notice is mailed by first class regular mail to the Owner at any address provided on the application or to any address subsequently provided by the Owner; or,
- 5.3.3 Sent by email to any email address provided by the Owner on the application.

6.0 INSPECTION

6.1 In accordance with Section 436 of the Act, an Officer may, at any reasonable time, enter upon land to inspect any premise or place where a business which is subject to this by-law is carried on or where there are reasonable or probable grounds to believe a business subject and pursuant to this by-law was or is being carried on for the purposes of ensuring compliance with this by-law.

6.2 It shall be an offence to obstruct or permit the obstruction of the entry upon land and the inspection of the Officer.

7.0 ORDER

7.1 Where an Officer has reasonable grounds to believe that a contravention of this by-law has occurred, the Officer may serve an order on the Owner setting out the reasonable particulars of the contravention and directing:

7.1.1 Compliance within a specified time frame.

7.1.2 Any work that is required to be done, and in default of such work being done, the work may be done at the Owner's expense and the Town may recover the expense in the same manner as municipal taxes; or,

7.1.3 The activity be discontinued.

7.2 Any Person who contravenes an order under this by-law is guilty of an offence.

8.0 OFFENCES

8.1 Every Person who contravenes any provision of this by-law, including failing to comply with an order made under this by-law, is guilty of an offence and upon conviction is liable to a fine, and other such penalties or fines including any Part 1 offences/set-fines thereof that may be assessed and approved pursuant to Schedule B to this By-law as may be amended from time to time all as provided for in the *Provincial Offences Act, R.S.O. 1990, c. P.33*, as amended.

8.2 In accordance with Section 398(2) of the Act, the Town may add unpaid fees, charges, and fines under this By-Law to the tax roll and collect them in the same manner as property taxes.

9.0 EFFECTIVE DATE

9.1 This by-law shall come into force and take effect upon its enactment.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule “A”

The Corporation of the Town of Tecumseh

PATIO REQUIREMENTS

Approval Requirements: The Approval Manager will circulate Temporary Patio applications to the appropriate Town Departments and/or agencies to determine whether the Temporary Patio design and location is acceptable. As a result of such circulation the Approval Manager may refuse to grant approval or impose such terms and conditions as are consistent with the guidelines contained herein.

Other Approvals: Approval for a Temporary Patio must comply with other approvals as may be applicable such as the Health Unit, the Alcohol and Gaming Commission of Ontario (AGCO) and any other regulatory bodies governing the sale of food and/or beverages or the public health. Approval by the property owner is also required by written consent. The business owner is responsible for obtaining all relevant permissions, including but not limited to the Alcohol and Gaming Commission of Ontario and their landlord. Owners shall provide their liquor license for confirmation, if requested by the Town.

Security Deposit: Prior to the Temporary Patio application being approved and if requested, the Owner shall pay to the Town a security fee in the amount of \$1,000.00 cash to ensure the Owner completes the Owner's obligations imposed by this By-law and any conditions attached to the application approval. If the Owner fails to comply with said obligations, the Town may use all or part of the security deposit toward correcting the non-compliance. If the Owner completes all of the Owner's obligations in a manner satisfactory to the Approval Manager, then the Town shall refund all or part of the security deposit, as applicable, to the Owner.

Indemnity and Liability: As part of the Temporary Patio application process the Owner will covenant and agree in writing that the Town shall not be liable for any damage or injury to any property or person at any time arising from any cause whatsoever in relation to the Temporary Patio. The Owner covenants and agrees to indemnify and

save harmless the Town of Tecumseh, its agents, employees and Council members from and against any and all liabilities, suits, claims, demands, fines, actions, costs, losses, expenses, or proceedings of any kind (including legal costs of a solicitor and his own client basis), including without limitation claims to property damage, personal injury or death, suffered or incurred by the Town of Tecumseh arising out of or in any way connected, directly or indirectly to the Temporary Patio.

Information Requirements: Business owners desiring to expand their outdoor patios are to submit a site plan drawn to scale illustrating the location, limits and dimensions of the Temporary patio, and all associated features (i.e. barricades, fencing, tables, chairs) for the Town Administration to review and ensure compliance with these guidelines, as well as track for ongoing compliance purposes. An inspection may be required prior to opening the Temporary patio for use.

Required on-site parking may be used for a Temporary patio. The required number of designated Accessible Parking Spaces must remain available for parking use and designated fire routes and sight triangles must be maintained. A reasonable number of standard parking spaces should be maintained to serve patrons and the use of legal on-street parking may be taken into account as part of this consideration.

Further Conditions of Approval:

1. Insurance: The Owner shall purchase and maintain in force, at their own expense (including the payment of all deductibles) and for the term of the permit, the following policies of insurance underwritten by insurers licensed to conduct business in the Province of Ontario and shall be considered primary coverage of any existing Town insurance coverage:

a) Commercial General Liability Insurance, including coverage for bodily injury, personal injury, property damage, products and completed operations coverage, and cross liability with a minimum amount of \$2,000,000.00 for each occurrence, and including:

i. As it relates to Temporary Patios an endorsement certifying that the Town is included as an additional insured,

ii. Liquor Liability for premises licensed by the Owner to serve alcohol. The policies shall be endorsed to the effect that such insurance policies shall not be altered, cancelled or allowed to expire without thirty (30) days advance written notice to the Town. As it relates to Temporary Patios, the Owner shall deliver to the Town of Tecumseh a certificate of insurance to evidence the foregoing insurance.

Accessory Use: Temporary Patios shall be located adjacent to an existing food and beverage establishment and shall be considered an accessory use. Temporary Patios shall not extend beyond the in front of adjacent tenant spaces, exits, or beyond business frontage without written permission from affected adjacent property owners and tenants; this includes any overhanging elements. This permission shall be provided to the Town in writing.

iii. The Owner is responsible for obtaining all relevant permissions, including but not limited to the Alcohol and Gaming Commission of Ontario and their landlord. Owners shall provide their liquor license for confirmation, if so requested by the Town.

2. Operation Criteria

i. Design Criteria

a) For patios on municipal or Town land all work shall conform to the approved standards and specifications of the Town of Tecumseh.

ii. Installation and Operation Criteria

A Patio on Municipal or private lands shall:

a) For Temporary patios be permitted temporarily for operation during the Authorized Time Period

b) Unless otherwise authorized all works in relation to Temporary Patios that are on Municipal Lands are to be removed from the right-of-way by November 30th of each year .

c) Be restricted to operational hours between 7am to 2am subject to further

compliance with Liquor License regulations for licensed premises and other applicable laws, including but not limited to the applicable municipal Noise Control By-laws, as amended;

- d) Be setback a minimum of 2m from a fire hydrant or fire department connection and shall not obstruct the use of the hydrant or fire department connection in any way;

A fire extinguisher (minimum 2A-10BC) must be available within 15.2 m (50 ft.) of any part of the patio.

- e) Provide for a minimum of 1.5m from the curb to the enclosure, to allow for wheelchair passage when a vehicle door is opened;
- f) Be located outside the daylight triangle where adjacent to an intersection, as determined by the Town;
- g) The perimeter of the patio shall be delineated with any combination of fencing, landscape planters, roping or other decorative methods (the “fencing”) as approved by the Town provided they are secured without endangering any underground utilities. However the patio shall not be enclosed by any structure other than the fence unless otherwise approved by the Town.
- h) The fencing shall be secure and not fixed to a Town sidewalk or boulevard surface, and may be subject to review and approval by the Town;
- i) The fence shall not enclose nor impede any portion of a required fire access route and shall be easily removable for emergency or operational needs;
- j) The fence shall have an opening to provide access to the patio and access to the main entrance of the business, which shall be a minimum of 1.2m wide. The fence shall not impede emergency access to any building and a clear path shall be maintained between the area outside of the fence and the exit from the building. Where the posted capacity of the patio is greater than 60 persons, the enclosed area shall have at least two exits.
- k) Have signage at designated exit points to ensure alcohol does not travel outside

of designated spaces.

- l) If the Temporary Patio is on municipal lands, the patio to be completely removed and stored off-site before the permit is issued and immediately following the expiration of the permit;
- m) CSA-certified electric or propane patio heaters (with max 20 lb. tank) are permitted where located at least 3 m (10 ft.) away from tree branches and other combustibles, operated per the manufacturer's directions and not stored on the road right-of-way when not in use. Solid-, gel- or liquid-fuel fire features, open flames (ie candles, barbeques, fire pits etc.) of any kind are not permitted.
- n) Not permit smoking and/or vaping.
- o) All patios must adhere to all applicable health and safety requirements inclusive of current provincial and local public health guidelines and including those related to COVID-19.
- p) All Patios should be barrier free and in compliance with the Accessibility for Ontarians with Disabilities Act and any and all other Municipal and provincial regulatory requirements as may be applicable including compliance with zoning, Fire Code and Building Code requirements;
- q) Be permitted to have lighting subject to review and approval of the method of wiring / source of power. Where permitted, lighting shall be installed to avoid glare and light spill to adjacent properties, roads and public areas;
- r) Any signage, whether on town or private property shall further be subject to and in compliance with the Town's Zoning and/or Sign By-laws as applicable;
- s) Be permitted to include umbrellas or awnings provided a minimum vertical clearance of 2.4m above grade is provided and maintained without interfering with other street furniture;
- t) Be prohibited from causing removal of or damage to any municipal street tree. No person shall use a municipal street tree for the purpose of securing patio fencing or

attaching cables, awnings or other paraphernalia associated with a patio; and

- u) Where a fire safety plan is required, said plan shall address requirements for inclement weather.
- v) The use of live music or a sound system are subject to the Town's Noise By-Law
- w) Comply with all other applicable laws.

3. **Repairing Utilities:** The Owner covenants and agrees to further hold the Town and any other agencies, having utilities or services on or in the Town Lands, harmless from any claims, suits, actions or demands whatsoever which may in any manner be affected in any work of constructing, altering, relocating or repairing any public service or utility rendered necessary or desirable by or on account of any maintenance work required to be carried out on the Town Lands, including, but not limited to, fencing, traffic devices, landscaping, furniture, and other patio amenities.

4. **Utility Access:** The Town and all public utility agencies retain the right of access to the approved Temporary Patio area that is on Town property for the installation, maintenance and repair of infrastructure such as but not limited to pipes, cables, wires, poles, hydrants, etc. as necessary. In case of emergency, no notice may be given. For scheduled work, a minimum notice of forty-eight (48) hours will be given. Temporary Patio improvements shall be removed and reinstalled at the Temporary Patio operator's expense.

5. **Emergency Vehicle Access:** The Town retains the right of access to the approved Temporary Patio for emergency vehicle access.

6. **Health and Safety:** All works shall be carried out and all patios in conformity with the Occupational Health & Safety Act. The Owner shall be solely responsible for any fines or charges laid under the Occupational Health and Safety Act.

7. **Enforcement:** In the event that a patio has been placed, installed or maintained in a manner that is not in compliance or if the patio presents an immediate risk to public safety, the matter shall be referred to By-law Enforcement.

8. Maintenance Criteria

- a) Every person who owns or controls a patio shall:
 - i. Ensure that all patio furniture is neatly stacked and/or safely secured each night;
 - ii. Maintain the patio in a safe, tidy and clean condition at all times, including the removal of any graffiti, posters and third party advertising however affixed to the patio furniture or fencing, within twenty-four (24) hours of becoming aware of the condition;
 - iii. Immediately remove any spill, garbage or litter accumulation in and around the patio;
 - iv. Regularly monitor the condition and arrange for maintenance and repair of any damaged sections of Town Lands, sidewalk, fence, broken patio furniture, umbrellas or awnings; and
 - v. Maintain and replace, when required, any floral displays or plantings within the area of the patio or mounted on the fence.
- b) In the event that an Owner abandons a Temporary Patio, the Owner is responsible for the total removal of all components associated with the patio, including but not limited to the fence, furniture, lighting, waste receptacles, umbrellas or awnings and restoration of the site back to its original condition to the satisfaction of the Town. The Town may undertake the removal work by whatever means deemed necessary. The Owner agrees to reimburse the Town of Tecumseh for all costs involved.
- c) If applicable The Town or any public utility may enter the area occupied by a Temporary Patio for the purpose of doing any work within the road and/or highway.
- d) The Chief Building Official and/or Town By-law enforcement is authorized to inspect all patios as and when determined to be necessary and require adjustments to the patio in order to address compliance issues if applicable

Schedule B

By-Law 2023-046

Being a by-law to adopt Requirements for Patios and Authority for Temporary Patios and Temporary Patio Extensions in the Town of Tecumseh

Set Fines under Part I – Provincial Offences Act

Item	Short Form Wording	Offence Creating Provision or Defining Offence	Set Fine
1.	TBD		\$100.00
2.			\$100.00
3.			\$100.00
4.			\$250.00
5.			\$100.00
6.			\$100.00
7.			\$100.00
8.			\$300.00
9.			\$200.00
10.			\$300.00
11.			\$100.00
12.			\$100.00
13.			\$100.00
14.			\$200.00
15.			\$200.00
16.			\$100.00
17.			\$100.00
18.			\$100.00

The Corporation of the Town of Tecumseh

By-Law Number 2023-047

Being a By-Law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh

Whereas under subsection 11(2) of the *Municipal Act, 2001*, a municipality may pass by-laws for protecting the health, safety, and well-being of persons; and for the protection of persons and property, including consumer protection;

And whereas under Section 151(1) of the *Municipal Act, 2001*, a municipality may provide for a system of licences with respect to any business and may,

- a) prohibit the carrying on or engaging in the business without a licence;
- b) refuse to grant a licence or suspend a licence; impose conditions as a requirement to obtaining or continuing to hold and renew a licence;
- c) impose conditions as a requirement of obtaining, continuing to hold or renewing a licence;
- d) impose special conditions on a business in a class that have not been imposed on all of the businesses in that class in order to obtain, continue to hold or renew a licence;
- e) impose conditions, including special condition, as a requirement of continuing to hold a licence at any time during the term of the licence; and
- f) license, regulate or govern real and personal property used for the business and the persons carrying it on or engaged in it.

And whereas Section 391 on the *Municipal Act, 2001*, enables a municipality to pass a by-law imposing fees or charges for services and activities provided or done by or on behalf of it;

And whereas the Council of the Corporation of the Town of Tecumseh deems it appropriate to regulate Food Vendors within the Town.

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1. Definitions

Applicant means a Person seeking a Licence or renewal of a Licence and is the Person who is managing or responsible for the overall operations of a Refreshment Vehicle.

Eating Establishment means a restaurant or building that prepares and/or sells Food or drink for public consumption.

Fire Chief means the Fire Chief of the Town.

Food means food or drink for human consumption and includes refreshments and confections but shall not include the sale of alcohol or cannabis.

Food Vendor means a person who sells or offers food or drink for consumption inclusive of refreshments and confections including pre-packaged, prepared, wholesale, bulk or catered food or the Food of an operator or proprietor of food premises or eating establishment (the "Food") who sells or offers such Food from a Refreshment Vehicle as further defined in this By-law

Frozen Treat Vehicle means a Refreshment Vehicle which only provides ready-to-eat frozen dessert type refreshments (such as popsicles, ice cream bars, and slushies) which are prepared and/or sold for consumption to the public.

Health Inspector means a Public Health Inspector acting under the direction of the Medical Officer of Health for the Windsor-Essex County Health Unit.

Highway shall have the same meaning as "highway" in the *Highway Traffic Act* R.S.O. 1990, C.H8 as amended or successor thereto.

Licence means a licence issued by the Municipal Clerk to operate a Refreshment Vehicle or Frozen Treat Vehicle in accordance with this by-law.

Licensee means a Food Vendor to whom a Licence has been issued.

Motor Vehicle means a motor vehicle as defined by the *Highway Traffic Act*, R.S.O. 1990, C. H.8, as amended or successor thereto.

Municipal Clerk means the Clerk of the Town of Tecumseh or a designate.

Municipal Property means all property owned, leased or under control of the municipality and without limitation this term shall include all Parks, open spaces, open and unopened road allowances, sidewalks, pathways, trails and parking lots.

Officer means a police officer, provincial offences officer, a municipal by-law enforcement officer or any other person as may be appointed by Council to enforce this by-law.

Private Property means all property in the Town of Tecumseh but does not include any Highway or Municipal Property.

Person means an individual, a partnership, or a corporation and the heirs, executors, administrators or other legal representatives of the Persons, as the case may be.

Refreshment Vehicle means a Food Vendor who sells or offers Food primarily based from any 'motor vehicle as defined by the Highway Traffic Act and includes but is not limited to catering trucks, chip trucks, Frozen Treat Vehicles (motorized or non-motorized) and includes any trailers hauled by a motor vehicle AND/OR the selling or offering of Food primarily based from any non-motorized, muscular powered or stationary equipment and shall include but not be limited to bicycle refreshment carts, portable barbecues to grills, tables or coolers.

Special Event means an event held by the Town or sponsored by the Town for which a License and/or such other authorization from the Town is required..

Town means The Corporation of the Town of Tecumseh.

Waste means any food, disposable eating utensils, paper, wooden, cardboard, plastic, glass or metal products used in the preparation, serving or consumption of the food or beverage offered for sale from a refreshment vehicle.

Zone means a zone defined in the Town of Tecumseh Zoning by-law, as amended from time to time.

2. General

Prohibitions

- 2.1 No Food Vendor shall operate without a Licence issued under this by-law.
- 2.2 No Food Vendor shall operate with a suspended or revoked Licence.
- 2.3 The Licensee shall conform to the requirements and any conditions of the Licence throughout the duration of the Licence.
- 2.4 Each Refreshment Vehicle location must be licensed separately. If there is more than one Refreshment Vehicle to be licensed at one location then each Refreshment Vehicle at such location shall require a license.
- 2.5 No Person shall sell or offer Food from a Refreshment Vehicle between the hours of 11:00 pm to 7:00 am, seven (7) days a week.

- 2.6 Every Person providing Food from a Refreshment Vehicle shall do so in accordance with the applicable provisions of the *Health Protection and Promotion Act*, R.S.O, 1990, c.H.7, as amended, and regulations made there under any successor legislation in substitution thereof.
- 2.7 Every Person who has been issued a Licence for a Refreshment Vehicle may additionally require such further License and/or Town authorization for each Special Event location where the Refreshment Vehicle wishes to carry on business.

Licensing Procedures

- 2.8 Every application for a Licence shall be completed and submitted on forms prescribed by the Municipal Clerk as may be amended from time to time, and such other information or documentation as the Clerk may require and shall include the required licensing fee of \$350.00 per license (as may be amended and prescribed further from time to time in accordance with the Town's Fees and Charges By-law). Additional Fees or charges may be applicable for Special Event locations.
- 2.9 Every application to request a location shall include a site plan drawn to scale showing the proposed vehicle location, adjacent structures, entrance and exit from adjacent street(s), proposed additions to the vehicle, signs, the location and proposed hook-up of all utilities and setback distances from the street, all as required by the provisions of this by-law.
- 2.10 A Licence issued under the provisions of this by-law shall not be assigned, transferred, leased or granted the right to use to any other Person.
- 2.11 Every change of address or telephone number of any Person licensed under this by-law shall be reported to the Clerk within fifteen (15) days.
- 2.12 Licences are valid from the date of issuance and expire on December 31st of each year, unless revoked, suspended, or otherwise issued for a shorter or different period of time.
- 2.13 Licence fees will not be prorated.
- 2.14 Licence fees are not refundable.

Licensing Requirements – Refreshment Vehicle

- 2.15 Every Licence application to operate a Refreshment Vehicle shall include the following:
- 2.15.1 the applicable fee as set out herein or as may be amended and prescribed further from time to time in accordance with the Town's Fees and Charges By-law);

- 2.15.2 a photograph of the Refreshment Vehicle;
- 2.15.3 a current list of the location (s) at which the Refreshment Vehicle shall operate;
- 2.15.4 A current list containing the name, address, and phone number of every Person who will be operating the Refreshment Vehicle, which may be used for notification purposes in respect of health and /or public safety matters;
- 2.15.5 a copy of the Refreshment Vehicle registration, where applicable;
- 2.15.6 If the Refreshment Vehicle is a Motor Vehicle, a valid safety standards certificate issued by a provincially authorized Motor Vehicle Inspection mechanic certifying that the Motor Vehicle to which the license application relates to, and complies in all respects with the applicable equipment and performance standards set out in the regulations made under the *Highway Traffic Act, R.S.O. 1990, c.H18*, as amended, or any successor thereto;
- 2.15.7 Indemnification and proof of Commercial General Liability insurance in the amount of two million dollars (\$2,000,000) for the sale of prepackaged foods or five million dollars (\$5,000,000) for when raw food is being cooked. In addition to:
 - 2.15.7.1 Proof of Automobile Liability Insurance in the amount of two million dollars (\$2,000,000), coverage against claims for bodily injury and/or property damage for all licensed Motor Vehicles and related equipment owned or leased by the Applicant.
- 2.15.8 Such policy or policies shall be in the name of the owner and shall name The Corporation of the Town of Tecumseh as an additional insured thereunder, and shall state that The Corporation of the Town of Tecumseh shall be indemnified by the owner of the Licence so that if a lawsuit is filed against the Town, notwithstanding that the operator or owner of the Licence or vehicle will be required to pay the Town any and all costs it incurred, or losses suffered by the Town as a result of any legal proceeding. All policy or policies shall also contain a cross liability of interest clause protecting the Town against any actions, causes of actions, claims and demands whatsoever which may arise resulting from the Town's insurance of the permit to use in the designated area;
- 2.15.9 It shall be the responsibility of the Licensee to ensure that all such insurance is renewed and kept in force and effect without interruption during the term of the Licence, and evidence of such insurance renewal must be submitted to the Town within thirty (30) days of expiration.

- 2.15.10 The proof of insurance shall include a provision that the Municipal Clerk will be given at least ten (10) days' notice in writing of any cancellation, expiration or variation in the policy;
- 2.15.11 No Licensee shall fail to have proof of insurance on site while operating the Refreshment Vehicle;
- 2.15.12 The Town or the Municipal Clerk may require additional types of insurance coverage or higher limits of insurance coverage;
- 2.15.13 Proof of an inspection conducted by the Windsor-Essex County Health Unit dated within thirty (30) days of the Application for a Licence of both the Refreshment Vehicle and any premises used to prepare Food;
- 2.15.14 A copy of a valid Food Handler Certification Card for at least one (1) employee supervising the preparation, processing, packaging, service, and storage of Food;
- 2.15.15 the Licensee and any Person operating a Refreshment Vehicle shall provide a Criminal Record Check;
- 2.15.16 Where the Refreshment Vehicle is fitted with propane or natural gas (except for 20 pound or smaller sized propane or natural gas tanks), a current certificate issued within thirty (30) days of the date of the Refreshment Vehicle licence application, on the prescribed Technical Standards and Safety Authority (TSSA) form, by a provincially authorized propane or natural gas fitter, as the case may be, certifying that the Refreshment Vehicle complies with the applicable equipment and performance standards as prescribed by the Province of Ontario;
- 2.15.17 Proof of inspection conducted by the Fire Chief of the Town of Tecumseh dated within thirty (30) days of the Application for the Licence of both the Refreshment Vehicle to comply with the NFPA 96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations) and any premises used to prepare Food must comply with the Ontario Fire Code. If the Food premises is located outside of the Town of Tecumseh, an inspection of the food premises is required by the Fire Services of the municipality.
- 2.15.18 Written permission from the owner and operator is required for a Refreshment Vehicle location if the location is on private property.
- 2.15.19 If, as determined by the Municipal Clerk acting reasonably, the owner/operator of the Refreshment Vehicle is one and the same as the owner/operator of an existing food premises or eating establishment that sells or offers food or drink for consumption on the private property location that is the subject of the application then, provided permission has otherwise been obtained from the

Owner of the private property location (if different than the operator), the licensing fee shall not be applicable but the applicant will otherwise still continue to be subject to the terms and conditions of this By-law as applicable.

- 2.15.20 Not operate at a Special Event or on any Municipal Property without a license issued under this By-law or unless the license requirement has been waived by the Municipal Clerk;
- 2.15.21 Such other conditions as the Municipal Clerk may impose that are not otherwise specified in this by-law as a requirement of obtaining or renewing a Licence under this by-law.
- 2.16 Every Licensee shall produce the Licence issued in accordance with this by-law when requested to do so by an Officer.
- 2.17 Every Licensee shall affix the Licence to the Refreshment Vehicle so it is clearly visible to the public and customers at all times.
- 2.18 The Refreshment Vehicle and immediate surrounding location shall be kept in a clean and sanitary condition at all times and free from grease, papers, rubbish and debris.
- 2.19 Every Licensee shall equip the Refreshment Vehicle with a hard sided garbage receptacle with lid and recycling bin of sufficient size to accommodate waste and all waste generated by the operation of the Refreshment Vehicle. The Licensee shall ensure that all garbage be removed daily from the site to maintain cleanliness.
- 2.20 Every Licensee shall ensure that no waste generated by the operation of the Refreshment Vehicle is deposited in any Town-owned waste containers.
- 2.21 No Refreshment Vehicle shall be equipped with any flashing lights or sounding device for attracting attention except those required by the Highway Traffic Act for vehicles on the road.

Licensing Requirements - Frozen Treat Vehicle

- 2.22 Every Licence application to operate a Frozen Treat Vehicle shall include and be subject to the following conditions:
 - 2.22.1 To the extent applicable, as determined by Municipal Clerk acting reasonably, the licensing requirements applicable to a Refreshment Vehicle shall apply to the licensing requirements for a Frozen Treat Vehicle.
 - 2.22.2 the applicable fee of \$350.00 per vehicle as set out herein and as may be further amended and prescribed in the Town's Fees and Charges By-law. Additional Fees or charges may be applicable for Special Event locations.

- 2.22.3 a photograph of the Frozen Treat Vehicle;
- 2.22.4 a current list containing the name, address, and phone number of every Person who will be operating the Frozen Treat Vehicle, which may be used for notification purposes in respect of health and /or public safety matters;
- 2.22.5 the Licensee and any Person operating a Frozen Treat Vehicle shall provide a Criminal Record Check;
- 2.22.6 Indemnification and proof of Commercial General Liability insurance in the amount of two million dollars (\$2,000,000) for the sale of prepackaged foods;
- 2.22.7 Where a Frozen Treat Vehicle is not a Motor Vehicle, section 2.14.6.1.5 shall not apply, and shall be maintained and in good state of repair;
- 2.22.8 Proof of Inspection conducted by the Windsor-Essex County Health Unit dated within thirty (30) days of the Application for a Licence;
- 2.22.9 Not operate at a Special Event or on Municipal Property without a license unless otherwise authorized by the Municipal Clerk;
- 2.22.10 Notwithstanding the Town's Noise By-law or any successor thereto, no Person operating a Frozen Treat Vehicle shall operate any type of auditory signaling device or electronic amplification /speaker system (including but not limited to: ringing bells or gongs, blowing horns, sirens, whistles; playing of music; or the use of a loud speaker) within a Residential Zone between the hours of 10:00 pm to 8:00 am any day of the week;
- 2.22.11 Stop for longer than 10 minutes at one location;
- 2.22.12 Not visit the same location within the same two-hour period.

Location Requirements

- 2.23 The location (s) of the Refreshment Vehicle shall be permitted on:
 - a) private property that is either commercially, industrially, institutionally zoned or within a business park zone.as identified on applicable Schedules of the Town's Zoning By-law(s); or
 - b) Curbside on the municipal road allowance within the Tecumseh Road Main Street Community Improvement Area (CIP) provided that written permission has been obtained by the property owner of the land that the Refreshment Vehicle is proposing to be located in front of.

- 2.24 No Person shall operate a Refreshment Vehicle within 60 meters of a school unless authorized to do so by the applicable school or school board. A copy of the school or school board permission must be submitted to the Municipal Clerk.
- 2.25 No Person shall operate a Refreshment Vehicle within 60 meters from the front entrance of an Eating Establishment unless authorized to do so by the owner of the Eating Establishment.
- 2.26 No Person shall operate a Refreshment Vehicle or Frozen Treat Vehicle at a Special Event or within 100 meters of a Special Event unless authorized by the Municipal Clerk
- 2.27 Where a Refreshment Vehicle or Frozen Treat Vehicle is authorized to operate at a Special Event or otherwise on Town Property, the Licensee shall be required to obtain a Licence at the prescribed fee unless the Municipal Clerk has specifically exempted in writing the requirement to obtain a License to operate at a Special Event or otherwise on Town Property.
- 2.28 Unless otherwise authorized to operate at a Special event or otherwise on Town property by the Municipal Clerk, a Licensee shall only be permitted to operate a Frozen Treat Vehicle from a municipal road in all Residential Zones identified under the Town's Zoning By-law.
- 2.29 No Licensee shall operate a Refreshment Vehicle from Private Property unless the Licensee has obtained written permission of the property owner. A copy of written permission shall be submitted to the Municipal Clerk.
- 2.30 No Refreshment Vehicle shall be located where it can obstruct the entrance or exit to any building, or obstruct the accessibility of a sidewalk.
- 2.31 No Refreshment Vehicle Licensee shall place tables or chairs at the designated location as an eating area for customers.
- 2.32 The location of the Refreshment Vehicle will be parked or stored when not in operation and the location shall otherwise be in compliance with the Town's Zoning By-law.

3. Enforcement and Penalties

Inspections

- 3.1 Any Officer may, at any reasonable time, enter upon any Refreshment Vehicle or Frozen Treat Vehicle for the purpose of carrying out an inspection to determine whether or not the provisions of this by-law are being complied with.
- 3.2 No Person shall prevent or interfere, or attempt to prevent or interfere with an inspection undertaken by an Officer.

Suspension of Licence

- 3.3 The Municipal Clerk may suspend a licence if the Licensee fails to comply with any provision of this by-law and such non-compliance is not remedied following notice from the Town specifying the particulars of the non-compliance.

Offences and Penalties

- 3.4 Every person who is convicted of an Offence is liable to a fine or penalty as provided for in the Provincial Offences Act, R. S.O. 1990, Chap. P.33. including any Part 1 offences/set-fines thereof that may be assessed and approved pursuant to Schedule A to this By-law as may be amended from time to time.
- 3.5 Every Person who contravenes any provision of this By-law or any provision of a Licence issued under this by-law is guilty of an offence and upon conviction is liable up to a maximum fine, as provided for in the *Provincial Offences Act, R.S.O 1990*.
- 3.6 In addition to section 3.4, the Municipal Clerk shall refuse to issue a Licence to any Person, or shall refuse to renew a Licence, or shall revoke a Licence where:
- 3.6.1 a Person or Licensee has any unpaid fines arising from a conviction for an offence under the By-law;
 - 3.6.2 a Person or a Licensee has submitted false information or documents in support of an application for a Licence;
 - 3.6.3 in sole and absolute discretion of the Municipal Clerk, a suspension under section 3.5 is not appropriate or sufficient given the nature of the non-compliance with this by-law;
 - 3.6.4 after a period of suspension under section 3.5 there is continued non-compliance with the provisions of this by-law.

4. Effective Date

4.1 This by-law shall come into force and effect on the date of final passage.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule A

By-Law 2023-047

Being a By-Law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh

Set Fines under Part I – Provincial Offences Act

Item	Short Form Wording	Offence Creating Provision or Defining Offence	Set Fine
1.	TBD		\$100.00
2.			\$100.00
3.			\$100.00
4.			\$250.00
5.			\$100.00
6.			\$100.00
7.			\$100.00
8.			\$300.00
9.			\$200.00
10.			\$300.00
11.			\$100.00
12.			\$100.00
13.			\$100.00
14.			\$200.00
15.			\$200.00
16.			\$100.00
17.			\$100.00
18.			\$100.00

The Corporation of the Town of Tecumseh

By-Law Number 2023-052

Being a by-law to amend By-Law 2022-099 to prescribe administrative fees and charges for the Town of Tecumseh for the year 2023

Whereas Section 391 of the *Municipal Act, 2001 S.O. 2001, c. M.25* authorizes a municipality to impose fees or charges on persons for services or activities provided or done by or on behalf of it; for costs payable by it for services or activities provided or done by or on behalf of any other municipality or any local board; and for the use of its property including property under its control;

And whereas the *Municipal Act, 2001, S.O, 2001, C. M25* grants a municipality the power to pass by-laws that impose specific fees for licensing, services, permits and other reasons;

And whereas Section 69 of the *Planning Act, R.S.O 1990 c.P.13* grants a Council of a municipality, by-law, and a planning board, by resolution, authority to establish a tariff of fee for the processing of applications made in respect of planning matters;

And whereas Section 446 (1) of the *Municipal Act S. O. 2001, c.M.25* authorizes a municipality under this or any other Act or under a bylaw under this or any other Act to direct or require a person to do a matter or thing, the municipality may also provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense;

And whereas the Council of The Corporation of the Town of Tecumseh adopted By-Law 2022-099, to prescribe administrative fees and charges for The Corporation of the Town of Tecumseh, not otherwise prescribed by by-law.

And whereas the Council of The Corporation of the Town of Tecumseh wishes to amend By-Law 2022-099 so to prescribe fees relating to By-Law 2023-047 Being a By-Law to license Mobile Food Vendors in the Corporation of the Town of Tecumseh, By-Law 2023-046 Being a by-law to adopt Requirements for Patios and Authority for Temporary Patios and Temporary Patio Extensions in the Town of Tecumseh and By-law 2023-045 being A by-law to regulate the sale and setting off of fireworks within the Town of Tecumseh.

Now Therefore the Council of The Corporation of The Town of Tecumseh enacts as follows:

1. **That** Schedule A to By-Law 2022-099 be removed and repealed in its entirety and replaced with the revised Schedule A entitled General Administration, a copy of which is attached hereto and which revised Schedule A shall be incorporated by reference to By-Law 2022-099.

2. **That** Schedule B to By-Law 2022-099 be removed and repealed in its entirety and replaced with the revised Schedule B entitled Community Safety, a copy of which is attached hereto and which revised Schedule A shall be incorporated by reference to By-Law 2022-099.
3. **That** this by-law shall come into force and take effect on the date of third and final reading thereof.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Schedule A - General Administration
By-Law 2022-99

Type of Fee	2023 Fees	2022 Fees	HST
Archival Research - per hour or part thereof with a minimum fee of one hour plus cost of photocopying or plotting	\$ 44.47	\$ 41.60	Y
Photocopies (per page)		-	-
a) 11inch X 17 inch	\$ 0.74	\$ 0.69	Y
b) 11inch X 17 inch (Colour)	\$ 2.95	\$ 2.76	Y
c) 8-1/2 inch x 11 inch	\$ 0.20	\$ 0.19	Y
d) 8-1/2 inch x 11 inch (Colour)	\$ 1.48	\$ 1.38	Y
e) 8-1/2 inch x 14 inch	\$ 0.68	\$ 0.64	Y
f) 8-1/2 inch x 14 inch (Colour)	\$ 1.97	\$ 1.84	Y
g) Bound publications	\$ 9.83	\$ 9.20	Y
Maps, plans on plotter - per square foot	\$ 3.93	\$ 3.68	Y
Maps, plans on plotter - per square foot (Colour)	\$ 6.88	\$ 6.44	Y
Large Format Scanning - per square foot	\$ 4.67	\$ 4.37	Y
Geo-referenced data (reference Policy #43)		-	-
a) Each Segment (layer)	20% of cost	20% of cost	Y
b) Per parcel/entity	\$ 0.22	\$ 0.21	Y
c) Data production service fee	\$ 61.59	\$ 57.61	Y
Digital data on CD/DVD	\$ 61.59	\$ 57.61	Y
Compliance Reports		-	-
a) Building	\$ 90.00	\$ 80.00	N
b) Fire	\$ 75.00	\$ 69.95	N
c) Public Works	\$ 75.00	\$ 70.00	N
d) Tax Certificates	\$ 80.00	\$ 75.00	N
Municipal Paraphernalia		-	-
a) Town pins - each	\$ 0.44	\$ 0.44	Y
b) Town golf shirts - each	\$ 22.79	\$ 22.79	Y
c) Baseball Caps	\$ 9.29	\$ 9.29	Y
d) Town of Tecumseh flags	\$ 33.76	\$ 33.76	Y
e) Canadian flags	\$ 35.40	\$ 35.40	Y
f) Ontario flags	\$ 55.75	\$ 55.75	Y
Return Cheque	\$ 30.00	\$ 30.00	N
Burial permit	\$ 30.00	\$ 15.50	N
Marriage License	\$ 135.00	\$ 130.00	N
Mobile Food Vender	\$ 350.00	-	N
Temporary Outdoor Patio	\$ 250.00	-	N
Fireworks Application	\$ 50.00	-	N
Reprint Tax Bills	\$ 10.00	\$ 10.00	N
Tax Registration administration fee (plus costs)	\$ 320.00	\$ 300.00	N
Refund or Misdirected Payment Fee	\$ 25.00	\$ 20.00	N
By-Law Enforcement Administration Fee		-	-
Corrective work performed under any Town of Tecumseh By-law	\$ 140.00	\$ 130.00	N

The Corporation of the Town of Tecumseh

By-Law Number 2023 - 028

Being a bylaw to provide for the repair and improvements to the Sullivan Creek Drain

Whereas the Council of The Corporation of the Town of Tecumseh (hereafter “Town”) has been requested to provide for the repair and improvement of the Sullivan Creek Drain;

And Whereas the Town procured a Drainage Report for the Sullivan Creek Drain and specifications from the consulting engineering firm of Gerard Rood of Rood Engineering Inc., dated January 9, 2023 (hereafter “Drainage Report”);

And Whereas notice of a Public Meeting to hear comments from the affected property owners was given on Tuesday, February 14, 2023;

And Whereas a Public Meeting of Council was held on Tuesday, February 28, 2023, at 6:30 pm to hear from any affected property owners on the Drainage Report;

And Whereas the Council of The Corporation of the Town of Tecumseh is of the opinion that the repair and improvement of the Sullivan Creek Drain is desirable;

Now Therefore the Council of The Corporation of The Town of Tecumseh Enacts as follows:

1. **That** the Drainage Report providing for the repair and improvement of the Sullivan Creek Drain, dated January 9, 2023, as prepared by the consulting engineering firm Rood Engineering Inc. and attached hereto as Schedule “A” to this by-law, is hereby adopted and the drainage works as therein indicated and set forth is hereby approved and shall be completed in accordance therewith.
2. **That** the Treasurer, subject to the approval of Council, may agree with any bank or person for temporary advances of money to meet the costs of construction pending the completion of the drain and grants and computed payments are received.
3. **That** the Town may issue debentures for the amount borrowed and the amount of such debentures shall be reduced to the total amount of:
 - a) Grants received under Section 85 of the said Act;
 - b) Commuted payments made in respect of land and roads assessed.

4. **That** such debentures shall be made payable within five (5) years from the date of the debenture and shall bear interest at a rate as approved by resolution of Council.
5. **That** the specifications and General Specifications as established are adopted as set out in the Drainage Report which forms part of this by-law.
6. **That** the Mayor and Clerk are authorized to cause a contract for the construction of the works to be made and entered into with some person or persons, firm or corporations, subject to the approval of the Council to be declared by resolution.
7. **That** this by-law shall come into force upon and after the final passing thereof.

Read a first and second time this 28th day of February, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

Read a third and final time this **Choose an item.** day of **Choose an item.**, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk

SULLIVAN CREEK DRAIN
E09SU(102)

Repair and Improvement

Geographic Township of Sandwich South

TOWN OF TECUMSEH



Town of Tecumseh
917 Lesperance Road
Tecumseh, Ontario N8N 1W9
519-735-2184

Rood Engineering Inc.
Consulting Engineers
9 Nelson Street
Leamington, Ontario N8H 1G6
519-322-1621

REI Project 2015D010
January 9th, 2023

January 9th, 2023

Mayor and Municipal Council
Corporation of the Town of Tecumseh
917 Lesperance Road
Tecumseh, Ontario
N8N 1W9

Mayor McNamara and Members of Council:

**SULLIVAN CREEK DRAIN
E09SU(102)
Repair and Improvement
(Geographic Twp. of Sandwich South)
Project REI2015D010
Town of Tecumseh, County of Essex**

I. INTRODUCTION

In accordance with the instructions provided at your April 28th, 2015 meeting and received from the Town by letter dated May 27th, 2015, from your Director Corporate Services and Clerk, Laura Moy, we have prepared the following report that provides for repair and improvements of the open drain, along with inspection of the bridges located along the drain. The Sullivan Creek Drain comprises of an open drain generally located approximately 740 metres east of Sexton Road and 400 metres south of County Road 46. It meanders north easterly for approximately 5 km where it outlets to the Pike Creek Drain at a point approximately 760 metres north of Baseline Road and 480 metres west of County Road 19 (Manning Road) respectively, in the geographic Township of Sandwich South, Town of Tecumseh. A plan showing the Sullivan Creek Drain, as well as the general location of the bridges along the drain, is included herein as part of the report.

Our appointment and the works relative to the improvements to the Sullivan Creek Drain, proposed under this report, is in accordance with Section 78 of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010". We have performed all of the necessary survey, investigations, etcetera, for the proposed bridge and drain improvements, and we report thereon as follows.

II. BACKGROUND

From our review of the information provided from the Municipality's drainage files we have established the following reports that we utilized as reference for carrying out this project:

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|----|--------------------|--------------------------------------|---------------------------|
| 1) | October 24th, 1977 | Sullivan Creek Drain (upper portion) | Maurice Armstrong, P.Eng. |
| 2) | May 24th, 1983 | Sullivan Creek Drain (lower portion) | Maurice Armstrong, P.Eng. |

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(Geographic Township of Sandwich South)
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3) December 9th, 1966 Sullivan Creek Drain C.G.R. Armstrong, P.Eng.

The 1983 Report by Maurice Armstrong, P.Eng., provided for maintenance of the lower portion of Sullivan Creek Drain and has the latest profile for the grading of the drain for that section.

The 1977 Report by Maurice Armstrong, P.Eng., provided for maintenance of the upper portion of Sullivan Creek Drain and has a profile with the grading of the drain for that section.

We arranged with the Town to provide us with the updated assessment roll information for the affected parcels. We also reviewed reports for the abutting drains to help in establishing the current watershed limit for the Sullivan Creek Drain.

III. PRELIMINARY EXAMINATION AND ON-SITE MEETING

After reviewing all of the drainage information provided by the Town, we arranged with the Town Drainage Superintendent Sam Paglia, P.Eng., to schedule an on-site meeting for October 21st, 2015. The following people were in attendance at said meeting: John Wilson, Joseph and Brenda Gagnon, Leo Labbee, Joset Dworatscheu, Gerald Lavin, Richard Lafreniere, John Walton for Carl Battersby, Rosanne St. Louis, Steno Novelletto, Ken and Barb McCarthy, Joe McCarthy, Guy Robertson, Karyn Templin (County of Essex), Sam Paglia (Town Drainage Superintendent), Kory Snelgrove (Rood Engineering) and Gerard Rood (Rood Engineering).

Mr. Paglia introduced himself and reviewed some of the history of the drain. The Town had received a request for maintenance, and because of the age of the last report and the poor condition of the drain, the Town is proceeding with an engineer's report under Section 78 of the Drainage Act. The on-site meeting is the initial step in the process. The Town then asks the engineer for a draft report, and they schedule an information meeting and open house (Public Information Centre meeting) with the owners and engineer to discuss the report and plans. A final report is then prepared and submitted to Council and goes through the Drainage Act process of a Consideration meeting and Court of Revision meeting.

Mr. Rood noted that there has been some maintenance work in 1983 based on Town records, but the drain is now badly overgrown with trees and brush and appears to have a significant accumulation of sediment in some portions of the drain as per the investigations by the Town.

Mr. Rood asked the owners to provide information on any drainage changes that they might be aware of. The owners told us that there was a bridge at the O'Neil property. They were advised that the bridge will be picked up as part of the survey and inspected for its condition. The condition of the O'Neil bridge was found to be very poor, so the bridge will be replaced as part of the works.

The owners were advised that trees may be left on the top of the bank for environmental purposes. All trees within the drain cross section from top of bank to top of bank will be removed to prevent obstruction of drainage. The west side will be basically cleared for access to carry out the work and dispose of material; however, some mature trees may be able to be saved if the Contractor can work around them.

IV. FIELD SURVEY AND INVESTIGATIONS

Subsequent to the on-site meeting we arranged for a topographic survey of the drain and bridges to be completed. We further arranged to get updated assessment roll information from the

Municipality and obtained information on the tax class of each of the properties affected by the Municipal Drain. We were able to contact Jay O'Neil and discuss his bridge.

We also made initial submissions to the Essex Region Conservation Authority regarding their requirements or any D.F.O. requirements for work that would be proposed to be carried out on the access bridges within the Sullivan Creek Drain open channel. A response from the Conservation Authority was received by email on March 31st, 2015 and indicated that the proposed works cannot change the 1:100 year flood elevations. The Town must also perform a self assessment through the D.F.O. website. A copy of the concerns and requirements to satisfy E.R.C.A. and D.F.O. is included in **Appendix "REI-A"** of this report.

We also arranged to review the "Ministry of Natural Resources & Forestry (M.N.R.F.) Species at Risk (S.A.R.) Mitigation Plan for Drainage Works (March 2018-17-4938)" that the Town has prepared to address the Endangered Species Act, 2007. Section 6.0 of the Mitigation Plan indicates that snake species are a concern for this work area and although turtles are not indicated, they are mobile and could be encountered. The Mitigation Plan includes measures to be followed as outlined in "Section 7.0 Mitigation Measures" of the document and a copy of same as it relates to turtles and snakes is included in **Appendix "REI-B"**. Providing mitigation requirements are implemented, it was concluded that present wildlife Species at Risk will be protected from negative impacts and the works will not contravene Section 9 (species protection) or Section 10 (habitat protection) of the Endangered Species Act, 2007 that is administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.). Based on this information we find that the Town can proceed with the eligible repairs, maintenance, and improvements to the drain as they are exempt under Sections 9 and 10 of the Act, provided that they follow the rules within Ontario Regulation 242/08 and the Mitigation Measures in their S.A.R. Mitigation Plan. To address these requirements the Town has established comprehensive mitigation measures as well as species identification guides for reference. Copies of the measures and guides shall be provided to the successful Tenderer for use during construction, and these documents are available for viewing by any interested parties at the Town office.

V. BRIDGES REVIEW

As part of our investigations, we made detailed inspections of each of the bridges along the open drain. Their condition and proposed work if any are summarized as follows:

1. This bridge serves parcel 460-01000 owned by Michael Lutsch. The 6.4m long 400mm diameter C.S.P. (corrugated steel pipe) was found to be in poor condition with the bottom beginning to rust out and will need to be replaced under maintenance in the near future.
2. This bridge serves parcel 460-01100 owned by Thomas Halford. This 27.2m long 500mm diameter C.S.P. bridge is in fair condition but has significant dirt accumulation almost halfway up the pipe and will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
3. This bridge serves parcel 460-01200 owned by Thomas and Linda Halford providing access to the residence. The east part of this 39.8m long 600mm diameter C.S.P. bridge serves the east portion of a shared access to the property and is in fair condition but has significant dirt accumulation in the pipe that will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
4. This bridge serves parcel 460-01200 owned by Thomas and Linda Halford providing access to the farm land portion. The west part of this 39.8m long 600mm diameter C.S.P. bridge serves the west portion of a shared access to the property and is in fair condition but has

- significant dirt accumulation in the pipe that will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
5. This bridge serves parcel 460-01300 owned by Rosemary Halford. This 6.7m long 600mm diameter C.S.P. is in fair condition but has fill accumulation to almost the mid point of the pipe that will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 6. This bridge serves parcel 460-01400 owned by Thomas Halford. This 6.1m long 700mm diameter C.S.P. is in fair condition but has fill accumulation to almost the mid point of the pipe that will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 7. This bridge serves parcel 460-01500 owned by Michael and Helen Lavin. This 10.4m long 700mm C.S.P. is in fair condition but has fill accumulation to almost the mid point of the pipe that will require cleaning under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 8. This bridge serves King's Highway No. 3 and is a concrete structure with a 1.3m X 2.4m opening that is relatively new and in good condition.
 9. This bridge serves parcel 480-08410 owned by Gerald and Agnes Lavin. This 7.7m long 1200mm diameter C.S.P. is in fair condition with wood beam headwalls requiring some repairs as provided for under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 10. This bridge serves parcel 520-01000 owned by Canada Southern Railway Company. This 13m long concrete span bridge with a 1.2m X 1.54m opening is in good condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 11. This bridge serves parcel 480-08400 owned by Gerald and Agnes Lavin. The structure is a deteriorated steel beam and wood structure with a 3m top width located just north of the former railroad bridge and this structure will be removed under this report. We recommend that the bridge be abandoned pursuant to Section 19 of the Drainage Act.
 12. This bridge serves parcel 480-08400 owned by Gerald and Agnes Lavin and is the primary access serving the parcel. This 6.1m long 1700mm diameter C.S.P. bridge is narrow by today's standards but is in fair condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 13. This bridge serves County Road 46 and comprises two (2) corrugated steel pipes of 2000mm diameter with concrete headwalls. The bridge is in fair condition. The report and plans will provide the Town and County of Essex with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 14. This bridge serves County Road 17. The 20.6m long 1.45m X 3.65m concrete structure appears to be in good condition. The report and plans will provide the Town and County of Essex with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
 15. This bridge serves parcel 520-01300 owned by Kenneth & Barbara McCarthy. This 6.0m long 2100mm X 1555mm C.S.P. arch appears to be in fair condition, but the broken concrete pieces headwalls are in need of repair, and this will be provided for in this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.

16. This bridge serves parcel 520-04700 owned by Gerald and Agnes Lavin. Deterioration of the bridge in 2018 required emergency replacement with a “temporary” bridge. We recommend that the 14.0m long 2230mm X 1700mm C.S.P. arch “temporary” bridge become part of the drainage works pursuant to this report as it meets the design standards required. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
17. This bridge serves King’s Highway 401. The 2.0m X 3.6m concrete bridge is in good condition. The report and plans will provide the Town and Ministry of Transportation Ontario with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
18. This bridge serves parcel 520-04500 owned by Sandwich South Farms Ltd. The 4.25m long open bottom 1.3m X 3.7m concrete span culvert appears to be in good condition. Some washouts of the drain banks at the corners of the bridge will be repaired under this report with quarried limestone on filter cloth. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
19. This bridge serves the County Road 43. The 1.58m X 4.6m concrete box bridge was recently replaced and is in good condition. The report and plans will provide the Town and County of Essex with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
20. This bridge serves as an access for parcel 510-01550 owned by Rose Jobin. The 4.8m top width 1.9m X 3.8m concrete span bridge appears to be in fair condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
21. This pipe arch bridge serves parcel 510-01800 owned by Wilfred O’Neil. The bridge was collapsing and replaced with a new “temporary” bridge in 2015 including precast concrete block headwalls. We recommend that the 11.0m long 3.3m X 2.08m C.S.P. arch “temporary” bridge become part of the drainage works pursuant to this report as it meets the design standards required. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
22. This concrete span bridge serves parcel 510-02000 owned by Ruth Battersby. The 4.5m long 1.9m X 4.3m concrete bridge appears to be in reasonable condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
23. This is a 2.5m X 5.2m concrete bridge that is 10.5m long and that was newly installed in 2015 for the Town Baseline Road. The bridge is in excellent condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
24. This 6.2m long 2900mm X 2080mm C.S.P. arch bridge with broken concrete pieces headwalls serves parcel 560-08100 owned by 507822 Ontario Inc. & 494112 Ontario Ltd. The bridge is in fair condition. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.
25. This 13.85m long concrete bridge serves the 12th Concession Road of the Town. The 2.55m X 4.25m bridge is in good condition with some scouring of the footing noted at the northeast headwall that will be addressed under this report. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act.

We prepared preliminary designs and estimates for improvement of those bridges in the future and for those that require work at this time. We contacted some of the bridge owners to discuss their bridge replacement or repairs with them and to determine if there were any concerns that the owner was aware of that should be addressed as part of the report. Preliminary details of the proposed work and cost estimates for work on the bridge were discussed with Mr. O'Neil, along with cost sharing. The owner was reminded that they would also share in the cost of the work along the downstream portions of the drain. Mr. O'Neil indicated that the pipe at the rear of their property was in poor condition and needs replacement and requested a new access across the Sullivan Creek Drain.

VI. PUBLIC INFORMATION CENTRE REVIEW

Arrangements were made for a virtual meeting on August 19th, 2021, with the Engineer, the Drainage Superintendent and interested owners to discuss the Draft drainage report dated June 16th, 2021, for this project. The procedures under the Drainage Act were reviewed and the next steps were detailed. There will be Town, County of Essex, and Ministry of Transportation contributions to cost for this project because the project is a Municipal drain and public roads, or lands are affected. The owners were advised that snow blockage can occur, but the Drainage Act does not require this to be addressed. The Town did however do some removal in the past to alleviate flooding problems that arose and is expected to address this again in the future if the need arises. Owners are advised that there is the opportunity to debenture the costs for 5 years and pay the assessment with their taxes. Owners are advised that they only pay a share of the cost for work adjacent to their lands and for downstream to the outlet. Once the Town is aware of concerns, they are obliged to act in accordance with the requirements of the Drainage Act.

Benefit and Outlet liability assessments are discussed as defined below. Establishment of pipe lengths is based on the minimum standard top width of 6.1m (20'), the depth of the drain, and the type of end treatment provided. The cost of additional top width requested by an owner is fully borne by that owner. The drainage report provides estimates of costs, and the owners will only pay the actual cost shared on the basis of the assessment schedule. Lands eligible for the farm property tax class will be eligible for a grant in the amount of 1/3 of their total cost assessment.

If the work is not started before March 15th, it will likely be completed in the summer or fall. If any delay occurs, the fish protection timing window from March 15 to June 30th will come into effect and the work will have to be done after June 30th. Bridge cost sharing was reviewed with the owners at the P.I.C. meeting. Existing pipes are normally cleaned by flushing them with a high pressure nozzle and the material is removed at the end of the pipe. The owners are advised that they can have their tile ends repaired by a qualified contractor. The tiles are inspected during the course of the work and only those in disrepair will be fixed up as part of the work.

It should be noted that the Public Information Centre (P.I.C.) meeting is not a requirement under the Drainage Act but the Town holds these meetings to address questions and concerns and to solicit comments from the affected owners. Feedback during and after the meeting was utilized to establish the final requirements for the drainage report.

Owners are reminded that they have the opportunity to present their concerns to Council regarding the report details at the Consideration meeting and assessment questions at the Court of Revision meeting, along with appeal rights to the Ontario Ministry of Agriculture, Food and Rural Affairs (O.M.A.F.R.A.) Appeals Tribunal and to the Drainage Referee as provided for in the Drainage Act.

Clarification is provided on the two (2) types of assessments included within the report. The Drainage Act definitions and applicable clauses are as follows:

“Benefit” means the advantages to any lands, roads, buildings or other structures from the construction, improvement, repair, or maintenance of a drainage works such as will result in a higher market value or increased crop production or improved appearance or better control of surface or subsurface water, or any other advantages relating to the betterment of lands, roads, buildings or other structures.

“Outlet liability” means the part of the cost of the construction, improvement or maintenance of a drainage works that is required to provide such outlet or improved outlet. Lands and roads that use a drainage works as an outlet, or for which, when the drainage works is constructed or improved, an improved outlet is provided either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse, may be assessed for outlet liability. The assessment for outlet liability shall be based upon the volume and rate of flow of the water artificially caused to flow upon the injured land or road or into the drainage works from the lands and roads liable for such assessments. Every drainage works constructed under this Act shall be continued to a sufficient outlet.

Owners are advised that they have a legal responsibility to convey their drainage to a sufficient outlet. For this reason, they have a share in the cost for upkeep of the drain downstream of their lands and this obligation is reflected in the assessment for Outlet. There were concerns raised that some owners maintain the drain banks along their properties, and they should therefore not be assessed or assessed less. They are reminded that the responsibility for carrying out maintenance on a Municipal drain rests with the Town as set out in the Drainage Act. Any owner can notify the Town that the drain requires maintenance, and the Town has to take action pursuant to the Act. This system is generally reactive and requires the property owners to raise their concerns and issues to the Town. Owners are reminded that keeping brush clear along their portion of the drain and having buffer strips provides them with a direct benefit of improved crop yield and preservation of topsoil on their lands. It was suggested that they were being penalized for the work that they had done, but it was pointed out that sediment in their portion of the drain has to be removed and they still have an Outlet Liability for the downstream portion of the drain. The owners are reminded that Municipal drainage is a communal project and basically a user pay system. As an example, when work is carried out on the Pike Creek Drain downstream of the Sullivan Creek Drain outlet, the owners in the Sullivan watershed would be responsible for a portion of the cost, along with the other owners in the Pike Creek Drain watershed. Owners are advised of the 1/3 grant available to agricultural lands that qualify, and that the Town administers the grant process and reflects any available grant on the final billing to each owner.

It was indicated that some owners may appeal their assessment as set out in the drainage report. They are advised that they should submit their appeal to the Court of Revision 10 days before the scheduled date of the meeting; however, the Court of Revision can agree to hear appeals presented at the meeting. If owners are still dissatisfied with the report after that meeting, they may submit an appeal to the O.M.A.F.R.A. Appeals Tribunal through the Town Clerk within 21 days of the closing of the Court of Revision pursuant to Section 54 of the Drainage Act.

The cost sharing for bridges was discussed with some owners feeling that the bridge owner should bear all the cost. It was explained that an owner has the right for one access across each Municipal drain. The owner generally pays 100% of the cost for the first bridge installation and it becomes part of the drain when included in an engineer’s report and is then to be maintained by the drain. The Engineer explained that he determines the cost sharing, and it generally relates to a bridge, that is part of the drain, and located at the mid length of the drain, being shared 50%-

50%. The ratio to the bridge owner diminishes as you proceed downstream or increases as you proceed upstream from that point.

The time required to initiate the project was discussed. It was pointed out that the Town has 45 days under Section 79 of the Act to take action or could be liable for damages. An owner would have to quantify any damages experienced and could try to sue the Town. The Act does provide for the owners to make appeals if the Town fails to take action on certain matters prescribed in the legislation.

There was some discussion of the disposal of excavated materials on the abutting lands. The Engineer confirmed that existing grass buffers and accesses would be protected and maintained. Allowances as set out in the report were reviewed and access provisions that are set out in the report Specifications was referenced. Owners were advised that the Contractor is responsible to remove any sticks and rocks (cobbles) etcetera from the spread materials and the Contractor is responsible for one (1) year after the work is completed.

There were questions about assessment for cost when an owner's property does not drain to the Municipal drain. We explained that lands may be assessed for a "cutoff" benefit in the case where the construction of a drain prevents overland flows from going across their lands. Being relieved of these flows results in less damage to their lands and crops and is therefore considered as a benefit and an assessment is provided for same. It was pointed out that the lands that do not drain into the Municipal drain are only assessed Benefit, and there is no assessment for Outlet if they do not direct any flows into the drain. Further questions included assessment for lands that are completely tiled to the drain, the limits of the watershed relative to the Little 10th Concession Drain at the northwest corner of the watershed, and adjustments for area and runoff for the Lutsch lands at the upstream end of the drain.

There was a question about removal of dead and overhanging trees on the top of the banks. We advised the owner that the specifications would provide more detail directing the Contractor to include for this work as part of the brushing on the drain so that the risk of said materials falling in and blocking off or damaging the drain is minimized.

Owners have the right to ask Council questions at the Consideration meeting and Court of Revision meeting.

VII. FINDINGS AND RECOMMENDATIONS

We find that the profiles included in the 1983 and 1987 report plans by Maurice Armstrong, P.Eng. provide a good fit to the existing profile of the drain. Said reports provided for improvements to the open drain and we have used the grades and other drain parameters to establish the design and work included for in this report.

Based on our detailed survey, investigations, examinations, and discussions with the affected Owners and governing Authorities, we would recommend that drain improvement works be carried out as follows:

- a) Bridge 11 be completely removed from the drain and the drain cross section be restored in accordance with the information on the profiles and cross sections. We recommend that the bridge be abandoned pursuant to Section 19 of the Drainage Act.
- b) We recommend that all drain improvements, including the removal of the farm bridge and bridge repairs and improvements, be carried out in accordance with the

requirements established by E.R.C.A. and D.F.O. as set out in the documents within **Appendix "REI-A"** attached to this report.

- c) As this is an existing Municipal drain, and conditions have not changed and there is no information to indicate any new species concerns, the construction can be carried out based on the provisions included within the Mitigation Plan for Drainage Works (March 2018-17-4938) that the Town has prepared to address the Endangered Species Act, 2007 now administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.). Providing mitigation requirements are implemented, we find that present wildlife Species at Risk will be protected from negative impacts and the works will not contravene Section 9 (species protection) or Section 10 (habitat protection) of the Endangered Species Act, 2007. Based on this information we find that the Town can proceed with the eligible repairs, maintenance, and improvements to the drain as they are exempt under Sections 9 and 10 of the Act, provided that they follow the rules within Ontario Regulation 242/08 and the Mitigation Measures in their S.A.R. Mitigation Plan. A copy of said mitigation measures is included in **Appendix "REI-B"** within this report. We recommend that any work being completed shall be carried out in accordance with Town mitigation measures as included in **Appendix "REI-B"** for reference by the land owners, the Town of Tecumseh, and the Contractor who will be conducting the works.
- d) We find that portions of the open drain have significant accumulation of silt and debris and we recommend that these be cleaned out as set out further in this report.
- e) The existing drain has some buffer strips and grass accesses along the Municipal drain that reduce the amount of erosion and the sediment entering the drain and enhance water quality. We recommend that the existing buffer strips be protected as part of this project and suggest that new buffer strips be constructed by the owners in all areas where no current grass buffer exists.
- f) As provided for by Section 18 of the Drainage Act, we recommend that any future new access bridge culvert or replacement be constructed as outlined further in this report including the specifications and the plans that form part of the report. All existing bridges and access pipes that are in fair or good condition shall be flushed and cleaned out to restore the drain bottom profile.
- g) Near the drain outlet northeasterly of 12th Concession Road any excavated materials shall be hauled away as required by E.R.C.A. This area will generally extend from the east side of 12th Concession Road to the outlet in Pike Creek Drain.
- h) M.E.C.P. requires proper handling of excess soils in accordance with Ontario Reg 406/19 pursuant to the Environmental Protection Act, R.S.O. 1990, c. E.19 and any subsequent amendments to same. In liaison with the Town Drainage Department, we arranged for the necessary investigations and testing by WSP E&I Canada Limited for the section of drain from the former railroad downstream in a northerly direction to the south side of County Road 46. Their report and findings are included in **Appendix "REI-F"** attached to this report. We recommend that handling of all excess soil excavated materials from this area including disposal be carried out in accordance with the requirements set out in the WSP report. Material from Zone 1 can be disposed of on the site. Zone 3 materials are to be loaded up and hauled away to the County landfill site.

We further find and recommend as follows:

i) **Bridge No. 1** – Michael Lutsch (460-01000)

This corrugated steel pipe access is badly rusted with poor bottom on the east end. We recommend that the existing 400mm diameter pipe be replaced as set out further in this report under maintenance when the need arises.

j) **Bridge No. 2** – Thomas Halford (460-01100)

The east broken concrete pieces endwall has been repaired subsequent to our field survey. We recommend that the materials be salvaged, and the headwall be reconstructed utilizing grout and additional pieces, or concrete filled jute bags as needed to create a stable headwall when the pipe is replaced in the future.

k) **Bridge No. 9** – Gerald & Agnes Lavin (480-08410)

The wooden beam headwalls on this bridge are in very poor condition and in need of repair. We recommend that new pressure treated timber be provided to replace unsuitable materials and restore the headwalls to a stable condition including any tie-backs needed.

l) **Bridge No. 11** – Gerald & Agnes Lavin (480-08400)

This bridge is unsuitable for rehabilitation, and we recommend that the existing rotted timber top, rusted steel beams, and concrete abutments be removed and disposed of and that the drain be restored to its design cross section as shown on the profile and cross sections of the plans. As noted above, the bridge is recommended to be abandoned pursuant to Section 19 of the Drainage Act.

m) **Bridge No. 15** – Kenneth & Barbara McCarthy (520-01300)

The broken concrete pieces endwalls are collapsed and in need of repair. We recommend that the materials be salvaged, and the headwalls be reconstructed utilizing grout and additional pieces, or concrete filled jute bags as needed to create stable headwalls.

n) **Bridge No. 16** – Gerald & Agnes Lavin (520-04700)

This bridge was collapsing at the time of the drain survey. A “temporary” new replacement bridge was installed in accordance with the plans and report dated May 3rd, 2018, that were used to obtain the permit from E.R.C.A. We recommend that the “temporary” bridge that was installed pursuant to the E.R.C.A. permit become a part of the Sullivan Creek Drain under this report and be kept up and maintained by the Town as part of the drainage works in accordance with the details and specifications provided in this report.

o) **Bridge No. 18** – Sandwich South Farms Ltd. (520-04500)

This concrete span bridge is in good condition but some washouts of the drain banks at the corners of the bridge were observed. We recommend that the drain banks be restored with compacted clay fill and that quarried limestone rip rap on filter cloth be installed on

the banks adjacent to the bridge corners to protect the newly placed fill and minimize the risk of future erosion.

p) **Bridge No. 21** – Wilfred O’Neil (510-01700 & 510-01800)

The existing bridge near the north limit of Parcel 510-01700 was collapsing and replaced with a new “temporary” bridge just north of the existing bridge and constructed on Parcel 510-01800. The new replacement bridge was installed in accordance with the plans and report dated November 3rd, 2015, utilized for the permit application to the E.R.C.A. for the pipe arch including precast concrete block headwalls. HEC-RAS modeling was carried out to compare existing to final conditions with the new bridge installation. The modeling results were submitted to E.R.C.A. on January 5th, 2016 and showed that no significant impact occurred to the drainage works. We recommend that the “temporary” bridge become part of the drainage works pursuant to this report as it meets the design standards required. The report and plans will provide the Town with the details needed for future work on the bridge pursuant to the maintenance provisions of the Drainage Act. The bridge will provide both parcels with access across the drain.

q) **Bridge No. 25** – 12th Concession Road – Town of Tecumseh

This concrete bridge appears to be in good condition with some scouring noted around the footing on the east end of the bridge. We recommend that the drain be restored with compacted clay fill and that quarried limestone rip rap on filter cloth be installed on the newly placed fill to minimize the risk of future erosion.

We have investigated the watershed boundaries as per the Public Information Centre meeting and made adjustments to the drainage report to reflect the updated findings and the input from affected owners that was provided. This drainage report provides for the Sullivan Creek Drain to be restored to its past design standards to restore its original level of service with none of the works that are provided for with having any negative or adverse impacts to the drain or level of service. Information that was provided to E.R.C.A. for the “temporary” bridges that needed to be constructed under emergency requirements demonstrated that no significant impact was caused to the drainage works by the new bridges being installed. We recommend that the Sullivan Creek Drain be repaired and improved, including the bridge removal as outlined, in accordance with this report, the attached specifications and the accompanying drawings, and that all works associated with same be carried out pursuant to Section 78 of the “Drainage Act, R.S.O. 1990, Chapter D.17 as amended 2010”.

VIII. ALLOWANCES

We have provided that all of the work will generally be completed from the north and west side of the drain. Between Bridge 19 and Bridge 20 the drain cleaning will be carried out from the east side of the drain with the materials spread to the east. From Highway No. 3 to County Road 46 the work will be carried out from the east side of the drain to protect mature trees and plantings conducted with E.R.C.A. support. The Contractor will be required to restore any existing grassed buffer and driveway areas damaged by the work. We recommend that any materials removed from the open drain or existing bridges, be spread on the adjacent open agricultural lands to the north, east, and west of the drain for disposal by the Contractor, beyond the limits of any existing grass buffer or driveway access. Based on all of the above we find that allowances for damages are payable pursuant to Sections 29 and 30 of the Drainage Act.

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We find that the provision of access along the drain as noted above and disposal of excavated material on the abutting agricultural lands requires payment for the land necessary to carry out same. Where there are lawn areas along the drain, work may be carried out from the road side of the drain and the excavated material will be loaded up and hauled away for disposal and any damage to the lawn will need to be restored by the Contractor, so no allowance is required for those areas. We therefore recommend that the following owners be compensated where values are shown for all work areas that will be impacted, including for the access to the drain and for damages to lands and crops, if any, as follows, namely:

1)	Michael Lutsch, (460-01000),	Owner,	Part of Lot 297, S.T.R. Concession,	\$	450.00
2)	Thomas Halford, (460-01100),	Owner,	Part of Lot 298, S.T.R. Concession,	\$	lawn
3)	Thomas & Linda Halford, (460-01200),	Owners,	Part of Lot 298, S.T.R. Concession,	\$	401.00
4)	Rosemary Halford, (460-01300),	Owner,	Part of Lot 298, S.T.R. Concession,	\$	lawn
5)	Thomas Halford, (460-01400),	Owner,	Part of Lot 298, S.T.R. Concession,	\$	433.00
6)	Michael & Helen Lavin, (460-01500),	Owners,	Part of Lot 298, S.T.R. Concession,	\$	665.00
7)	John Lafferty, (460-09200),	Owner,	Part of Lot 299, S.T.R. Concession,	\$	1,621.00
14)	Catherine Lafferty & Mary Thompson, (460-02000),	Owners,	Part of Lot 299, S.T.R. Concession,	\$	1,577.00
23)	Gerald & Agnes Lavin, (480-08410),	Owners,	Part of Lot 298, N.T.R. Concession,	\$	2,794.00
22)	Gerald & Agnes Lavin, (480-08400),	Owners,	Part of Lot 298, N.T.R. Concession,	\$	1,349.00
80)	Diklich Capital Corp., (530-00100),	Owner,	Part of Lot 10, Concession 9,	\$	1,288.00
82)	Edward Chittle Jr., (530-04775),	Owner,	Part of Lot 11, Concession 9,	\$	lawn
58)	Kenneth & Barbara McCarthy, (520-01300),	Owners,	Part of Lots 11 & 12, Concession 10,	\$	3,089.00
76)	Gerald & Agnes Lavin, (520-04700),	Owners,	Part of Lot 12, Concession 10,	\$	964.00

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73)	Sandwich South Farms Limited, (520-04500),	Owner,	Part of Lot 13, Concession 10,	\$	1,253.00
41)	Rose Jobin, (510-01550),	Owner,	Part of Lots 13 & 14, Concession 11,	\$	840.00
43)	Paul & Rose Jobin, (510-01600),	Owners,	Part Lot 14, Concession 11,	\$	554.00
45)	Wilfred O'Neil, (510-01700),	Owner,	Part Lot 14, Concession 11,	\$	639.00
46)	Wilfred O'Neil, (510-01800),	Owner,	Part Lot 15, Concession 11,	\$	441.00
47)	Wilfred O'Neil, (510-01900),	Owner,	Part Lot 15, Concession 11,	\$	521.00
48)	Ruth Battersby, (510-02000),	Owner,	Part Lot 15, Concession 11,	\$	2,541.00
51)	Helene Battersby, (510-02100),	Owner,	Part Lot 16, Concession 11,	\$	3,877.00
91)	Philip, Rose & Paul Jobin, (560-04000),	Owners,	Part Lot 17, Concession 11,	\$	2,885.00
94)	507822 Ontario Inc. & 494112 Ontario Limited, (560-08100),	Owners,	Part Lot 17, Concession 11,	\$	2,389.00
93)	Mary McGraw, (560-08000),	Owner,	Part Lot 18, Concession 11,	\$	677.00
79)	Mario & Deana Liburdi, (560-08500),	Owners,	Part of Lot 18, Concession 12,	\$	1,113.00
TOTAL FOR ALLOWANCES AND DAMAGES					\$ 32,361.00

These values for allowances and damages are based on a strip of land parallel to and immediately adjacent to the drain or grassed buffer and driveway, for the parcels generally abutting the north and west side of the Municipal drain and south side from Bridge 19 to Bridge 20 and are based on a value of \$1,225.00 per acre (\$3,027.00 per hectare) for the affected lands and crops, if any. These allowances provide for a spread depth of 100mm and are calculated using a rate per acre of \$700.00 for year one, \$350.00 for year two and \$175.00 for the third year. The impact after 3 years is considered negligible.

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We have provided for this in our estimate as is provided for under Sections 29 and 30 of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010".

IX. ESTIMATE OF COST

Our estimate of the Total Cost of this work, including all incidental expenses, is the sum of **EIGHT HUNDRED AND THIRTY TWO THOUSAND DOLLARS (\$832,000.00)**, made up as follows:

CONSTRUCTION

Item 1)	<u>Station 0+000 to Station 9+963</u> ; Carry out excavation of the drain to remove accumulated sediment and restore the drain to the profile grade shown on the plans, including all loading, hauling, and disposal where required, and leveling of material, approximately <u>9,963</u> lineal metres (approximately 9,360 cubic metres).	Lump Sum	\$	315,000.00
Item 2)	<u>Bridge No. 2</u> ; Provide all material, equipment and labour to salvage the existing broken concrete endwall pieces and reconstruct the headwalls utilizing concrete grout and additional pieces or concrete filled jute bags as needed to create stable headwalls, complete. (Thomas Halford)	Lump Sum	\$	3,750.00
Item 3)	<u>Bridge No. 9</u> ; Provide all material, equipment and labour to repair the existing timber headwalls with pressure treated lumber, anchors, and tiebacks as needed to create stable headwalls, complete. (Gerald & Agnes Lavin)	Lump Sum	\$	3,750.00
Item 4)	<u>Bridge No. 11</u> ; Provide all material, equipment and labour to remove and dispose of the existing steel beam and timber structure and concrete abutments and restore the drain to its design cross section, including all loading, hauling, disposal, topsoil placement, seed, and mulch, complete. (Gerald & Agnes Lavin)	Lump Sum	\$	2,250.00
Item 5)	<u>Bridge No. 15</u> ; Provide all material, equipment and labour to salvage the existing broken concrete endwall pieces and reconstruct the headwalls utilizing concrete grout and additional pieces or concrete filled jute bags as needed to create stable headwalls, complete. (Kenneth & Barbara McCarthy)	Lump Sum	\$	3,750.00
Item 6)	<u>Bridge No. 16</u> ; Provide all material, equipment and labour to excavate the drain, completely remove and dispose of the existing pipe and any endwall materials, including any other deleterious material encountered; supply and install 14.0 metres of 2230mm X 1700mm, 2.8mm thick aluminized corrugated steel pipe arch with 125X26mm corrugations including Granular 'B' backfill, Granular 'A'			

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	travel surface; excavation, placement, compaction, grading; 305mm thick quarried limestone on filter cloth sloped end protection; topsoil placement, seeding and mulching, and restoration and clean up, complete. (Gerald & Agnes Lavin)	Lump Sum	\$	20,155.00
Item 7)	Bridge No. 18; Provide all material, equipment and labour to repair the drain banks adjacent to the bridge corners including placement of clay fill, compaction, and installation of approximately 20 tonnes of quarried limestone rip rap on filter cloth to protect the banks from erosion, complete. (Sandwich South Farms Ltd.)	Lump Sum	\$	1,800.00
Item 8)	Bridge No. 21; Provide all material, equipment and labour to excavate the drain, completely remove and dispose of the existing pipe and any endwall materials, including any other deleterious material encountered; supply and install 11.0 metres of 3300mm X 2080mm, 3.5mm thick aluminized corrugated steel pipe arch with 125X26mm corrugations including Granular 'B' backfill, Granular 'A' travel surface; excavation, placement, compaction, grading; precast concrete block headwalls; topsoil placement, seeding and mulching, and restoration and clean up, complete. (Wilfred O'Neil)	Lump Sum	\$	44,100.00
Item 9)	Bridge No. 25; Provide all material, equipment and labour to repair the drain bank adjacent to the northeast bridge footing at the east side including placement of clay fill, compaction, and installation of approximately 10 tonnes of quarried limestone rip rap on filter cloth to protect the bank from erosion at the footing, complete. (Town of Tecumseh)	Lump Sum	\$	900.00
Item 10)	Station 0+000 to Station 9+963; Supply and install new heavy duty H.D.P.E. plastic tile main extensions, including connections, rodent grate, removal of any deleterious materials, excavation, backfill, compaction and restoration, complete:			
	a) 3.0 metres (10') of 150mm (6") diameter pipe for 150mm diameter tiles: <u>7</u> required at <u>\$250.00</u> each		\$	1,750.00
	b) 3.0 metres (10') of 200mm (8") diameter pipe for 200mm diameter tiles: <u>19</u> required at <u>\$300.00</u> each		\$	5,700.00
	c) 3.0 metres (10') of 250mm (10") diameter pipe for 250mm diameter tiles: <u>9</u> required at <u>\$350.00</u> each		\$	3,150.00
	d) 3.0 metres (10') of 300mm (12") diameter pipe for 300mm diameter tiles: <u>7</u> required at <u>\$550.00</u> each		\$	3,850.00
Item 11)	Station 0+000 to Station 9+963; Supply and install approximately <u>222</u> lateral tile drain extensions to outlet			

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	end of damaged existing 100mm diameter lateral tiles entering the drain, including excavation, rodent grate, backfill, compaction, topsoil placement and seed and mulch, complete at \$ <u>75.00</u> each.	\$	16,650.00
Item 12)	<u>Station 0+000 to Station 9+963;</u> Supply and install approximately <u>360</u> tonnes of quarried limestone rip rap for rock chute spillways and general erosion protection, complete at \$ <u>75.00</u> per tonne.	\$	27,000.00
Item 13)	<u>Station 0+000 to Station 9+963;</u> Supply and install approximately <u>720</u> square metres of synthetic filter mat for rock chute spillways and general erosion protection, complete at \$ <u>7.00</u> per square metre.	\$	5,040.00
Item 14)	Brushing and grubbing including all disposal and clean up (approximately 9,963 lineal metres), removing and reinstalling fences, complete. Lump Sum	\$	99,650.00
Item 15)	Spread scavenged topsoil; carry out seeding and mulching on all newly excavated side slopes (approximately 9,963 lineal metres), including all harrowing, raking, preparation and clean up, complete. Lump Sum	\$	69,750.00
Item 16)	<u>Station 3+310 to Station 3+761.1;</u> Carry out all loading, hauling and disposal of the excess soil materials in accordance with Appendix "REI-F", approximately <u>236</u> cubic metres, complete. Lump Sum	\$	5,000.00
Item 17)	Estimated net Harmonized Sales Tax (1.76% H.S.T.) on construction items above. Lump Sum	\$	11,140.00
TOTAL FOR CONSTRUCTION		\$	644,135.00

INCIDENTALS

1)	Report, Estimate, & Specifications	\$	24,900.00
2)	Survey, Assistants, Expenses, and Drawings	\$	90,750.00
3)	Duplication Cost of Report and Drawings	\$	2,000.00
4)	Estimated Cost of Letting Contract	\$	1,500.00
5)	Estimated Cost of Layout and Staking	\$	2,000.00
6)	Estimated Cost of Part-Time Supervision and Inspection During Construction (based on 2 week duration)	\$	6,000.00

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7)	Estimated Net H.S.T. on Incidental Items Above (1.76%)	\$	2,238.00
8)	Estimated Cost for Excess Soils Consultant	\$	12,600.00
9)	Estimated Cost of Interim Financing	\$	1,500.00
10)	Estimated Cost of E.R.C.A. Permit	\$	1,500.00
11)	Contingency Allowance	\$	10,516.00
TOTAL FOR INCIDENTALS		\$	155,504.00
TOTAL FOR ALLOWANCES (brought forward)		\$	32,361.00
TOTAL FOR CONSTRUCTION (brought forward)		\$	644,135.00
TOTAL ESTIMATE		\$	832,000.00

X. DRAWINGS AND SPECIFICATIONS

As part of this report, we have attached design drawings for the construction of the drain improvements and farm bridge improvements. The design drawings show the subject bridges and improvement locations and the details of the work, as well as the approximate location within the watershed area. The design drawings are attached to the back of this report and are labelled **Appendix "REI-E"**.

Also attached, we have prepared Specifications which set out the required construction details for the bridge improvements and drain repair and improvements, which also include Standard Specifications labelled therein as **Appendix "REI-C"**.

XI. SCHEDULE OF ASSESSMENT

We would recommend that the Total Cost for construction of this project, including incidental costs, be charged against the lands affected in accordance with the attached Construction Schedule of Assessment. On September 22nd, 2005, the Ontario Ministry of Agriculture, Food and Rural Affairs (O.M.A.F.R.A.) issued Administrative Policies for the Agricultural Drainage Infrastructure Program (A.D.I.P.). This program has re-instated financial assistance for eligible costs and assessed lands pursuant to the Drainage Act. Sections 85 to 90 of the Drainage Act allow the Minister to provide grants for various activities under said Act. Sections 85 and 87 make it very clear that grants are provided at the discretion of the Minister. Based on the current A.D.I.P., "lands used for agricultural purposes" may be eligible for a grant in the amount of 1/3 of their total assessment. The new policies define "lands used for agricultural purposes" as those lands eligible for the "Farm Property Class Tax Rate", "Managed Forest Tax Incentive Program", or the "Conservation Land Tax Incentive Program". The Municipal Clerk provides this information to the Engineer from the current property tax roll. Properties that do not meet the criteria are not eligible for grants. In accordance with same we expect that this project will be qualified for the grant normally available for agricultural lands. The Ministry, however, is continually reviewing their policy for grants, and we recommend that the Municipality monitor the policies, and make application to the Ministry for any grant should same become available through the A.D.I.P. program or other available funds.

When maintenance work is carried out in the future on the open drain portion, the cost for said future maintenance shall be assessed in accordance with the attached "Schedule of Assessment" excluding any Special Benefit. This Schedule shall be used for all future drain work with actual future maintenance cost shared on a pro-rata basis with the values shown in this assessment schedule.

XII. FUTURE MAINTENANCE

When maintenance work is carried out in the future on the open drain portion, the cost for said future maintenance shall be assessed in accordance with the attached Schedule of Assessment excluding any Special Benefit. When future maintenance work is carried out, the assessment to the affected Owners shall be based on the actual future maintenance cost shared on a pro-rata basis with the values shown in this assessment schedule.

When maintenance work is carried out on any bridges in the future, we recommend that part of the cost be assessed as a Benefit to the abutting parcel served by the access bridge, and the remainder shall be assessed to the upstream lands and roads based on their affected area and outlet assessments as set out in the attached Schedule of Assessment. The share for Benefit and Outlet Liability shall be as set out in the Bridge Cost Sharing table below.

BRIDGE COST SHARING

<u>Bridge</u>	<u>Owners</u>	<u>Benefit to Owner</u>	<u>Outlet Upstream</u>
1	Michael Lutsch, (460-01000),	84.9%	15.1%
2	Thomas Halford, (460-01100),	91.5%	8.5%
3 & 4	Thomas & Linda Halford, (460-01200),	93.8%	6.2%
5	Rosemary Halford, (460-01300),	82.3%	17.7%
6	Thomas Halford, (460-01400),	81.0%	19.0%
7	Michael & Helen Lavin, (460-01500),	81.8%	18.2%
8	Ministry of Transportation, Ontario, (King's Highway No. 3),	98.0%	2.0%
9	Gerald & Agnes Lavin, (480-08410),	63.4%	36.6%

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10	Canada Southern Railway, (590-01000),	98.8%	2.0%
11	Removed and Abandoned	0.0%	0.0%
12	Gerald & Agnes Lavin, (480-08400),	61.4%	38.6%
13	Count of Essex, (County Road 46),	98.0%	2.0%
14	County of Essex, (County Road 17),	98.0%	2.0%
15	Kenneth & Barbara McCarthy, (520-01300),	51.9%	48.1%
16	Gerald & Agnes Lavin, (520-04700),	54.5%	45.5%
17	Ministry of Transportation, Ontario, (King's Highway No. 401),	98.0%	2.0%
18	Sandwich South Farms Ltd., (520-04500),	44.2%	55.8%
19	County of Essex, (County Road 43),	98.0%	2.0%
20	Rose Jobin, (510-01550),	43.2%	56.8%
21	Wilfred O'Neil, (510-01800),	48.7%	51.3%
22	Ruth Battersby, (510-02000),	38.0%	62.0%
23	Town of Tecumseh, (Baseline Road),	98.0%	2.0%
24	507822 Ontario Inc. & 494112 Ontario Ltd., (560-08100),	31.4%	68.6%
25	Town of Tecumseh, (12th Concession Road),	98.0%	2.0%

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We recommend that the bridge structures as identified herein, be maintained in the future as part of the drainage works. We would also recommend that the access bridges in the drain, for which the future maintenance costs are to be borne by the abutting affected landowners and upstream lands and roads, be maintained by the Town and that said maintenance would include works to the bridge culvert, bedding, backfill and end treatment. Where concrete, asphalt or other decorative driveway surfaces over the bridge culverts require removal as part of the maintenance works, these surfaces should also be repaired or replaced as part of the works. Likewise, if any fencing, gate, decorative walls, guard rails or other special features exist that will be impacted by the maintenance work, they are also to be removed and restored or replaced as part of the bridge maintenance work. However, the cost of the supply and installation of any surface material other than Granular "A" material, and the cost of removal and restoration or replacement, if necessary, of any special features, shall be totally assessed to the benefiting adjoining parcel served by said access bridge.

Where a bridge has a top width beyond the standard 6.1 metres (20 feet), all of the increased cost for providing the extra top width shall be assessed as a Benefit to the parcel served by the access bridge. Upstream lands and roads shall only be responsible for sharing in the cost of a standard top width access bridge.

The concrete bridge serving the Canada Southern Railway Parcel 590-0100 can be replaced by a single 1800mm diameter aluminized C.S.P. with 125X25 corrugations if desired by the owner. The pipe will need to be 24 metres long with sloped ends and quarried limestone on filter cloth protection and its invert embedded 10% of its diameter below the existing drain bottom or design bottom, whichever is lower. Should the Railway decide to proceed with doing the work themselves, the cost of construction will be borne by them, and they will only be responsible for any incidental costs that are incurred to ensure that the works are completed to the satisfaction of the Town Drainage Superintendent and in accordance with the requirements of this drainage report and bridge details set out in the Specifications and Appendices. If the maintenance of the bridge pipes is carried out by the Town, the cost sharing shall be as set out in the Bridge Cost Sharing table as noted above.

We further recommend that the maintenance cost sharing as set out above shall remain as aforesaid until otherwise determined and re-established under the provisions of the "Drainage Act, R.S.O. 1990, Chapter D.17".

All of which is respectfully submitted.

Rood Engineering Inc.



Gerard Rood, P.Eng.



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att.

ROOD ENGINEERING INC.

Consulting Engineers
9 Nelson Street
LEAMINGTON, Ontario N8H 1G6

SCHEDULE OF ASSESSMENT
SULLIVAN CREEK DRAIN
(Geographic Township of Sandwich South)
TOWN OF TECUMSEH

2. ONTARIO LANDS:

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Acres Afft'd	Hectares Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
King's Highway 401			12.08	29.86	Ministry of Transportation Ontario	\$ 2,911.00	\$ 17,437.00	\$ 3,436.00	\$ 23,784.00
King's Highway #3			5.70	14.08	Ministry of Transportation Ontario	\$ 1,020.00	\$ 8,221.00	\$ 3,394.00	\$ 12,635.00
Total on Ontario Lands.....						\$ 3,931.00	\$ 25,658.00	\$ 6,830.00	\$ 36,419.00

3. MUNICIPAL LANDS:

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
County Road 46			2.75	6.79	County of Essex	\$ 1,020.00	\$ 3,964.00	\$ 1,995.00	\$ 6,979.00
County Road 17			3.17	7.83	County of Essex	\$ 728.00	\$ 4,571.00	\$ 1,941.00	\$ 7,240.00
County Road 43			5.67	14.00	County of Essex	\$ 58.00	\$ 8,174.00	\$ 1,496.00	\$ 9,728.00
Sexton Sideroad			2.22	5.49	Town of Tecumseh	\$ 583.00	\$ 3,205.00	\$ 726.00	\$ 4,514.00
Baseline Road			4.88	12.06	Town of Tecumseh	\$ 2,010.00	\$ 7,041.00	\$ 1,185.00	\$ 10,236.00
South Talbot Road			2.86	7.07	Town of Tecumseh	\$ 364.00	\$ 4,128.00	\$ 1,438.00	\$ 5,930.00
12th Concession Road			0.14	0.34	Town of Tecumseh	\$ 1,850.00	\$ 199.00	\$ 1,049.00	\$ 3,098.00
Total on Municipal Lands.....						\$ 6,613.00	\$ 31,282.00	\$ 9,830.00	\$ 47,725.00

4. PRIVATELY OWNED - NON-AGRICULTURAL LANDS:

Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
460-01100	STR	298	0.190	0.47	Thomas Halford	\$ 277.00	\$ 367.00	\$ 4,166.00	\$ 4,810.00
460-01300	STR	298	0.465	1.15	Rosemary Halford	\$ 68.00	\$ 720.00	\$ 1,108.00	\$ 1,896.00
460-01800	STR	299	0.518	1.28	Frank Lafferty In Trust	\$ -	\$ 646.00	\$ 108.00	\$ 754.00
460-01801	STR	299	0.595	1.47	Ministry of Transportation	\$ -	\$ 714.00	\$ 121.00	\$ 835.00

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Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
480-08200	NTR	298	0.502	1.24	Alexander Chevalier & Jessie Darmon	\$ -	\$ 665.00	\$ 105.00	\$ 770.00
480-08250	NTR	298	0.178	0.44	Ali Khafaja	\$ -	\$ 323.00	\$ 51.00	\$ 374.00
480-08500	NTR	299	26.382	65.19	Joseph McCarthy	\$ 10,003.00	\$ 12,788.00	\$ 4,636.00	\$ 27,427.00
480-08611	STR	292	0.259	0.64	Ministry of Transportation	\$ -	\$ 395.00	\$ 51.00	\$ 446.00
480-08700	NTR	299	0.190	0.47	David & Margaret Pringle	\$ -	\$ 316.00	\$ 41.00	\$ 357.00
480-08750	NTR	299	0.299	0.74	Joseph & Marilyn McCarthy	\$ -	\$ 442.00	\$ 57.00	\$ 499.00
480-08801	NTR	299	4.395	10.86	Josef Dworatschek	\$ -	\$ 2,029.00	\$ 262.00	\$ 2,291.00
480-08803	NTR	299	0.405	1.00	Kevin & Melissa McCarthy	\$ -	\$ 560.00	\$ 72.00	\$ 632.00
480-08900	NTR	299	15.722	38.85	Ravinder & Mavi Singh	\$ 1,769.00	\$ 7,258.00	\$ 940.00	\$ 9,967.00
480-09010	NTR	298	0.498	1.23	Tammy & John Flood	\$ -	\$ 617.00	\$ 79.00	\$ 696.00
480-09100	NTR	298	0.210	0.52	Jason & Wendy Hill	\$ -	\$ 328.00	\$ 43.00	\$ 371.00
480-09110	NTR	298	0.210	0.52	Jacqueline Mailloux	\$ -	\$ 328.00	\$ 43.00	\$ 371.00
490-00100	NTR	300	0.401	0.99	Khmer Buddhist Santivararam Windsor 2016	\$ -	\$ 555.00	\$ 71.00	\$ 626.00
510-01590	11	13	0.680	1.68	Philip Jobin	\$ 99.00	\$ 662.00	\$ 59.00	\$ 820.00
510-02010	11	16	0.409	1.01	Laurie Knight	\$ 12.00	\$ 424.00	\$ 1.00	\$ 437.00
520-00900	10	9 & 10	0.405	1.00	Hardershan Brar	\$ -	\$ 557.00	\$ 72.00	\$ 629.00
520-01000	10	10	0.045	0.11	Union Gas Limited	\$ 3.00	\$ 108.00	\$ 13.00	\$ 124.00
520-01100	10	10	0.405	1.00	Guy & Tina Robertson	\$ 18.00	\$ 546.00	\$ 72.00	\$ 636.00
520-01210	10	11	0.421	1.04	Charles Matthews	\$ 61.00	\$ 542.00	\$ 72.00	\$ 675.00
520-01301	10	12	0.773	1.91	Barbara McCarthy	\$ 34.00	\$ 728.00	\$ 66.00	\$ 828.00
520-01350	10	12	0.469	1.16	Roger Lemmon	\$ 7.00	\$ 558.00	\$ 49.00	\$ 614.00
520-03400	10	16	0.089	0.22	Joseph & Helen Diesbourg	\$ -	\$ 136.00	\$ -	\$ 136.00
520-03800	10	16	0.101	0.25	Jacob Carlesimo	\$ -	\$ 151.00	\$ -	\$ 151.00
520-03901	10	16	0.405	1.00	Clifford & Connie Campeau	\$ -	\$ 420.00	\$ 1.00	\$ 421.00
520-03920	10	15	0.271	0.67	Herbert Henricks & Marianne Scarpelli	\$ 4.00	\$ 310.00	\$ 1.00	\$ 315.00
520-04250	10	15	0.502	1.24	Jeremy Knezev	\$ 7.00	\$ 469.00	\$ 1.00	\$ 477.00
520-04300	10	15	0.405	1.00	Luigina Gobbo	\$ 6.00	\$ 420.00	\$ 1.00	\$ 427.00
520-04550	10	13	0.251	0.62	Brian Chittle	\$ 37.00	\$ 325.00	\$ 30.00	\$ 392.00
520-04600	10	13	0.656	1.62	Steno Novelletto & Rosanne St.Louis	\$ 48.00	\$ 648.00	\$ 56.00	\$ 752.00
520-04750	10	12	0.506	1.25	Thomas & Mary Moore	\$ -	\$ 556.00	\$ 50.00	\$ 606.00

Schedule of Assessment - Sullivan Creek Drain
(Geographic Township of Sandwich South)
Town of Tecumseh

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Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
530-04800	9	10	0.405	1.00	Lee Simpson	\$ 29.00	\$ 553.00	\$ 72.00	\$ 654.00
560-08500	18	12	0.405	1.00	Mario & Deana Liburdi	\$ 775.00	\$ 231.00	\$ -	\$ 1,006.00
560-00300	10	17	1.012	2.50	Crossway Church	\$ -	\$ 771.00	\$ 2.00	\$ 773.00
560-04000	11	17	15.929	39.36	Norman, Rose, Philip & Paul Jobin	\$ 12,165.00	\$ 5,423.00	\$ 12.00	\$ 17,600.00
560-04010	11	17	0.490	1.21	Derek Battersby & Brittney Brown	\$ -	\$ 458.00	\$ 1.00	\$ 459.00
Windsor									
030-06300	10	16	0.409	1.01	Robert & Judy-Ann Coupe	\$ -	\$ 410.00	\$ 1.00	\$ 411.00
030-06400	1351	45 & 46	0.134	0.33	Thomas Crouchman	\$ -	\$ 180.00	\$ -	\$ 180.00
030-06500	1351	47	0.235	0.58	Gregory Maxwell	\$ -	\$ 276.00	\$ 1.00	\$ 277.00
030-06700	10	16	0.138	0.34	Rousian Rakhoutine & Lilia Demeneva	\$ -	\$ 186.00	\$ -	\$ 186.00
Total on Privately Owned - Non-Agricultural Lands.....						\$ 25,422.00	\$ 45,099.00	\$ 12,587.00	\$ 83,108.00

5. PRIVATELY OWNED - AGRICULTURAL LANDS (grantable):

460-01000	STR	297	8.09	20.00	Michael Lutsch	\$ 3,260.00	\$ 3,951.00	\$ 1,257.00	\$ 8,468.00
460-01200	STR	298	13.58	33.55	Thomas & Linda Halford	\$ 2,991.00	\$ 7,287.00	\$ 2,124.00	\$ 12,402.00
460-01400	STR	298	10.52	26.00	Thomas Halford	\$ 2,813.00	\$ 5,586.00	\$ 1,902.00	\$ 10,301.00
460-01500	STR	298	16.19	40.00	Michael & Helen Lavin	\$ 10,277.00	\$ 8,407.00	\$ 2,294.00	\$ 20,978.00
460-01600	STR	299	20.23	50.00	John Lafferty	\$ 10,277.00	\$ 10,392.00	\$ 1,597.00	\$ 22,266.00
460-01601	STR	299	0.17	0.43	Frank & Catherine Lafferty	\$ -	\$ 297.00	\$ 51.00	\$ 348.00
460-01700	STR	299	0.43	1.07	Frank Lafferty Limited	\$ -	\$ 580.00	\$ 99.00	\$ 679.00
460-01900	STR	299	14.08	34.78	Catherine Lafferty	\$ -	\$ 6,498.00	\$ 1,108.00	\$ 7,606.00
460-01901	STR	299	11.85	29.27	538073 Ontario Inc.	\$ 1,512.00	\$ 5,844.00	\$ 934.00	\$ 8,290.00
460-02000	STR	299	11.74	29.00	Catherine Lafferty & Mary Thompson	\$ 9,071.00	\$ 5,892.00	\$ 927.00	\$ 15,890.00
460-02100	STR	298	9.71	24.00	538073 Ontario Inc.	\$ 9,941.00	\$ 8,229.00	\$ 767.00	\$ 18,937.00
480-08300	NTR	298	41.68	102.98	Sandwich South Farms Inc.	\$ 3,878.00	\$ 19,120.00	\$ 3,122.00	\$ 26,120.00
480-08400	NTR	298	7.52	18.58	Gerald & Agnes Lavin	\$ 8,375.00	\$ 3,493.00	\$ 1,186.00	\$ 13,054.00
480-08410	NTR	298	18.47	45.65	Gerald & Agnes Lavin	\$ 13,551.00	\$ 8,849.00	\$ 1,457.00	\$ 23,857.00

Schedule of Assessment - Sullivan Creek Drain
(Geographic Township of Sandwich South)
Town of Tecumseh

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Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
480-08600	NTR	299	12.61	31.15	Richard McCarthy	\$ 243.00	\$ 5,820.00	\$ 866.00	\$ 6,929.00
480-08800	NTR	299	19.83	49.00	538073 Ontario Inc.	\$ 3,802.00	\$ 9,441.00	\$ 1,379.00	\$ 14,622.00
480-09000	NTR	298	10.32	25.51	Rose M, Philip N, & Paul J. Jobin & Joie Reyner	\$ -	\$ 4,736.00	\$ 616.00	\$ 5,352.00
490-10200	NTR	300	1.62	4.00	538073 Ontario Inc.	\$ -	\$ 1,345.00	\$ 174.00	\$ 1,519.00
490-10300	NTR	300	19.49	48.16	Robert & Richard McCarthy	\$ -	\$ 8,998.00	\$ 1,165.00	\$ 10,163.00
510-01500	11	13	16.41	40.54	Norman, Rose, Philip, Paul, Joie & Joslyne Jobin	\$ 1,993.00	\$ 6,438.00	\$ 576.00	\$ 9,007.00
510-01550	11	13	6.37	15.75	Rose Jobin	\$ 4,598.00	\$ 2,464.00	\$ 729.00	\$ 7,791.00
510-01600	11	14	16.42	40.57	Paul & Rose Jobin	\$ 6,333.00	\$ 6,253.00	\$ 561.00	\$ 13,147.00
510-01610	11	14	0.40	0.99	Philip Jobin	\$ 72.00	\$ 465.00	\$ 41.00	\$ 578.00
510-01700	11	14	8.09	20.00	Wilfred O'Neil	\$ 5,317.00	\$ 3,059.00	\$ 277.00	\$ 8,653.00
510-01800	11	15	8.09	20.00	Wilfred O'Neil	\$ 5,133.00	\$ 3,013.00	\$ 25,500.00	\$ 33,646.00
510-01900	11	15	8.09	20.00	Wilfred O'Neil	\$ 4,794.00	\$ 2,989.00	\$ 13.00	\$ 7,796.00
510-02000	11	15	15.99	39.50	Ruth Battersby	\$ 12,148.00	\$ 5,812.00	\$ 476.00	\$ 18,436.00
510-02005	11	15	0.20	0.50	James Battersby	\$ 9.00	\$ 255.00	\$ 1.00	\$ 265.00
510-02100	11	16	22.26	55.00	Helene Battersby	\$ 17,170.00	\$ 7,835.00	\$ 18.00	\$ 25,023.00
520-00700	10	10	21.19	52.36	Rose Jobin	\$ 1,680.00	\$ 9,538.00	\$ 1,262.00	\$ 12,480.00
520-00750	10	10	20.29	50.13	Rose, Philip & Paul Jobin & Jobin Farms Inc.	\$ 1,596.00	\$ 9,249.00	\$ 1,209.00	\$ 12,054.00
520-01300	10	11 & 12	48.39	119.56	Kenneth & Barbara McCarthy	\$ 34,771.00	\$ 20,383.00	\$ 5,026.00	\$ 60,180.00
520-03500	10	16	8.50	21.00	Clifford & Connie Campeau	\$ -	\$ 2,943.00	\$ 6.00	\$ 2,949.00
520-03900	10	16	11.01	27.20	Clifford & Connie Campeau	\$ -	\$ 3,811.00	\$ 8.00	\$ 3,819.00
520-04000	10	15	9.85	24.33	Susanna MacKenzie-Russell	\$ 92.00	\$ 3,409.00	\$ 7.00	\$ 3,508.00
520-04100	10	15	9.92	24.50	Sanward Enterprises Inc.	\$ 111.00	\$ 3,433.00	\$ 7.00	\$ 3,551.00
520-04200	10	15	19.33	47.76	Edward Chittle Jr.	\$ 144.00	\$ 6,692.00	\$ 14.00	\$ 6,850.00
520-04400	10	14	40.47	100.00	Norman Jobin	\$ 722.00	\$ 15,297.00	\$ 1,387.00	\$ 17,406.00
520-04500	10	12 & 13	40.41	99.85	Sandwich South Farms Ltd.	\$ 15,126.00	\$ 16,090.00	\$ 2,387.00	\$ 33,603.00
520-04700	10	12	63.13	156.00	Gerald & Agnes Lavin	\$ 10,994.00	\$ 25,867.00	\$ 16,384.00	\$ 53,245.00
520-04800	10	11	30.35	75.00	Wayne & Carol O'Neil	\$ 67.00	\$ 12,611.00	\$ 1,673.00	\$ 14,351.00
530-00100	9	10	25.90	64.00	Diklich Capital Corp	\$ 12,584.00	\$ 11,658.00	\$ 1,545.00	\$ 25,787.00
560-03900	10	17	2.41	5.95	Susanna Mackenzie	\$ -	\$ 834.00	\$ 2.00	\$ 836.00
530-04770	9	11	0.27	0.66	Sanward Enterprises Inc.	\$ 19.00	\$ 389.00	\$ 54.00	\$ 462.00

Schedule of Assessment - Sullivan Creek Drain
(Geographic Township of Sandwich South)
Town of Tecumseh

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Tax Roll No.	Con. or Plan No.	Lot or Part of Lot	Hectares Afft'd	Acres Afft'd	Owner's Name	Value of Benefit	Value of Outlet	Value of Special Benefit	TOTAL VALUE
530-04775	9	11	0.30	0.74	Edward Chittle Jr.	\$ 44.00	\$ 426.00	\$ 57.00	\$ 527.00
560-08000	11	18	0.40	1.00	Mary McGraw	\$ 1,336.00	\$ 131.00	\$ -	\$ 1,467.00
560-08100	11	17	16.19	40.00	507822 Ontario Inc. & 494112 Ontario Limited	\$ 8,966.00	\$ 5,418.00	\$ 383.00	\$ 14,767.00
560-08200	11	17	8.09	20.00	Phyllis Battersby, Wendy Philips & Cindy Walton	\$ 3,744.00	\$ 2,709.00	\$ -	\$ 6,453.00
Windsor									
030-04700	10	12	2.19	5.40	Sandwich South Farms Ltd.	\$ 211.00	\$ 1,135.00	\$ 2.00	\$ 1,348.00
030-04800	10	12 & 13	6.59	16.28	1027414 Ontario Inc.	\$ -	\$ 2,281.00	\$ 5.00	\$ 2,286.00
030-05000	10	13	16.19	40.00	Paul & Philip Jobin	\$ -	\$ 5,605.00	\$ 12.00	\$ 5,617.00
030-05200	10	13	8.09	20.00	John Wilson	\$ -	\$ 2,802.00	\$ 6.00	\$ 2,808.00
030-05400	10	14	15.38	38.00	Norbert St.Louis	\$ -	\$ 5,325.00	\$ 11.00	\$ 5,336.00
030-05600	10	14	11.74	29.00	Gerald Lavin	\$ -	\$ 4,064.00	\$ 9.00	\$ 4,073.00
030-05850	10	15	6.07	15.00	2017345 Ontario Limited	\$ -	\$ 2,102.00	\$ 5.00	\$ 2,107.00
030-06000	10	15	6.07	15.00	2017345 Ontario Inc.	\$ -	\$ 2,102.00	\$ 5.00	\$ 2,107.00
030-06110	10	15	11.41	28.20	5040815 Ontario Limited	\$ -	\$ 3,951.00	\$ 9.00	\$ 3,960.00
030-06200	10	16	2.01	4.96	2187065 Ontario Ltd.	\$ -	\$ 695.00	\$ 1.00	\$ 696.00
030-06600	1351	48	10.36	25.59	Joseph & Brenda Gagnon	\$ -	\$ 3,586.00	\$ 8.00	\$ 3,594.00
Total on Privately Owned - Agricultural Lands (grantable).....						\$ 229,765.00	\$ 347,884.00	\$ 82,701.00	\$ 660,350.00
5. PRIVATELY OWNED - AGRICULTURAL LANDS (non-grantable):									
590-01000	STR	298, 299, 300	2.83	7.00	Canada Southern Railway Co.	\$ 1,137.00	\$ 1,324.00	\$ 1,376.00	\$ 3,837.00
590-01200	NTR	298	0.70	1.74	Town of Tecumseh	\$ 41.00	\$ 461.00	\$ 59.00	\$ 561.00
Total on Privately Owned - Agricultural Lands (non-grantable).....						\$ 1,178.00	\$ 1,785.00	\$ 1,435.00	\$ 4,398.00
TOTAL ASSESSMENT			943.29	2330.88		\$ 266,909.00	\$ 451,708.00	\$ 113,383.00	\$ 832,000.00

1 Hectare = 2.471 Acres
Project No. REI2015D010
January 9th, 2023

SPECIFICATIONS

SULLIVAN CREEK DRAIN

(Geographic Township of Sandwich South)

TOWN OF TECUMSEH

I. GENERAL SCOPE OF WORK

The Sullivan Creek Drain currently comprises of an open drain with the upper end generally located approximately 740 metres east of Sexton Road and 400 metres south of County Road 46, it meanders northeasterly for approximately 5 km where it outlets to the Pike Creek Drain at a point approximately 760 metres north of Baseline Road and 480 metres west of County Road 19 respectively, in the geographic township of Sandwich South, Town of Tecumseh. The work on the drain will extend from the outlet as noted on the plans and proceed southerly to the upstream end of the open drain. The work under this project generally comprises of improvements to the open drain to provide a suitable cross section for conveyance of flows, along with removal of a farm bridge along the course of the drain. The installation of two new replacement bridges has already been completed due to emergency needs. The work on the bridge being taken out includes the removal and disposal of all existing deck structure including the poured concrete abutment walls and the removal of any other materials to allow for the drain open cross section to be restored. Work on the drain includes supply and installation of quarried limestone on filter cloth general erosion protection and rock chute inlets. The proposed work is intended to address the repair and improvement of the open drain, tile end improvements, bridge repairs and improvements including headwall work and erosion protection in accordance with current standards.

All work shall be carried out in accordance with these specifications, the plans forming part of this drainage project, as well as the Standard Details included in **Appendix "REI-C"**. The excess soil to be loaded up and hauled away for disposal shall be carried out in accordance with the requirements set out in the WSP report included in **Appendix "REI-F"**. All work carried out under this project shall be completed to the full satisfaction of the Town Drainage Superintendent and the Consulting Engineer.

II. E.R.C.A. AND D.F.O. CONSIDERATIONS

The Contractor will be required to implement stringent erosion and sedimentation controls during the course of the work to help minimize the amount of silt and sediment being carried downstream into the Pike Creek Drain. It is intended that work on this project be carried out during relatively dry weather to ensure 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 sites 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 Essex Region Conservation Authority (E.R.C.A.) or the Department of Fisheries and Oceans (D.F.O.), copies of which will be provided, if available, and the notes in **Appendix "REI-A"**. The Contractor is advised that **no work** may be carried out in the existing drain **from March 15th to July 15th** of any given year because the drain is directly connected to a downstream drain that is classified as sensitive to impacts on aquatic life and habitat by E.R.C.A. and D.F.O. and Largemouth Bass may be present as advised by D.F.O.

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

- a) As per standard requirements, work will not be conducted at times when flows in the drain are elevated due to local rain events, storms, or seasonal floods. Work will 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 to 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 their Contractors to ensure that sediment and erosion control measures are functioning properly and are maintained and 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.
- f) The Contractor shall construct six (6) sediment/refugia pools along the lower portion of the drain located near Stations 3+360, 4+360, 5+360, 6+360, 7+360 and 8+360. Each pool shall be centred in the drain and be 3 metres long and 300mm deep with 1:1 side slopes with a minimum bottom width of 600mm for drain design bottom width of 1.2m, and 800mm for drain design bottom width of 1.4m.

III. M.N.R.F. – M.E.C.P. CONSIDERATIONS

The Contractor is to note that this project has gone through the Ministry of Natural Resources and Forestry (M.N.R.F.) screening process by way of a Species at Risk (S.A.R.) review of the Mitigation Plan for Drainage Works (March 2018-17-4938) that the Town has prepared to address the Endangered Species Act, 2007, that is now administered by the Ministry of Environment, Conservation and Parks (M.E.C.P.). Section 6.0 of the Mitigation Plan indicates that snake species are a concern for this work area and although turtles are not indicated, they are mobile and could be encountered. The Mitigation Plan includes measures to be followed as outlined in “Section 7.0 Mitigation Measures” of the document and a copy of same as it relates to turtles and snakes is included in **Appendix “REI-B”**. Providing mitigation requirements are implemented, it was concluded that present wildlife Species at Risk will be protected from negative impacts and the works will not contravene Section 9 (species protection) or Section 10 (habitat protection) of the Endangered Species Act, 2007. Based on this information we find that the Town can proceed with the eligible repairs, maintenance, and improvements to the drain as they are exempt under Sections 9 and 10 of the Act, provided that they follow the rules within Ontario Regulation 242/08 and the Mitigation Measures in their S.A.R. Mitigation Plan. To address these requirements the Town has established comprehensive mitigation measures as well as species identification guides for reference. The results of the review will be provided to the Contractor and copies of the mitigation measures, habitat protection and identification sheets will be included within **Appendix “REI-B”**.

The Contractor is to review **Appendix “REI-B”** in detail and is required to comply, in all regards, with the contents of said M.N.R.F. information, or any future requirements, and follow the special

requirements therein included, during construction. The Drainage Superintendent has reviewed the endangered species maps and any concerns will be provided in **Appendix “REI-B”**. Certain species such as turtles and snakes are mobile and may be encountered during construction. Therefore, the Mitigation Measures in Section 7.0 of the Town Plan has been included in **Appendix “REI-B”** in its entirety along with timing window charts for further information and use by the Contractor.

The Contractor shall contact the Drainage Superintendent if an endangered species is encountered during construction. The Contractor shall be responsible for providing the necessary equipment and materials outlined in the **“MITIGATION PLAN”** to address the handling of any endangered species encountered during the course of the construction work. The Contractor shall cooperate fully and assist the Drainage Superintendent or M.N.R.F. – M.E.C.P. staff in the proper handling of the endangered species as outlined in the **“MITIGATION PLAN”**, and as may be further directed by the Drainage Superintendent or the M.N.R.F. – M.E.C.P. staff and shall govern all its operations accordingly.

IV. ACCESS TO WORK

The Contractor is advised that the majority of the work to be carried out on this project extends along the north and west side of the Sullivan Creek Drain except for the portion between Bridge 19 and 20 that will be completed from the east side and from Highway No. 3 to County Road 46 along the easterly side. For the lawn areas in front of MN 5580, 5660 and 5680, the Contractor shall carry out its work from the roadside and load up and haul away and dispose of the excavated material and any material from cleaning out the culverts located in the drain. Where lands on both sides of the drain belong to the same landowner, the landowner may request work to be done from the other side of the drain and the Contractor shall coordinate this with the landowner. The Contractor shall have access for a minimum width of 8 metres (26 feet) abutting the proposed drainage works. The Contractor may utilize the work area as necessary, to permit the completion of all of the work required to be carried out for this project along with an area sufficient to spread the excavated material to a maximum depth of 100mm on the adjacent lands beyond any grass buffer or driveway access. The Contractor shall also have access through the driveways from the roads along the works as necessary to access the open drain and carry out the replacement and removal and repair of the existing access bridges as set out on the plans and in these specifications, along with a sufficient area in the vicinity of the bridges to carry out the improvements of the structure and ancillary work.

The Contractor shall ensure that the traveling public is protected at all times while utilizing the roadway for its access. The Contractor shall provide traffic control, including flag persons when required.

Throughout the course of the work, it is imperative that the Contractor protect as much landscaping and vegetation as possible when accessing along the drain. This will be of particular concern along the grass buffer and driveway areas abutting the drain. Any accesses or areas used in carrying out the works are to be fully restored to their original conditions by the Contractor at its cost, including topsoil placement and lawn restoration as directed by the Town Drainage Superintendent and the Consulting Engineer. Restoration shall include but not be limited to all necessary levelling, grading, shaping, topsoil placement, seeding, mulching, and granular placement required to make good any damage caused.

V. REMOVAL OF BRUSH, TREES AND RUBBISH

Where there is any brush, trees or rubbish along the course of the drainage works from top of bank to top of bank, including the full width of the work access, all such brush, trees or rubbish shall be close cut and grubbed out, and the whole shall be chipped up for recycling, burned or

otherwise satisfactorily disposed of by the Contractor. The brush and trees removed along the course of the work are to be cut as close to the ground as practicable and within the drain banks parallel to the side slopes. Except as noted herein, stumps shall be left in place and shall be sprayed with a single application of stump killer (Diphenoprop BK700 or approved equal). Dead trees on the top of each bank and any trees or tree branches that overhang the drain shall be removed and trimmed. All removed materials shall be put into piles by the Contractor in locations adjacent to the drain and within the working corridors, where they can be safely chipped and disposed of, or burned by it, or hauled away and disposed of by the Contractor to a site to be obtained by it at its expense. In all cases, trees and brush shall be stockpiled on the property on which they were cut. Prior to and during the course of any burning operations, the Contractor shall comply with the guidelines prepared by the Air Quality Branch of the Ontario Ministry of the Environment and shall ensure that the Environmental Protection Act is not violated. The Contractor shall assume all responsibility for control of the burn, obtaining all utility locates in the area of each burn site, all responsibility for liabilities related to the burning of the brush and smoke generated, and will be required to notify the local fire authorities to obtain any permits and co-operate with them in the carrying out of any work. The removal of brush and trees shall be carried out in close consultation with the Town 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 on private lands adjacent to the drain and within the working corridors, especially mature trees beyond the drain sideslopes.

The Contractor shall protect all other trees, bushes, and shrubs located along the length of the drainage works except for those trees that are established, in consultation with the Town Drainage Superintendent, the Consulting Engineer, and the Owners, to be removed as part of the works. The Contractor shall note that protecting and saving the trees may require the Contractor to carry out hand work around the trees, bushes, and shrubs to complete the necessary final site grading and restoration.

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 Contractor shall remove all deleterious materials and rubbish along the course of the open drain and any such materials located in the bridge culverts and enclosures while carrying out its cleaning of same. All such deleterious materials and rubbish shall be loaded up and hauled away by the Contractor to a site to be obtained by it at its cost in accordance with excess materials regulations.

VI. FENCING

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

VII. DETAILS OF OPEN DRAIN WORK

The open drain shall be excavated to the lines, levels, grades, and cross-sections as shown on the accompanying drawings, or as may be further established by the Town Drainage Superintendent

or the Engineer at the time of the work. The drain shall be carefully excavated so as not to disturb the existing banks, rock protection and vegetation, except for those portions of the drain where widening or restoration of a stable drain bank configuration is required. The bottom width of the drain and the sideslopes of the excavation shall conform to the dimensions given on the drawings.

The Contractor is advised that there is a high pressure gas line crossing under the drain just south of County Road 46 and this will require the Contractor to coordinate with Enbridge Gas for 3rd party inspection when working within 30m (100') of the gas line crossing. The Contractor will be responsible to arrange for the necessary locates of all utilities in the vicinity of the drain along its complete length and shall take appropriate steps to protect them during the course of its works on the drain.

The drain shall be of the size, type, depth, etcetera as shown on the accompanying drawings. When completed, the drain shall have a uniform and even bottom and in no case shall such bottom project above the grade line, as shown on the accompanying drawings, and as determined from the Benchmarks. The finished side slopes of the drain shall be 1.5 metres horizontal to 1.0 metre vertical.

The excavated material to be cast onto the adjoining lands shall be well and evenly spread over a sufficient area so that no portion of the excavated earth is more than 100mm in depth. The material shall be kept at least 1.2 metres clear from the finished edge of the drain, care being taken not to fill up any existing tiles, ditches, furrows or drains with the excavated material. The excavated material to be spread upon the lands shall be free from rocks, cobbles, boulders, stumps, rubble, rubbish or other similar material and these materials, if encountered, shall be hauled away by the Contractor and disposed of at a site to be obtained by it at its expense.

Where the drain crosses any lawn, garden, orchard, parking, roadway or driveway areas, the excavated material for the full width of the above-mentioned areas shall be hauled away by the Contractor and disposed of to a site to be obtained by the Contractor at its expense. All work at the disposal site shall be established between the Contractor and the site owner. The Contractor shall be responsible for any permits required and shall provide copies of same to the Town and Consulting Engineer when requested. The handling of these excess soils shall be conducted in accordance with the requirements set out in **Appendix "REI-F"**. Materials from Zone 1 can be placed on the adjacent lands. Material from Zone 3 will be loaded up and hauled away for disposal at the County landfill site.

Where there is any brush or rubbish in the course of the drain, including both side slopes of the drain, all such brush or rubbish shall be close cut and grubbed out. Where there is any brush or rubbish where the earth is to be spread, or on that strip of land between where the earth is to be spread and the edge of the drain, all such brush or rubbish shall be close cut and grubbed out. The whole is to be burned, chipped, or otherwise satisfactorily disposed of by the Contractor.

VIII. DETAILS OF BRIDGE WORK

The Contractor shall completely remove and dispose of Bridge 11 at the north side of the former railway property. The Contractor shall load up and haul away all deleterious material from the bridge site as set out further in these specifications. The drain cross section in the location of the bridge shall be restored in accordance with the profile and the new exposed banks restored as noted in these specifications.

For future works the existing concrete, steel or H.D.P.E. pipes shall be removed and disposed of by the Contractor, along with any other deleterious materials that are encountered. The bridge shall be replaced in accordance with the profile and detail plans including the 10% embedment and the new exposed banks restored as noted in these specifications.

The Contractor will be responsible to restore any damage caused to the roadways at its cost. All damaged hard surface roadway areas shall be neatly saw cut and the damaged materials

removed and disposed of by the Contractor prior to carrying out any restoration work. The extent of the repairs shall be established in consultation with the Town Drainage Superintendent, the Road Authority, and the Consulting Engineer and the repairs shall be completed to their full satisfaction.

The Contractor is to note that any intercepted tiles or pipes along the length of the future replacement culverts are to be extended and connected through rock protection at its cost unless otherwise noted in the accompanying drawings.

IX. CORRUGATED STEEL PIPE INSTALLATION

The new corrugated steel pipes (CSP) to be installed on this project are required to be provided in the longest lengths that are available and shall not be less than 3.0 metres. Where the overall access pipe length exceeds the standard pipe lengths, the Contractor shall connect the pipe sections together by use of a manufactured 9-C bolted coupler installed in accordance with the manufacturer's recommendations. All coupler joints shall be wrapped with a layer of filter cloth around the complete circumference so that it extends a minimum of 100mm beyond the coupler on each end, to ensure a positive seal against soil migration through the joints.

The Contractor shall note that the placement of any new culvert pipe shall be performed totally in the dry and it shall be prepared to take whatever steps are necessary to ensure same, all to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer. As part of the work, the Contractor will be required to clean out the drain along the full length of the pipe and for a distance of 3.05 metres (10 ft.) upstream and downstream of the pipe. The Contractor shall note that the pipe inverts are set at least 10% of the pipe diameter (or the pipe rise) below the drain bottom to provide the embedment required by E.R.C.A. and D.F.O. and to meet the minimum cover requirements for the pipe.

The installation of the complete length of the new culvert pipe, including all appurtenances, shall be completely inspected by the Town Drainage Superintendent or the Consulting Engineer's Inspector prior to backfilling any portions of same. Under no circumstance shall the Contractor commence the construction or backfill of the new culvert pipe without the site presence of the Town Drainage Superintendent or the Consulting Engineer's Inspector to inspect and approve said installation. The Contractor shall provide a minimum of two (2) working days' notice to the Town Drainage Superintendent or the Consulting Engineer prior to commencement of the work. The installation of the new culvert structure is to be performed during normal working hours of the Town Drainage Superintendent and the Consulting Engineer from Monday to Friday unless written authorization is provided by them to amend said working hours.

For the access bridge installation, once the new aluminized steel type II corrugated pipe has been satisfactorily set in place, the Contractor shall completely backfill same with granular material M.T.O. Type "B" O.P.S.S. Form 1010 with the following exception. The top 305mm (12") of the backfill material for the full top width of the access, and the full top width of the drain or the excavated trench, and any approaches to the south and transitions to the north shall be granular material M.T.O. Type "A" O.P.S.S. Form 1010. All of the driveway approach areas extending from the Town roadway to the south face of the new bridge culvert shall be backfilled with compacted granular material M.T.O. Type "A" O.P.S.S. Form 1010, but only after all topsoil material has been completely removed and disposed of, and the minimum thickness of this granular material shall be 305mm (12"). All areas outside of the access driveway shall be backfilled with native material compacted to 96% of Standard Proctor Density and topped with a minimum of 50mm of topsoil and shall be seeded and mulched.

For hard surface driveway crossings, the top 305mm (12") of the backfill over the pipe below the hard surface treatment shall comprise granular material M.T.O. Type "A" O.P.S.S. Form 1010 compacted to a minimum of 100% Standard Proctor Density. The Contractor shall at all times be very careful when performing its backfilling and compaction operations so that no damage is caused to the pipe. To ensure that no damage is caused to the proposed pipe, alternative methods of achieving the required backfill compaction shall be submitted to the Consulting Engineer or the

Town Drainage Superintendent for their approval prior to the commencement of this work. The Contractor shall restore the asphalt surface by placing a minimum of the existing thickness or a 90mm minimum thickness of Type HL-4 hot mix asphalt. The asphalt shall be supplied and placed in two (2) approximately equal lifts compacted to a value ranging from 92% to 96% of maximum relative density as per O.P.S.S. 310. For existing concrete driveways, the Contractor shall carefully remove the concrete to the nearest expansion joint. The concrete driveway shall be restored to the original length and width that was removed and include 150mm thick, 30MPa concrete, with 6% \pm 1% air entrainment and 6x6-6/6 welded wire fabric reinforcing installed at the midpoint of the slab. All slab surfaces shall be finished to provide an appearance approximating the finish on the existing concrete driveway abutting the replacement.

The Contractor will be responsible to restore any damage caused to the roadways at its cost. All damaged hard surface roadway areas shall be neatly saw cut and the damaged materials removed and disposed of by the Contractor prior to carrying out any restoration work. The extent of the repairs shall be established in consultation with the Town Drainage Superintendent, the Road Authority, and the Consulting Engineer and the repairs shall be completed to their full satisfaction.

The Contractor is to note that any intercepted pipes or tiles along the length of the proposed culvert are to be extended and connected at its cost to the open drain at the end of the new culvert unless otherwise noted in the accompanying drawings.

The Contractor shall also note that the placing of the new access bridge culvert shall be completed so that it totally complies with the parameters established and noted in the Bridge Details and Tables for the culvert replacement. The culvert shall be set on an even grade and the placement shall be performed totally in the dry, and the Contractor should be prepared to take whatever steps are necessary to ensure same, all to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer. The Contractor shall also be required to supply a minimum of 100mm (4") of 20mm (3/4") clear stone bedding underneath the culvert pipe extending from the bottom of the drain to the culvert invert grade, all to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer. Furthermore, if an unsound base is encountered, it must be removed and replaced with 20mm (3/4") clear stone satisfactorily compacted in place to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer. The Contractor is to note that when replacing an access bridge or enclosure culvert, it shall be required to excavate a trench having a width not less than the new pipe outside diameter plus a 600mm working width on both sides of the new pipe to allow for proper installation of granular backfill and compaction of same. The Contractor shall also note that all culvert pipe installations are to be carried out with a minimum of 10% of their diameter or rise embedded below the drain design bottom, as shown and noted on the plan for each of the access bridge installations.

X. REMOVALS

Where existing access bridges and enclosures are to be completely removed and replaced, the Contractor shall be required to excavate and completely extract the existing concrete structure or culvert pipe and the existing endwalls in their entirety, as well as any other deleterious materials that may be encountered in removing same, excluding poured concrete headwalls that are to be reused. The Contractor shall neatly saw cut any concrete or asphalt surfaces over the pipes for a sufficient width to allow for the safe removal of same or go to the nearest expansion joint panel of the concrete driveways. The Contractor shall also be required to completely dispose of all removed materials to a site to be obtained by it at its own expense in accordance with the excess soil handling requirements in **Appendix "REI-F"**. The Contractor shall note that when headwalls are shown to be left in place, the Contractor shall protect same and carry out its work for the pipe replacement as noted above and dispose of any debris resulting from the work.

All unsuitable and deleterious materials from the excavation and removal of the existing bridge and enclosure culverts and drain cleaning shall be hauled away and disposed of by the Contractor to a site to be obtained by it at its expense. Likewise, any material excavated to allow for the

granular approaches to the bridge, driveway transitions, or installation of new headwalls shall also be hauled away and disposed of by the Contractor in accordance with the excess soil requirements in **Appendix "REI-F"**.

XI. CONCRETE FILLED JUTE BAG, PRECAST CONCRETE BLOCK OR SLOPED END PROTECTION

Unless otherwise shown or noted, the Contractor is to provide new concrete filled jute bag headwalls, precast concrete block, or sloped quarried limestone on non-woven filter cloth end protection for the access bridges and enclosures being replaced or constructed on this drain.

The concrete filled jute bags are to be provided and laid out as is shown and detailed in the drawings provided by the Town and as noted in the Standard Specifications in **Appendix "REI-C"**. In all cases, the concrete filled jute bag headwalls shall be topped with a minimum 100mm (4") thick continuous concrete cap comprising 30MPa concrete with 6% \pm 1% air entrainment for the entire length of the headwalls. The headwalls shall be installed on an inward batter to be not less than 1 horizontal to 5 vertical, and under no circumstances shall this batter, which is measured from the top of the headwall to the projection of the end of the pipe, be less than 305mm (12"). From the midpoint of the pipe height down to the concrete footing, the wall shall be a double concrete filled jute bag installation. On the road side the walls shall be deflected as shown to provide daylighting and a better approach across the new bridge.

The installation of the concrete filled jute bag headwalls, unless otherwise specified, shall be provided in total compliance with the Items 1, 3, and 4 included in the **"STANDARD SPECIFICATIONS FOR ACCESS BRIDGE CONSTRUCTION"**. These are attached to the back of these specifications and labelled **Appendix "REI-C"**. The Contractor shall comply in all respects with the General Conditions included in Item 4 and the **"Typical Concrete Filled Jute Bag Headwall End Protection"** detail also shown therein.

The Contractor shall install interlocking precast concrete blocks with filter cloth backing for walls on both ends of the bridges requiring same. The blocks shall be minimum 600X600X1200mm in size as available from Underground Specialties - Wolseley, Windsor, Ontario, or equal, and installed as set out in **Appendix "REI-C"**. Vertical joints shall be staggered by use of half blocks where needed and wingwall deflections when required shall employ 45-degree angled blocks. Voids between the blocks and the pipe shall be grouted with 30MPa concrete having 6% \pm 1% air entrainment and extend for the full thickness of the wall and have a smooth uniform finish on the face that blends with the precast blocks. The installation of the endwalls, as well as the backfilling of the pipe where applicable, shall be provided in compliance with Items 1), 3), and 4) of the **"Standard Specifications for Access Bridge Construction"** attached within **Appendix "REI-C"** and in total compliance and in all respects with the General Conditions included in said Appendix. The Contractor shall submit shop drawings for approval of the wall installation that includes details for a minimum 300mm thick concrete footing that extends from the pipe invert downward. The footing shall extend into the drain banks each side for the required embedment of the blocks and be constructed to ensure that the completed wall will be completely vertical or tipped slightly back towards the driveway. Where the block walls extend more than 1.8 metres in height, the supplier shall provide the Contractor with uni-axial geogrid (SG350 or equivalent) reinforcement for installation to tie the wall back into the granular backfill. The Contractor, in all cases, shall comply with these specifications and upon completion of the stacked precast concrete end protection installation shall restore the adjacent areas to their original conditions. The Contractor shall supply quarried limestone on filter cloth rock protection adjacent to the headwalls at each corner of the bridge. All rock protection shall be 1.0 metres wide and 305mm (12") thick, installed on non-woven filter cloth, and shall be installed in accordance with Item 2) of the **"Standard Specifications for Access Bridge Construction"**. The synthetic filter mat to be used shall be non-woven geotextile GMN160 conforming to O.P.S.S. 1860 Class I, as available from Armtec Construction Products through Underground Specialties - Wolseley in Windsor, Ontario or equal. The quarried limestone to be used shall be graded in size from a minimum of 100mm to a maximum of 250mm, and is available from Walker Industries Amherst Quarries, in Amherstburg, Ontario, or equal.

Where sloped end protection is specified, the top 305mm (12") of backfill material over the ends of the access pipe, from the invert of said pipe to the top of the driveway elevation of the access bridge or enclosure, shall be quarried limestone. The quarried limestone shall be provided as shown and detailed on the plans or as indicated in the Standard Specifications in **Appendix "REI-C"** and shall be graded in size from a minimum of 100mm (4") to a maximum of 250mm (10"). The quarried limestone to be placed on the sloped ends of an access bridge or enclosure shall be underlain with a synthetic non-woven geotextile filter fabric. The sloped quarried limestone protection is to be rounded as shown on the plan details and shall also extend along the drain side slopes to a point directly in line with the ends of the culvert pipe. The road side approach to the entrance shall be provided with a minimum 5.0m radius at each end of the driveway entrance. All work shall be completed to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer.

The installation of the sloped quarried limestone end protection, unless otherwise specified herein, shall be provided in total compliance with Item 2), 3), and 4) of the **"STANDARD SPECIFICATIONS FOR ACCESS BRIDGE CONSTRUCTION"**. These are attached to the back of these specifications and labelled **Appendix "REI-C"**. The Contractor shall comply in all respects with the General Conditions included in Item 4 and the **"Typical Quarried Limestone End Protection Detail"** also in **Appendix "REI-C"**.

The quarried limestone erosion protection shall be embedded into the sideslopes of the drain a minimum thickness of 305mm and shall be underlain in all cases with non-woven synthetic filter mat. The filter mat shall not only be laid along the flat portion of the erosion protection, but also contoured to the exterior limits of the quarried limestone and the unprotected slope. The width of the erosion protection shall be as established in the accompanying drawings or as otherwise directed by the Town Drainage Superintendent or the Consulting Engineer during construction. In placing the erosion protection, the Contractor shall carefully tamp the quarried limestone pieces into place with the use of the excavator bucket so that the erosion protection when completed will be consistent, uniform and tightly laid. In no instance shall the quarried limestone protrude beyond the exterior contour of the unprotected drain sideslopes along either side of said protection. The synthetic filter mat fabric to be used shall be non-woven geotextile GMN160 conforming to O.P.S.S. 1860 Class I, as available from Armtec Construction Products, or equal. The quarried limestone to be used shall be graded in size from a minimum of 100mm to a maximum of 250mm, and is available from Walker Aggregates Amherst Quarries, in Amherstburg, Ontario, or equal.

XII. GENERAL QUARRIED LIMESTONE EROSION PROTECTION

At all of the swale and furrow locations entering the drain from the either side, it is required that general quarried limestone erosion protection and rock chutes be provided on the drain slopes, at the locations indicated or established due to erosion, and to the widths generally shown within the details and notes included in the accompanying drawings. The rock chutes shall be V-shaped and constructed to direct all flows through the centre portion of the rock chute. Where the drain banks are showing erosion or slumping and distress, the Contractor shall provide quarried limestone on filter cloth general erosion protection as outlined below. Protection locations shall be as established in consultation with the Town Drainage Superintendent and Consulting Engineer and shall include the areas noted on the profiles.

The quarried limestone erosion protection shall be embedded into the sideslopes of the drain a minimum thickness of 305mm and shall be underlain in all cases with non-woven synthetic filter mat. The filter mat shall not only be laid along the flat portion of the erosion protection, but also contoured to the exterior limits of the quarried limestone and the unprotected slope. The width of the general erosion protection shall be as established in the accompanying drawings or as otherwise directed by the Town Drainage Superintendent or the Consulting Engineer during construction. In placing the erosion protection, the Contractor shall carefully tamp the quarried limestone pieces into place with the use of the equipment bucket so that the erosion protection

when completed will be consistent, uniform and tightly laid. In no instance shall the quarried limestone protrude beyond the exterior contour of the unprotected drain sideslopes along either side of said protection. The synthetic filter mat to be used shall be non-woven geotextile GMN160 conforming to O.P.S.S. 1860 Class I, as available from Armtec Construction Products, or equal. The quarried limestone to be used shall be graded in size from a minimum of 100mm to a maximum of 250mm, and is available from Walker Aggregates Amherst Quarries, in Amherstburg, Ontario, or equal.

XIII. BENCHMARKS

Also, for use by the Contractor, we have established Benchmarks along the course of the work and especially at the location where the existing bridges are located. The Contractor shall work with the Drainage Superintendent or Inspector to transfer the benchmark from any object being removed to a temporary site benchmark such as a nail in a tree or top of a tile that is not being disturbed. This temporary site benchmark is to be used in setting the drain design grades.

For the bridge removals, the plans include details illustrating the work to be carried out. For each bridge detail a Benchmark has been indicated and the elevation has been shown and may be utilized by the Contractor in carrying out its work. In all cases, the Contractor is to utilize the specified drain grade to control its work. The Contractor shall ensure that it takes note of the direction of flow and sets all grades to assure that all flows go from south to north to match the direction of flow within the drain.

XIV. ANCILLARY WORK

During the course of any work to the bridges along the course of the work, the Contractor will be required to protect or extend any existing tile ends or swales and connect them to the drainage works to maintain the drainage from the adjacent lands. All existing tiles shall be extended utilizing solid Big 'O' "standard tile ends" or equal plastic pipe of the same diameter as the existing tile and shall be installed in accordance with the "**Standard Lateral Tile Detail**" included in the plans, unless otherwise noted. Connections shall be made using a manufactured coupling where possible. For other connections, the Contractor shall utilize a grouted connection. Grouted mortar joints shall be composed of three (3) parts of clean, sharp sand to one (1) part of Portland cement with just sufficient water added to provide a stiff plastic mix, and the mortar connection shall be performed to the full satisfaction of the Town Drainage Superintendent or the Consulting Engineer. The mortar joint shall be of a sufficient mass around the full circumference of the joint on the exterior side to ensure a tight, solid seal. The Contractor is to note that any intercepted pipes along the length of the existing culverts are to be extended and connected to the open drain unless otherwise noted in the accompanying drawings.

The Contractor shall re-grade the existing swales to allow for the surface flows to freely enter the drain. Any disturbed grass areas shall be fully restored with topsoil, seed and mulch.

Although it is anticipated that the bridge removal at each site shall be undertaken in the dry, the Contractor shall supply and install a temporary straw bale check dam in the drain bottom immediately downstream of each bridge site during the time of construction. The straw bale check dam shall be to the satisfaction of the Town Drainage Superintendent or Consulting Engineer and must be removed upon completion of the construction. The straw bales may be reused at each site subject to their condition. All costs associated with the supply and installation of this straw bale check dam shall be included in the cost bid for the bridge removal.

XV. TOPSOIL, SEED AND MULCH

The Contractor will be required to protect grass buffers and driveway accesses along the top of the drain bank where they currently exist. Where any of these are damaged, they shall be fully

restored including placement of topsoil. The topsoil shall be prepared for seeding as noted further in these specifications. Should the existing topsoil be treated to prevent grass growth, the Contractor shall strip the existing topsoil material back and spread it on the adjacent field and supply 50mm thick imported topsoil, or topsoil material scavenged from the drain banks at rock protection locations, that is suitable for growing grass.

The Contractor shall be required to restore all existing grassed areas and drain side slopes damaged by the construction and cutting of the drain cross-section by placing topsoil, and then seed and mulch over said areas including any specific areas noted on the bridge details. The Contractor shall be required to provide all the material and to cover the above mentioned surfaces with approximately 50mm of good, clean, dry topsoil on slopes and 100mm of good, clean, dry topsoil on horizontal surfaces, fine graded and spread in place ready for seeding and mulching. The placing and grading of all topsoil shall be carefully carried out according to Ontario Provincial Standard Specifications, Form 570, dated November 2007, or as subsequently amended or as amended by these Specifications. Once the topsoil has been properly placed and fine graded, the Contractor shall seed and mulch the area. Seeding and mulching operations shall be carried out in accordance with Ontario Provincial Standard Specifications, Form 572, dated November 2003, or as subsequently amended or as amended by these Specifications. The seeding mixture shall be OSECO Lawn Seed Mixture Canada No. 1 or equal as available from Morse Growers Supply, Leamington or equal. As part of the seeding and mulching operation, the Contractor will be required to provide either a hydraulic mulch mix or straw mulch with adhesive binder in accordance with O.P.S.S. 1103.05.03 dated November 2007, or as subsequently amended, to ensure that the grass seed will be protected during germination and provide a thick, uniform cover to minimize erosion, where necessary. All work shall be completed to the full satisfaction of the Town Drainage Superintendent and the Consulting Engineer.

All of the work relative to the placement of topsoil and the seeding and mulching operation shall be meticulously done and completed in a good and workmanlike manner all to the full satisfaction of the Town Drainage Superintendent and Consulting Engineer.

XVI. GENERAL CONDITIONS

- a) The Town Drainage Superintendent or Consulting Engineer shall have authority to carry out minor changes to the work where such changes do not lessen the efficiency of the work.
- b) The Contractor shall satisfy itself as to the exact location, nature and extent of any existing structure, utility, or other object which it may encounter during the course of the work. The Contractor shall indemnify and save harmless the Town of Tecumseh and the Consulting Engineer and their representatives for any damages which it may cause or sustain during the progress of the work. It shall not hold the Town of Tecumseh or the Consulting Engineer liable for any legal action arising out of any claims brought about by such damage caused by it.
- c) 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 to the design and project intent.
- d) The Contractor will be responsible for any damage caused by it to any portion of the Town 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 Town 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 Town. The Contractor, upon completing the works, shall clean all debris and junk, etcetera, 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.
- e) The Contractor shall provide all necessary lights, signs, and barricades to protect the public. All work shall be carried out in accordance with the requirements of the Occupational Health and Safety Act, and latest amendments thereto. If traffic control is required on this project, signing is to comply with the M.T.O. Manual of Uniform Traffic Control Devices (M.U.T.C.D.) for Roadway Work Operations and Ontario Traffic Manual Book 7.
 - f) During the course of the work the Contractor shall be required to connect existing drainage pipes to the Municipal Drain. In the event that polluted flows are discovered, the Contractor shall delay the connection of the pipe and leave the end exposed and alert the Town, the Drainage Superintendent, and the Consulting Engineer so that steps can be taken by the Town to address the concern with the owner and the appropriate authorities. Where necessary the Contractor shall cooperate with the Town in providing temporary measures to divert the drain or safely barricade same. Should the connection be found acceptable by the authorities, the Contractor shall complete the connection of the drain as provided for in the specifications, at no extra cost to the project.
 - g) 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.
 - h) 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.
 - i) During the course of the project the Contractor shall deal with any excess soil management from the project in accordance with Ontario Reg 406/19 pursuant to the Environmental Protection Act, R.S.O. 1990, c. E.19 and any subsequent amendments to same, and the provisions included in **Appendix "REI-F"**.
 - j) All driveways, laneways and access bridges, or any other means of access on to the job site shall be fully restored to their former condition at the Contractor's expense. Before authorizing Final Payment, the Town Drainage Superintendent and the Consulting Engineer shall inspect the work in order to be sure that the proper restoration has been performed. 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 be deducted from any monies owing to the Contractor.
 - k) The Contractor will be required to submit to the Town, 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 Town, a Certificate of Clearance for the project from the Workplace Safety and Insurance Board before Final Payment is made to the Contractor.
 - l) 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 Town. 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 Town 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.

- m) 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; and shall name the Town of Tecumseh and its' officials and the Consulting Engineer and their staff as additional insured under the policy. The Contractor must submit a copy of this policy to both the Town Clerk and the Consulting Engineer prior to the commencement of work.
- n) Monthly progress orders for payment shall be furnished the Contractor by the Town 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

The Contractor shall satisfy the Consulting Engineer or Town 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.

- o) 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 C.C.D.C.2 shall govern and be used to establish the requirements of the work.
- p) Should extra work be required by the Town Drainage Superintendent or Consulting Engineer, and it is done on a time and material basis, the actual cost of the work will be paid to the Contractor with a 15% markup on the total actual cost of labour, equipment and materials needed to complete the extra work.

APPENDIX “REI-A”

STANDARD E.R.C.A. AND D.F.O.
MITIGATION REQUIREMENTS

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

1. As per standard requirements, work will not be conducted at times when flows in the drain are elevated due to local rain events, storms, or seasonal floods. Work will be done in the dry.
2. 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 to 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.
3. 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 the related Ontario Provincial Standards. It is incumbent on the proponent and Contractors to ensure that sediment and erosion control measures are functioning properly and maintained/upgraded as required.
4. Silt or sand accumulated in the barrier traps must be removed and stabilized on land once the site is stabilized.
5. 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.
6. Any drain banks trimmed outside of the July 1st to September 15th timing window will require bio-degradable erosion control blankets to be installed to promote re-vegetation and to protect the slope from erosion in the interim.

Measures to Avoid Causing Harm to Fish and Fish Habitat

If you are conducting a project near water, it is your responsibility to ensure you avoid causing [serious harm to fish](#) in compliance with the *Fisheries Act*. The following advice will help you avoid causing harm and comply with the *Act*.

PLEASE NOTE: This advice applies to all project types and replaces all “Operational Statements” previously produced by DFO for different project types in all regions.

Measures

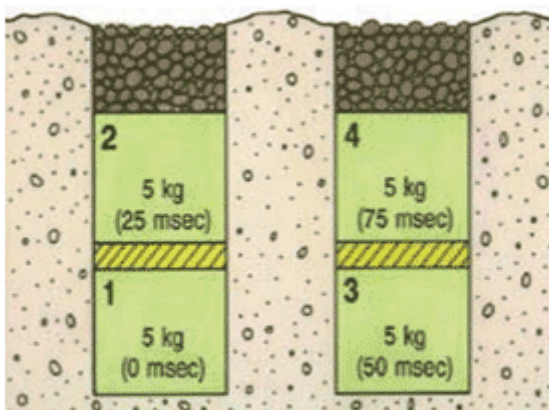
- Time work in water to respect [timing windows](#) to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed.
- Minimize duration of in-water work.
- Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
- Design and plan activities and works in waterbody such that loss or disturbance to aquatic habitat is minimized and sensitive spawning habitats are avoided.
- Design and construct approaches to the waterbody such that they are perpendicular to the watercourse to minimize loss or disturbance to riparian vegetation.
- Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or the built structures.
- Undertake all instream activities in isolation of open or flowing water to maintain the natural flow of water downstream and avoid introducing sediment into the watercourse.
- Plan activities near water such that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that building material used in a watercourse has been handled and treated in a manner to prevent the release or leaching of substances into the water that may be deleterious to fish.

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the waterbody or settling basin and runoff water is clear. The plan should, where applicable, include:
 - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the water body.
 - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering a waterbody. For example, pumping/diversion of water to a vegetated area, construction of a settling basin or other filtration system.
 - Site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., dredging, underwater cable installation).
 - Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry.
 - Regular inspection and maintenance of erosion and sediment control measures and structures during the course of construction.
 - Repairs to erosion and sediment control measures and structures if damage occurs.
 - Removal of non-biodegradable erosion and sediment control materials once site is stabilized.
- Clearing of riparian vegetation should be kept to a minimum: use existing trails, roads or cut lines wherever possible to avoid disturbance to the riparian vegetation and prevent soil compaction. When practicable, prune or top the vegetation instead of grubbing/uprooting.
- Minimize the removal of natural woody debris, rocks, sand or other materials from the banks, the shoreline or the bed of the waterbody below the ordinary high water mark. If material is removed from the waterbody, set it aside and return it to the original location once construction activities are completed.
- Immediately stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
- Restore bed and banks of the waterbody to their original contour and gradient; if the original gradient cannot be restored due to instability, a stable gradient that does not obstruct fish passage should be restored.
- If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.
- Remove all construction materials from site upon project completion.

- Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.
- Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained 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 occur on the site.
- Screen any water intakes or outlet pipes to prevent entrainment or impingement of fish. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when an entrapped fish is held in contact with the intake screen and is unable to free itself.
 - In freshwater, follow these measures for design and installation of intake end of pipe fish screens to protect fish where water is extracted from fish-bearing waters:
 - Screens should be located in areas and depths of water with low concentrations of fish throughout the year.
 - Screens should be located away from natural or artificial structures that may attract fish that are migrating, spawning, or in rearing habitat.
 - The screen face should be oriented in the same direction as the flow.
 - Ensure openings in the guides and seals are less than the opening criteria to make “fish tight”.
 - Screens should be located a minimum of 300 mm (12 in.) above the bottom of the watercourse to prevent entrainment of sediment and aquatic organisms associated with the bottom area.
 - Structural support should be provided to the screen panels to prevent sagging and collapse of the screen.
 - Large cylindrical and box-type screens should have a manifold installed in them to ensure even water velocity distribution across the screen surface. The ends of the structure should be made out of solid materials and the end of the manifold capped.
 - Heavier cages or trash racks can be fabricated out of bar or grating to protect the finer fish screen, especially where there is debris loading (woody material, leaves, algae mats, etc.). A 150 mm (6 in.) spacing between bars is typical.
 - Provision should be made for the removal, inspection, and cleaning of screens.
 - Ensure regular maintenance and repair of cleaning apparatus, seals, and screens is carried out to prevent debris-fouling and impingement of fish.
 - Pumps should be shut down when fish screens are removed for inspection and cleaning.
- Avoid using explosives in or near water. Use of explosives in or near water produces shock waves that can damage a fish swim bladder and rupture internal organs. Blasting vibrations may also kill or damage fish eggs or larvae.
 - If explosives are required as part of a project (e.g., removal of structures such as piers, pilings, footings; removal of obstructions such as beaver dams; or preparation of a river or lake bottom for installation of a structure such as a dam or water intake), the potential for impacts to fish and fish habitat should be minimized by implementing the following measures:

- Time in-water work requiring the use of explosives to prevent disruption of vulnerable fish life stages, including eggs and larvae, by adhering to appropriate fisheries [timing windows](#).
- Isolate the work site to exclude fish from within the blast area by using bubble/air curtains (i.e., a column of bubbled water extending from the substrate to the water surface as generated by forcing large volumes of air through a perforated pipe/hose), cofferdams or aquadams.
- Remove any fish trapped within the isolated area and release unharmed beyond the blast area prior to initiating blasting
- Minimize blast charge weights used and subdivide each charge into a series of smaller charges in blast holes (i.e., decking) with a minimum 25 millisecond (1/1000 seconds) delay between charge detonations (see Figure 1).
- Back-fill blast holes (stemmed) with sand or gravel to grade or to streambed/water interface to confine the blast.
- Place blasting mats over top of holes to minimize scattering of blast debris around the area.
- Do not use ammonium nitrate based explosives in or near water due to the production of toxic by-products.
- Remove all blasting debris and other associated equipment/products from the blast area.

Figure 1: Sample Blasting Arrangement



Per Fig. 1: 20 kg total weight of charge; 25 msecs delay between charges and blast holes; and decking of charges within holes.

- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.

- Whenever possible, operate machinery on land above the high water mark, on ice, or from a floating barge in a manner that minimizes disturbance to the banks and bed of the waterbody.
- Limit machinery fording of the watercourse to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the watercourse are required, construct a temporary crossing structure.
- Use temporary crossing structures or other practices to cross streams or waterbodies with steep and highly erodible (e.g., dominated by organic materials and silts) banks and beds. For fording equipment without a temporary crossing structure, use stream bank and bed protection methods (e.g., swamp mats, pads) if minor rutting is likely to occur during fording.
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.

Date modified:
2013-11-25

APPENDIX “REI-B”

5.0 Location

Located along the southern shores of Lake St. Clair in Essex County and in the Essex Region Watershed, the Town of Tecumseh (Study Area) encompasses a geographic area of 9,538.60 hectares (ha) that is bordered by the City of Windsor and the Town of LaSalle on its western side and the Town of Lakeshore to the east and shown on **Figure 1** (Essex Region Conservation Authority (ERCA), 2013). There are four (4) subwatersheds (total area): Pike Creek subwatershed (8,993 ha), Canard River subwatershed (34,776 ha), Tecumseh Area Drainage subwatershed (1,150 ha), Turkey Creek subwatershed (6,112 ha), and Little River subwatershed (6,490 ha) that traverse the lands within the Town's boundaries (ERCA, 2011). Approximately 95.15% (9,079.38 ha) of the landscape consists of anthropogenic features (residential, commercial, agricultural, etc.) while the remaining 4.81% (459.22 ha) is made up of natural areas (terrestrial (4.49%) and other terrestrial (0.32%)) (ERCA, 2013).

There are one hundred and twenty (120) municipal drains measuring 221 kilometers (km) within the Town of Tecumseh (Town of Tecumseh, 2014). Through our background review we identified 3 dominant habitat types surrounding/within the drains that have potential to provide habitat for SAR. Habitats consist of:

Existing Natural Features:

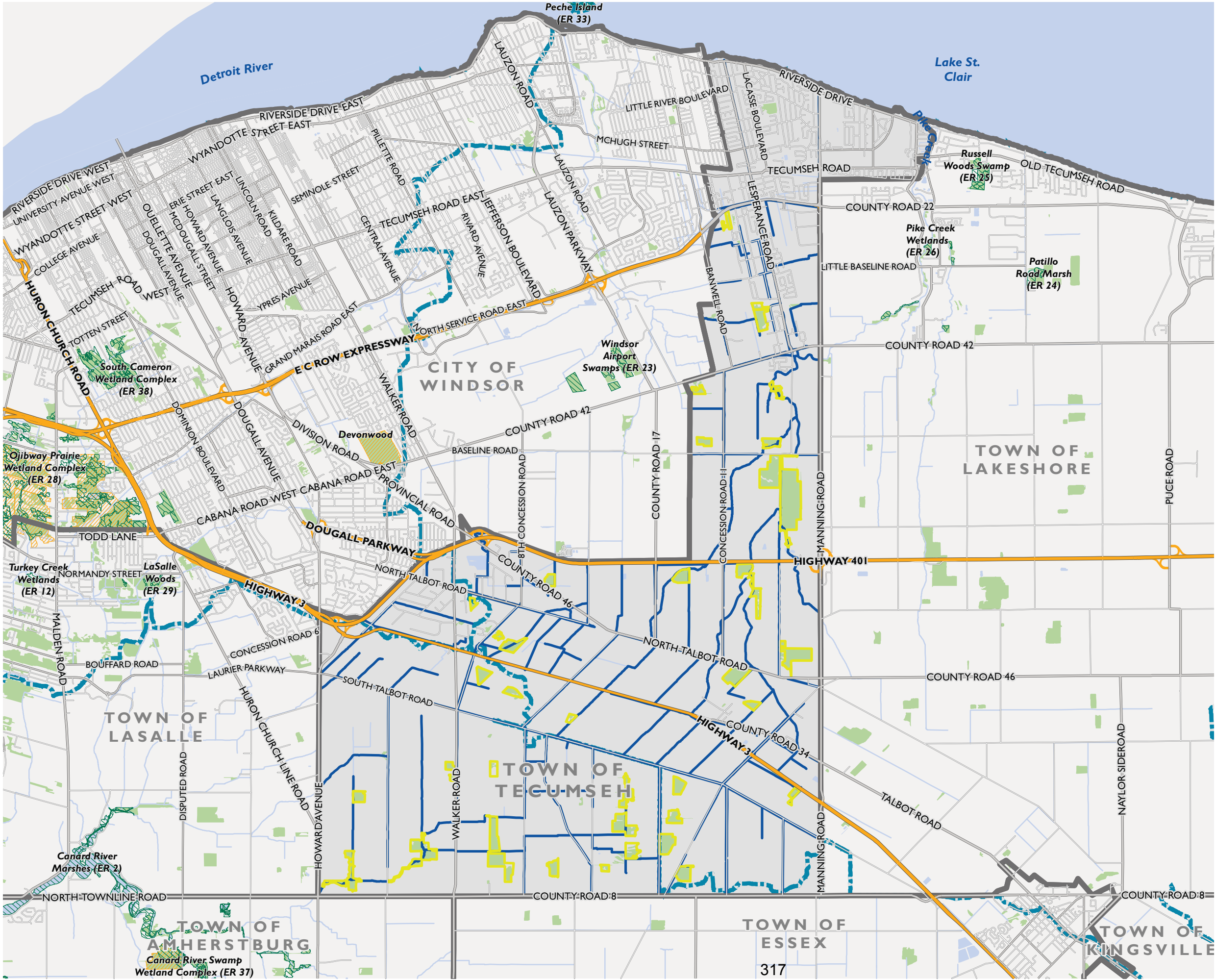
- Forest

Existing Anthropogenic Features:

- Urban (residential, commercial, recreational, right-of-ways)
- Agricultural (row crop, hayfield, old abandoned fields)

Within the Town, there are no forest patches greater than 100 ha in size with the largest being Fairplay Woods (an Environmentally Significant Area (ESA)) which spans a total area of 52.9 ha (ERCA, 2013). There are 2 forest patches that contain 200 m interior forest and 16 patches that contain 100 m interior forest (ERCA, 2013). In accordance with subparagraph i, of paragraph 2, of subsection 6 under Section 23.9 of O.Reg. 242/08, **Drainage Maps** have been prepared that show drain locations, surrounding land use types, proximity to sensitive natural features (e.g. Forest) and potential SAR habitat that exists within the Town's jurisdiction (see **Appendix B**). A list of all the drains and adjacent habitat type(s) has been provided in **Appendix B** following the Drainage Maps. In addition, a **Tecumseh Drain Database** (provided electronically) contains the drain names, adjacent habitat types, and relevant information found during our background review from the MNRF and ERCA.

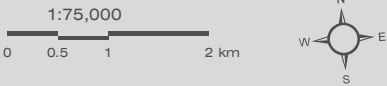




TOWN OF TECUMSEH

NATURAL FEATURES
FIGURE 1

- Mainland
- Provincially Significant Wetland
- ANSI, Life Science
- Natural Heritage System
- Municipal Drain
- Quaternary Watershed
- Water Body
- Woodland



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR, TOWN OF TECUMSEH

MAP CREATED BY: GM
MAP CHECKED BY: KM/AB
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 174938
STATUS: FINAL
DATE: 2017-12-08

6.0 Species at Risk

A review of secondary source information, including the expired MNRF Agreement¹, Natural Heritage Information Centre (NHIC) GIS Database records (i.e. 1 km squares that overlap the Study Area) were reviewed to gather a list of the SAR that have the potential to occur within the Town's boundaries. A total of sixty-six (66) species listed as either endangered or threatened on the SARO list (O.Reg. 230/08) were identified to occur within the Study Area (see **Appendix C**). One Restricted Species Record was also identified in 1988 (NHIC 1 km Square 17LG4478).

The habitat requirements for each of the sixty-six species was crossed referenced with habitats identified within the Study Area. A total of Nineteen (19) species listed as endangered or threatened were identified as having potential habitat within the Study Area drains, consisting of Turtles (2 species), Snakes (2 species), Fishes (2 species), Birds (3 species), and Plants (10 species). **Table 2** lists the SAR, preferred habitat type(s) (Forest, Agricultural, Urban or All), need for water presence (requirement for some species), and the dates during the year when the species is likely to be carrying out sensitive life processes, referred to herein as the Restricted Activity Period (RAP).

Four (4) species listed in Table 1, subsection 2, Section 23.9 of O. Reg. 242/08 were identified as having the potential to occur within the Town of Tecumseh drains, these species include: Pugnose Minnow (*Opsopoeodus emiliae*) (1 fish species), False Hop Sedge (*Carex lupuliformis*), Heart-leaved Plantain (*Plantago cordata*) and Scarlet Ammannia (*Ammannia robusta*) (3 plant species). Since these species are listed in Table 1, subsection 2, Section 23.9 of O. Reg. 242/08, this mitigation plan cannot be used for these species and as such, they have not been included in **Table 2** below. Permitting related to these species may be required when working in specific drains. More information on these species, their habitat preferences, known distribution within the area and steps that need to be taken to determine whether a permit is required are outlined in **Appendix D**.

Table 2: Species at Risk with Potential to Occur within the Study Area

Scientific Name	Common Name	ESA ¹	Preferred Habitat Type ²	Restricted Activity Period
Turtles (2 species)				
<i>Emydoidea blandingii</i>	Blanding's Turtle	THR	Forest, Water is present	November 1 to April 30 Important to Note: Activities that require water level reduction cannot occur in areas when and where turtles are hibernating (paragraph 6, subsection 13, under Section 23.9 of O.Reg. 242/08).
<i>Apalone spinifera</i>	Spiny Softshell	THR	Forest, Water is present	

¹ Agreement under Section 23 of O.Reg. 242/08 made under the ESA, 2007 (File # AY-23D-010-10)



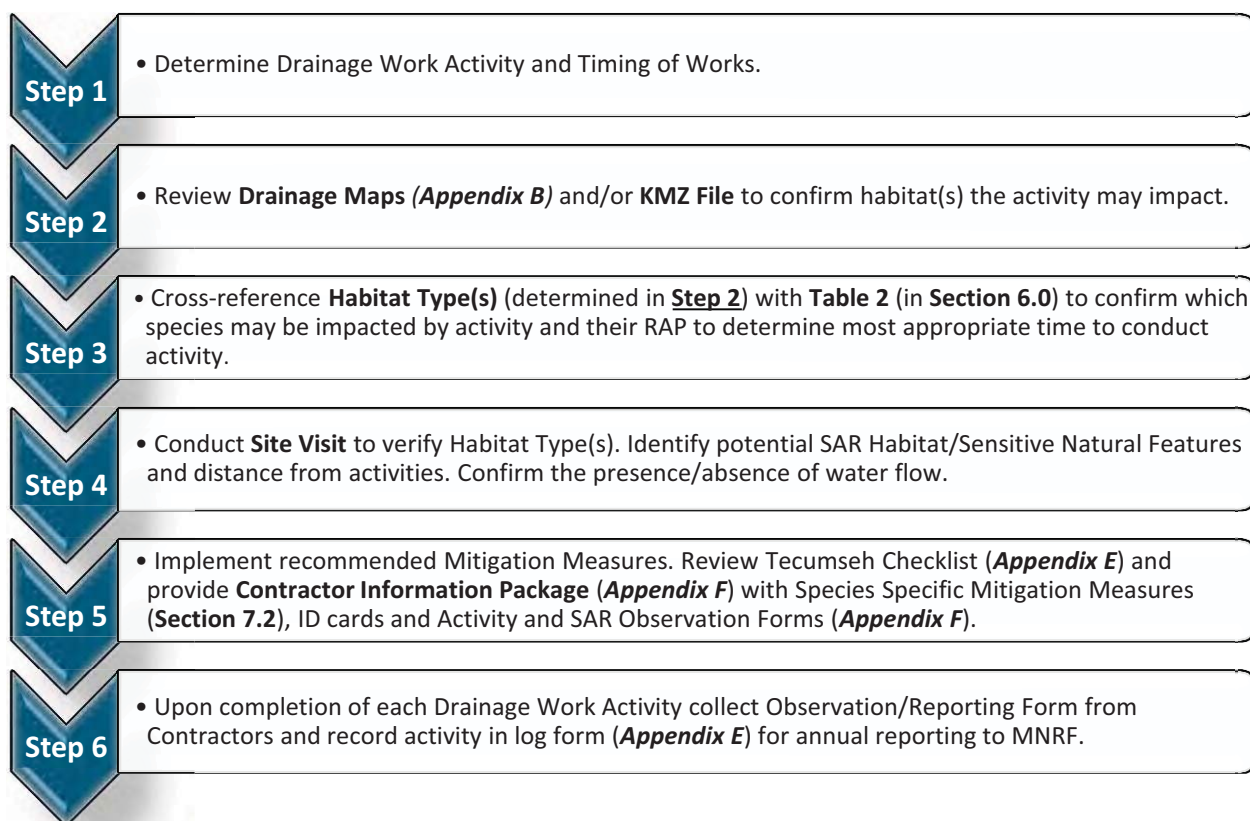
Scientific Name	Common Name	ESA ¹	Preferred Habitat Type ²	Restricted Activity Period
Snakes (2 species)				
<i>Pantherophis gloydi</i>	Eastern Foxsnake (Carolinian population)	END	All ³	September 20 to May 31
<i>Thamnophis butleri</i>	Butler's Gartersnake	END	All ³	
Fishes (2 species)				
<i>Notropis anogenus</i>	Pugnose Shiner	END	Water is present	March 15 to June 30
<i>Lepisosteus oculatus</i>	Spotted Gar	THR		
Birds (3 species)				
<i>Dolichonyx oryzivorus</i>	Bobolink	THR	Agricultural	May 1 to July 15
<i>Sturnella magna</i>	Eastern Meadowlark	THR	Agricultural	
<i>Hirundo rustica</i>	Barn Swallow	THR	All ³	
Vascular Plants (10 species)				
<i>Gymnocladus dioicus</i>	Kentucky Coffee-tree	THR	Forest	Not Applicable
<i>Liparis liliifolia</i>	Purple Twayblade	THR	Forest	
<i>Cornus florida</i>	Eastern Flowering Dogwood	END	Forest	
<i>Castanea dentata</i>	American Chestnut	END	Forest	
<i>Juglans cinerea</i>	Butternut	END	Forest	
<i>Morus rubra</i>	Red Mulberry	END	Forest	
<i>Aletris farinosa</i>	Colicroot	THR	Agricultural, Forest	
<i>Smilax rotundifolia</i>	Round-leaved Greenbrier (Great Lakes Plains population)	THR	Forest	
<i>Liatris spicata</i>	Dense Blazing Star	THR	Agricultural	
<i>Symphyotrichum praealtum</i>	Willowleaf Aster	THR	Forest	

¹Endangered Species Act – status as defined by O.Reg. 242/08 as of April 27, 2017; ²Preferred Habitat Types – The habitat types listed are areas where a SAR has the potential to occur. It should be noted that species have the potential to occur outside of these habitats; ³All – Structures such as culverts and bridges may provide suitable habitat for nesting Barn Swallow. Culverts, rip rap and gabion baskets also have the potential to provide nesting and/or hibernaculum for snake species.



7.0 Mitigation Measures

Based on the types of drainage work activities outlined above (in Section 2.0) and the potential for SAR and SAR habitat within and adjacent to the drainage features, the following best practices and mitigation measures are recommended when conducting drainage works. Prior to starting drainage works, the following steps are recommended to help determine the appropriate mitigation/management measures:



7.1 General Mitigation Measures

The following mitigation measures are recommended to avoid or minimize impacts to the natural environment when conducting drainage works. Following this section species specific mitigation measures are provided.

When planning for drainage works, activities should be planned outside of sensitive timing windows for all wildlife species wherever possible. **Table 2** in Section 6.0 indicates the Restricted Activity Periods for the different SAR having the potential to occur within the Study Area. **Table 3** indicates sensitive timing windows for various types of wildlife (including SAR) based on habitat types.



This information can be used to determine what time(s) of year may be sensitive at a particular site, based on which types of habitat and wildlife are present.

Where possible, activities are recommended to be planned outside of these sensitive time(s); otherwise additional species specific mitigation measures are recommended and/or consultation with the MNRF.

Table 3: Sensitive Timing Windows for other Wildlife Species (including SAR)

Habitat Type	Wildlife	Sensitive Timing Windows
Agricultural (Hayfields and pastures)	Migratory Birds	March through July (breeding season for most species)
Waterbodies	Migratory Birds (including waterfowl)	March through Mid-August
	Turtles and Amphibians	March through Mid-August; and Mid-October through March (for overwintering wildlife, including turtles).
	Mammals	March through mid-August; and Mid-October through March (overwintering wildlife)
	Fish	In-water timing restriction for warmwater fishes March 15 to June 30.
Forest	Migratory Birds	March through mid-August
	Mammals	March through mid-August; and Mid-October through March (overwintering wildlife)
	Snakes	March through mid-August; and Mid-October through March (overwintering wildlife)
Urban	Snakes	March through mid-August; and October through March (overwintering wildlife)
	Mammals	October through March (overwintering wildlife)

The following list provides general measures that are recommended when conducting any drainage work activities:

- **Bats:** The work associated with drainage maintenance covered under this management plan would typically not include the removal of trees. As such, the potential for drainage work activities to impact bat SAR is low. However, if a tree that exhibits a diameter at breast height of 25 cm or greater or a tree that exhibits loose shaggy bark requires removal for drainage works, removal should be completed between November 1 and March 1, outside of the active season for bats. If the tree removal needs to occur during the active season, removal should be completed after dusk.
- Review species specific seasonal timing windows to avoid sensitive periods for species
- Where possible, abide by regulatory timing windows and setback distances and avoid regulated habitat features
- Minimize duration of in-water work (where applicable)



- Any in-stream work should be conducted during periods of low flow
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation
- Conduct wildlife sweeps prior to the commencement of drainage work activities to determine if SAR (or other wildlife) are present at the site and engaged in critical life processes (e.g. nesting, etc.)
- Following the wildlife sweep, the area of activity is to be isolated with silt fencing to keep SAR and other wildlife from entering the work space area.
- Develop and implement an erosion and sediment control plan for the site that minimizes the risk of sedimentation to the drain during all phases of an activity. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the drain of settling basin and runoff water is clear. Following the DFO's Measures to Avoid Harm (as outlined on DFO's website: <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>), an erosion and sediment control plan, where applicable, is to include the following:
 - Installation of effective erosion and sediment control measures before starting work to prevent sediment from entering the drain
 - Measures for managing water flowing onto the site, as well as water being pumped/diverted from the site such that sediment is filtered out prior to the water entering the drain
 - Site isolation measures, where required, to contain suspended sediment
 - Measures for containing and stabilizing waste materials generated from activities are stored away from any water bodies and prevent materials from re-entering water bodies
 - Erosion and sediment control measures are inspected and maintained on a regular basis during drainage works
 - Any damages to erosion and control measures are to be repaired immediately
 - Removal of non-biodegradable erosion and sediment control materials once site has been stabilized
- ***Phragmites*** is a non-native perennial grass species that has been observed throughout much of the province and Tecumseh, developing tall dense stands that degrade wetlands and other features by outcompeting native vegetation and changing habitat. To further prevent the spread and introduction of this unwanted species in the province, the provincial government has regulated invasive *Phragmites* as restricted under the *Invasive Species Act*, 2015. Restricted species under the Act, prohibits i) the transport of species into any provincial park and conservation reserve and ii) the deposit or release of species in Ontario. For further information on the *Invasive Species Act*, 2015 please visit: www.ontario.ca/invasionON. It is recommended that care be taken when working in areas with *Phragmites* and efforts be taken to prevent further spread of species through equipment transfer. Methods to prevent the spread of *Phragmites* while conducting drainage works should include:
 - Inspection of vehicles, equipment and heavy machinery thoroughly inside and out for accumulation of dirt, plant material or snow/ice, including the underside of vehicles, radiators, spare tires, foot wells and bumpers before entering onto a site. Remove any guards, covers, plates or other easy to remove external equipment;



- Inspections should be completed when: moving vehicles out of local area of operation; moving machinery between properties or sites within the same property where invasive species may be present or known to occur; and using machinery along roadsides, in ditches and along watercourses.
- Vehicles, equipment and heavy machinery should be cleaned: before moving out of local area where invasive species has been identified or known to occur; and when accumulations of dirt, plant material or snow/ice has been observed.
- Clean vehicles, equipment and heavy machinery in an area where risk of contamination is low, ideally on a mud free hard surface, at least 30 m away from any watercourse, waterbody, wetland or other natural area, if possible. Where risk of runoff is high, cleaning stations should be contained by sediment fence as per standard erosion and sediment control specifications.
- Remove large accumulations of dirt, using a compressed air device, high pressure hose or other device as necessary. Clean the vehicle starting at the top and working down, with particular attention to the undersides, wheels, wheel arches, guards, chassis, engine bays, grills and other attachments.
- Clean inside vehicles by sweeping, vacuuming or using compressed air device including floor, foot wells, pedals, seats and under the seats.

Additional details on cleaning equipment and/or managing invasive species can be found in the Clean Equipment Protocol for Industry (J. Halloran, et al., 2013) and online at the Government of Ontario's website: <https://www.ontario.ca/page/stop-spread-invasive-species>.

7.2 Species Specific Mitigation Plans

In the event a SAR or SAR habitat has been identified within the proposed area for drainage work activity, the following information should be clearly conveyed to the on-site staff as part of the drainage works protocol, via notes or plans and on-site briefings with construction/personnel:

- Schedule for pre-construction activities such as wildlife inspections, silt fencing installation and contractor briefing.
- Description of wildlife mitigation measures to be used during drainage work activities, including:
 - Placement and specifications of required protection measures (e.g. fencing, signage)
 - Phasing and direction of site clearing activities
 - Any recommendations regarding access routes for equipment, vehicle parking, materials, stockpiling, etc.
- Guidance on what to do in the event of a wildlife encounter, including SAR and arrangements for dealing with injured or orphaned animals (as indicated in **Table 5** and **Appendix F**). This guidance should be summarized in a handout suitable for quick reference by on-site staff.
- SAR awareness training should be provided to all on-site staff, including truck drivers.

In the Contractor Information Package (**Appendix F**) Dillon has provided SAR identification sheets for SAR with the potential to occur within the Study Area.



7.2.1 Species Specific Mitigation Measures for Snake Species

Snake species can be found in a variety of habitat types and most of the drainage work activities have the potential to encounter snakes. Particular attention should be given when conducting works on catch basins, culverts, rip rap and crossing structures, as snakes carry out sensitive life processes in structures such as these. **Table 4** shows the sensitive timing windows for snake species when carrying out life processes related to hibernation and staging.

Table 4: Sensitive Timing Windows for Snake Species

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec		
Date Codes ¹	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
Hibernation																																				
Staging																																				

¹Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNRF Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-010-10).

Table 5 below outlines the recommended mitigation measures to avoid impacts to snake species during and outside of RAP. Photographs of habitat observed within and adjacent to drains that have the potential to support SAR snakes, have been included in **Appendix G** (Photographs #1 - 4).



Table 5: Mitigation Measures for Snake Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Snakes in Study Area
Eastern Foxsnake (Carolinian population) and Butler's Gartersnake	<ul style="list-style-type: none">• Preconstruction planning that includes review for potential habitat.• During site visit, verify if attributes of regulated habitat occur and delineate where possible.• Establish constraints for activities, where possible, that abide by timing windows and setback distances and avoid regulated habitat features• Narrow construction footprint if possible.• Flag or fence off environmentally sensitive areas prior to drainage work activity. Bury fencing a minimum of 10 – 20 cm and vertical height of at least 60 cm. Note, stakes should be installed on the activity side to prevent snake use of stakes to climb fence.• Complete wildlife sweep within the exclusion area following fence installation to ensure no trapped wildlife.• Staff/workers conducting drainage works should be trained in snake species identification and procedures if encountered (review and sign off form in Contractor Information Package)• One staff member/worker or qualified biologist should be trained in proper snake handling procedures and protocols outlined in Section 2 of the Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders (Included in the Contractor Information Package). This person should be onsite at all times (when required) for the potential capture, temporary holding, transfer and release of any snakes encountered during construction. A minimum of two holding tubs and cotton sacks should be onsite at all times.• Prior to commencement of daily drainage work activity, the area should be cleared of snakes through machinery inspections (e.g. wheels, engine compartment) each morning and after machinery is left idle for more than one (1) hour if left on site during the snake active season.• If a nest is uncovered during drainage work activity:<ul style="list-style-type: none">◦ Collect any displaced or damaged eggs and transfer them to a holding tub◦ Capture and transfer all injured dispersing juveniles of that species into a light-coloured drawstring cotton sack◦ Place all cotton sacks with the captured injured individuals into a holding tub out of direct sunlight◦ Immediately contact the MNRF to seek direction and to arrange for transfer of the injured individuals◦ Immediately stop any disturbance to the nest site and loosely cover exposed portions with soil or organic material to protect the integrity of the remaining individuals◦ Do not drive over the nest site or conduct any activities within 5 m of the nest site◦ Do not place any dredged materials removed from drainage works on top of the nest site◦ Mark out the physical location of the nest site but not by any means that might increase the susceptibility of the nest to predation or poaching◦ Where there are no collected eggs or captured individuals, contact the MNRF within 24 hours to provide information on the location of the nest• Any injured captured snakes should be stored outside of direct sunlight and the MNRF should immediately be contacted to seek direction and to arrange for transfer. MNRF may require transfer to the nearest MNRF authorized Wildlife Rehabilitator. Contact Information for Authorized Wildlife Rehabilitator can be found in SAR Information Sheets (Appendix F).• If conducting drainage works during a species sensitive timing window and one or more individuals belonging to a snake species is encountered or active hibernacula is discovered:<ul style="list-style-type: none">◦ Trained staff/worker or qualified biologist shall capture and transfer all injured and uninjured individual snakes of that species into individual light-coloured, drawstring cotton sacks◦ Place cotton sacks into a holding tub◦ Ensure that the holding tub with captured individuals is stored at a cool temperature to protect snakes from freezing until the individuals can be retrieved or transferred◦ If an active hibernacula is uncovered cease all work and immediately, contact MNRF to seek advice and arrange for transfer and/or removal• If conducting drainage works outside of a species sensitive timing window and one or more individuals belonging to a snake species is encountered:<ul style="list-style-type: none">◦ Briefly stop the activity for a reasonable period of time to allow any uninjured individual snakes of that species to leave the work area◦ If the individuals do not leave the work area after the activity is briefly stopped, trained staff/worker or qualified biologist shall capture all uninjured individuals and release them in accordance with the methods outlined below◦ Where circumstances do not allow for the immediate release of captured uninjured individuals, they may be transferred into individual, light-coloured, drawstring cotton sacks before placing them into a holding tub which shall be stored out of direct sunlight for a maximum of 24 hours before releasing them in accordance with the methods outlined below◦ Capture and transfer any individuals injured as a result of conducting drainage works into a holding tub separate from any holding tub containing uninjured individuals◦ Store all captured injured individuals out of direct sunlight and immediately contact the MNRF to seek direction and to arrange their transfer• Uninjured individuals captured during drainage works, are to be released within 24 hours of capture, in an area immediately adjacent to the drainage works with natural vegetation cover within 50 m and out of harm’s way (as per subsections 2.3 and 2.4 of Handling Manual included in the Contractor Information Package; Appendix F).



Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Snakes in Study Area
	<ul style="list-style-type: none">• Uninjured individuals captured during drainage works, are to be released within 24 hours of capture, in an area immediately adjacent to the drainage works with natural vegetation cover within 50 m and out of harm’s way (as per subsections 2.3 and 2.4 of Handling Manual included in the Contractor Information Package; Appendix F).• Where one or more individuals belonging to a snake species is killed as a result of drainage work activity, or a person finds a deceased individual of a snake species, the following measures should be followed:<ul style="list-style-type: none">◦ Collect and transfer any dead individuals into a holding tub outside of direct sunlight; and,◦ Contact the MNRF within 72 hours to seek direction and to arrange for the transfer of the carcasses of the dead individuals.• If the methods of handling snakes outlined in subsection 2.3 and 2.4 of the Handling Manuals are not applicable due to a snake’s injuries, use a shovel or flat object to pick up the snake, ensuring that injured areas are supported and place in a large plastic bin or bucket with a lid with air holes. Immediately transport the turtle to an MNRF authorized veterinarian or wildlife rehabilitator and contact the MNRF. Contact Information for Authorized Wildlife Rehabilitator can be found in Appendix F and on SAR Information Sheets (Appendix F).• Complete a SAR Encounter Reporting Form included in Contractor Information Package (Appendix F).



7.2.2 Species Specific Mitigation Measures for Turtle Species

Turtles can generally be found associated with large slow moving water features that have logs or stumps for basking. For nesting, turtles prefer moist well drained, loose soils for digging and on a gradual typically south facing slope. Species such as Blanding's Turtle and Spiny Softshell hibernate underwater in permanent waterbodies. Sensitive timing windows for turtle species includes the nesting period and has been provided in **Table 6**.

When conducting drainage works where there is potential for turtle species to be hibernating, water level **cannot be reduced** as per Paragraph 6 of subsection 13 of Section 23.9 of O.Reg. 242/08.

Table 6: Restricted Activity Period for Turtle Species

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec		
Date Codes ¹	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
Hibernation																																				

¹Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNRF Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-010-10).

In **Table 7** below, the recommended mitigation measures to avoid impacts to turtle species during and outside sensitive timing windows and what to do when turtles or turtle nests are encountered is provided. Photographs of habitat observed within and adjacent to drains that have the potential to support SAR Turtles, have been included in **Appendix G** (Photographs #5 - 6).



Table 7: Mitigation Measures for Turtle Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Turtles within the Study Area
Blanding's Turtle	<ul style="list-style-type: none">• Preconstruction planning that includes review for potential habitat.• During site visit, verify if attributes of regulated habitat occur and delineate where possible.• Establish constraints for activities, where possible, that abide by timing windows, setback distances and avoid regulated habitat features.• Narrow construction footprint if possible.• Flag or fence off environmentally sensitive areas prior to drainage work activity. Bury fencing a minimum of 10 – 20cm and vertical height of at least 60 cm.• Complete wildlife sweep within the exclusion/construction area following fence installation to ensure no trapped wildlife.• Staff/workers conducting drainage works should be trained in turtle species identification and procedures if encountered (Review and sign off form in the Contractor Information Package; Appendix F).• One staff member/worker or qualified biologist should be trained in proper turtle handling procedures and protocols outlined in Section 1 of the Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders (provided in the Contractor Information Package; Appendix F). This person should be onsite at all times (when required) for the potential capture, temporary holding, transfer and release of any turtles encountered during construction. A minimum of two holding tubs and cotton sacks should be onsite at all times.• If construction is planned to commence during the turtle nesting period, prior to site preparation a turtle nesting search should be completed to identify turtle nests. If nests are encountered, the MNRF must be consulted immediately. Nests should be relocated to an appropriate facility for incubation with MNRF approval. Contact information for MNRF Authorized Wildlife Rehabilitator can be found in SAR Information Sheets (Appendix F).• Drainage work activity related to excavation of sediment or disturbance to banks should be avoided during the sensitive timing windows for turtles.• During turtle hibernation periods, water in drains or ditches cannot be reduced.• Prior to commencement of daily activity, the area should be cleared of turtles and turtle nests by a specially trained staff member or qualified biologist.
Spiny Softshell	<ul style="list-style-type: none">• Do not disturb a turtle encountered laying eggs and do not conduct activities within 20 m of the turtle while it is laying eggs.• If conducting drainage works during a species sensitive timing window and one or more individuals belonging to a turtle species is encountered:<ul style="list-style-type: none">◦ Trained staff/worker or qualified biologist shall capture and transfer all injured and uninjured individuals of that species to a holding tub◦ Capture and transfer all individuals injured as a result of the drainage work activity into a holding tub separate from any holding tub containing uninjured individuals◦ Ensure that the holding tub with captured individuals is stored at a cool temperature until the individuals can be retrieved or transferred◦ Contact the MNRF immediately to seek advice and arrange for transfer and/or removal• If a nest is uncovered during construction, immediately stop all activity near the nest. Cover the nest with soil or organic material. Do not drive within 5 m of the nest and contact the MNRF within 24 hours if no eggs or individuals were captured/collected.• Isolate material stockpile areas with fencing.• Any injured captured turtles should be stored outside of direct sunlight and the MNRF should immediately be contacted to seek direction and to arrange for transfer.• Machinery should be inspected each morning (e.g. under vehicles) for presence of turtles.• Uninjured individuals captured during drainage works, are to be released within 1 hour of capture, out of harm’s way no more than 125 m of where it was found, unless absolutely necessary. If it is not possible to relocate the turtle within 125 m of the capture location, contact the MNRF for further direction. MNRF may require transport of turtle(s) to MNRF Authorized Wildlife Rehabilitator or Veterinarian. Contact information can be found in Appendix F.• If the methods of handling turtles outlined in subsection 1.3 of the Handling Protocol are not possible due to a turtle’s injuries, use a shovel or flat object to pick up the turtle, ensuring that injured areas are supported and place in a large plastic bin or bucket with a lid with air holes. Immediately transport the turtle to an MNRF Authorized Wildlife Rehabilitator or Veterinarian and contact the MNRF. Contact Information for Authorized Wildlife Rehabilitator can be found in Appendix F and on SAR Information Sheets (Appendix F). See subsection 1.7 of the Handling Manual (included in the Contractor Information Package; Appendix F) for more details.• Complete a SAR Encounter Reporting Form included in the Contractor Information Package (Appendix F).



7.2.3 Species Specific Mitigation Measures for Aquatic Species

Review of background information including, DFO's Aquatic SAR Mapping (Map 29 of 33), NHIC and MNRF Agreement² identified 10 fish and 10 mollusc species listed as endangered or threatened under the ESA, 2007 with occurrence records within and/or adjacent to the Study Area. Of the 20 aquatic SAR identified only two fish species have been included in the Plan based on the presence of suitable habitat within the Study Area drains.

Although suitable habitat for SAR mussel species was not identified during our background review and site visits, if at any time a mussel species (of any type) are encountered, stop work and contact DFO for direction on how to proceed. A SAR Information Sheet for mussels species found during the background review has been provided in **Appendix F**.

Watercourses and drains identified during the background review and subsequent field investigations found all features to be of warm water thermal regime and to support warm water fish species. **Table 8** below indicates the in-water timing window restriction for warm water fish species. **Table 9** provides a list of recommended measures to follow to avoid impacts to fish species. As previously mentioned, activities that affect a species listed in Table 1, subsection 2, Section 23.9 of O. Reg. 242/08 still require a permit to conduct drainage works (see **Appendix D** for details). DFO's *Guidance for Maintaining and Repairing Municipal Drains in Ontario version 1.0* (2017) document should be consulted when conducting all drainage works.

Table 8: In-water Timing Window Restriction for Warm Water Fish Species

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec		
Date Codes ¹	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
In-water Restriction																																				

¹Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNRF Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-010-10).

² Agreement under Section 23 of O.Reg. 242/08 made under the ESA, 2007 (File # AY-23D-010-10).



Table 9: Mitigation Measures for Aquatic Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Aquatic Species within the Study Area
Pugnose Shiner	<ul style="list-style-type: none"> • Consult with MNRF if in-water timing window restrictions cannot be adhered to. • Allow for fish salvage within the isolated work area prior to dewatering. • Limit duration of in-water work as much as possible. • Conduct in-stream work during periods of low flow to reduce the risk to fish and their habitat and to allow work in-water to be isolated from flows. • Schedule work to avoid wet, windy, and rainy periods that may increase erosion and sedimentation. Suspend in-stream work immediately if sedimentation is detected. • Implement water quality monitoring if required. • Ensure equipment is clean and free of leaks. Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water. • Alter activities to reduce disturbance to species and habitat and follow current DFO Measures to Avoid Harm
Spotted Gar	<ul style="list-style-type: none"> • If federally listed SAR fish are encountered or have the potential to be present, contact the DFO to review next steps. • If SAR encountered, complete a SAR Encounter Reporting Form that will be included in the annual reporting.



7.2.4 Species Specific Mitigation Measures for Bird Species

Environment and Climate Change Canada (ECCC) identifies general nesting periods for migratory birds in Canada. Essex County is located within nesting zone C1, **Table 10** provides the RAPs for two habitat types: open field habitat and forest habitat. The RAPs provided are based on 61-100% of the migratory bird species predicted to be nesting during the identified time period (as indicated on the ECCC C1 nesting zone table).

Table 10: Restricted Activity Period for Bird Species

Month	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec		
Date Codes ¹	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L	E	M	L
Open																																				
Forest																																				

¹Monthly intervals: E = Early (days 1-10); M = Middle (days 11-20); L = Late (days 21-31). Adapted from the Seasonal Timing Windows Chart in the MNRF Agreement under Section 23 of O.Reg. 242/08 made under ESA, 2007 (File #: AY-23D-010-10).



Based on our review of potential SAR birds to occur within the Study Area, the following mitigation measures are recommended while conducting drainage work activities:

Table 11: Mitigation Measures for Bird Species

Common Name	Recommended Mitigation Measures to Avoid Impacts to SAR Birds within the Study Area
Bobolink	<ul style="list-style-type: none"> • Planning activities should include review of area for potential habitat (including box culverts and bridges for Barn Swallow nests). • Limit construction footprint where possible.
Eastern Meadowlark	<ul style="list-style-type: none"> • Conduct work outside of the RAP for birds where possible. • Pre-construction activities should include bird nest sweeps if activities occur during migratory bird sensitive timing window identified in Table 10, above. • Protect active nests by flagging or fencing off an appropriate setback distance. • Suspend activity if active habitat is discovered that cannot be adequately setback from.
Barn Swallow	<ul style="list-style-type: none"> • Maintain habitat connections where possible during activities. • Implement measures to restore lost habitat/ habitat connections. • If sensitive habitat is on site, a qualified biologist should be on site daily. • If SAR encountered, complete a SAR Encounter Reporting Form that will be included in the annual submission to the MNRF.



7.2.5 Species Specific Mitigation Measures for Vegetation Communities

Potential impacts to plant SAR may include trampling by personnel or equipment, alteration of growing conditions (e.g. soil compaction, sunlight availability, and moisture regime), disturbance to localized seed bank and introduction of invasive species. Mitigation measures that will be incorporated during drainage work activities to minimize the impacts to adjacent forest communities and SAR vegetation include:

- Planning activities should include review of area for identification of potential SAR vegetation.
- Limit construction footprint where possible to minimize the disturbance to plant species.
- Installing temporary erosion and sediment control measures prior to activity, and maintaining them throughout activity, including routinely inspecting and repairing them, as required. Enhanced sediment and erosion control measures will be implemented for sensitive areas where SAR habitat has been identified within and abutting the work site.
- Vegetation that does not require removal for the purposes of construction will be protected through the installation and maintenance of temporary vegetation protection fencing (e.g. snow fencing or erosion sediment control fencing). This includes protection of any SAR trees identified.
- Equipment, materials and other construction activities will not be permitted in zones delineated for protection.
- If drainage work activity cannot be undertaken without disturbing a SAR plant(s), the Town should contact the MNRF for additional site-specific measures.
- Operational procedures and Best Management Practices for handling material and excess material, and spill prevention will be implemented. Vehicular and equipment maintenance and refuelling will be carried out in a controlled manner, and where applicable, at designated maintenance areas. Refuelling will not be permitted within 30 m of any forest, or watercourse.
- Stabilize and re-vegetate exposed soil surfaces as soon as possible following activities, using native groundcover seed mixes and plantings.



APPENDIX “REI-C”

STANDARD SPECIFICATIONS **FOR ACCESS BRIDGE CONSTRUCTION**

1. PRECAST CONCRETE BLOCK & CONCRETE FILLED JUTE BAG HEADWALLS

After the Contractor has set the endwall foundations and the new pipe in place, it shall completely backfill same and install new precast concrete blocks or concrete filled jute bag headwalls at the locations and parameters indicated on the drawing. All concrete used for headwalls shall be a minimum of 30 mPa at 28 days and include 6% +/- 1% air entrainment.

Precast concrete blocks shall be interlocking and have a minimum size of 600mmX600mmX1200mm. Half blocks shall be used to offset vertical joints. Cap blocks shall be a minimum of 300mm thick. A foundation comprising minimum 300mm thick poured concrete or precast blocks the depth of the wall and the full bottom width of the drain plus 450mm embedment into each drain bank shall be provided and placed on a firm foundation as noted below. The Contractor shall provide a levelling course comprising a minimum thickness of 150mm Granular "A" compacted to 100% Standard Proctor Density or 20mm clear stone, or a lean concrete as the base for the foundation. The base shall be constructed level and flat to improve the speed of installation. Equipment shall be provided as required and recommended by the block supplier for placing the blocks such as a swift lift device for the blocks and a 75mm eye bolt to place the concrete caps,. The headwall shall extend a minimum of 150mm below the invert of the access bridge culvert with the top of the headwall set to match the finished driveway grade, unless a 150mm high curb is specified at the edge of the driveway. To achieve the required top elevation, the bottom course of blocks and footing may require additional embedment into the drain bottom. The Contractor shall provide shop drawings of the proposed wall for approval by the Drainage Superintendent or Engineer prior to construction.

Blocks shall be placed so that all vertical joints are staggered. Excavation voids on the ends of each block course shall be backfilled with 20mm clear stone to support the next course of blocks above. Walls that are more than 3 courses in height shall be battered a minimum of 1 unit horizontal for every 5 units of vertical height. The batter shall be achieved by careful grading of the footing and foundation base, or use of pre-battered base course blocks. Filter cloth as specified below shall be placed behind the blocks to prevent the migration of any fill material through the joints. Backfill material shall be granular as specified below. Where the wall height exceeds 1.8 metres in height, a uni-axial geogrid SG350 or equivalent shall be used to tie back the walls and be installed in accordance with the manufacturer's recommendations. The wall face shall not extend beyond the end of the access bridge pipe. Non-shrink grout shall be used to fill any gaps between the blocks and the access bridge pipe for the full depth of the wall. The grout face shall be finished to match the precast concrete block walls as closely as possible.

When constructing the concrete filled jute bag headwalls, the Contractor shall place the bags so that the completed headwall will have a slope inward from the bottom of the pipe to the top of the finished headwall. The slope of the headwall shall be one unit horizontal to five units vertical. The Contractor shall completely backfill behind the new concrete filled jute bag headwalls with Granular "B" and Granular "A" material as per O.P.S.S. Form 1010 and the granular material shall be compacted in place to a Standard Proctor Density of 100%. The placing of the jute bag headwalls and the backfilling shall be performed in lifts simultaneously. The granular backfill shall be placed and compacted in lifts not to exceed 305mm (12") in thickness.

The concrete filled jute bag headwalls shall be constructed by filling jute bags with concrete. All concrete used to fill the jute bags shall have a minimum compressive strength of 25 MPa in 28 days and shall be provided and placed only as a wet mix. Under no circumstance shall the concrete to be used for filling the jute bags be placed as a dry mix. The jute bags, before being filled with concrete, shall have a dimension of 460mm (18") x 660mm (26"). The jute bags shall be filled with concrete so that when they are laid flat, they will be approximately 100mm (4") thick, 305mm (12") to 380mm (15") wide and 460mm (18") long.

The concrete jute bag headwall to be provided at the end of the bridge pipe shall be a single or double bag wall construction as set out in the specifications. The concrete filled bags shall be laid so that the 460mm (18") dimension is parallel with the length of the new pipe. The concrete filled jute bags shall be laid on a footing of plain concrete being 460mm (18") wide, and extending for the full length of the wall, and 305mm (12") thick extending below the bottom of the culvert pipe.

All concrete used for the footing, cap and bags shall have a minimum compressive strength of 30 mPa at 28 days and shall include 6% ± 1% air entrainment.

Upon completion of the jute bag headwall the Contractor shall cap the top row of concrete filled bags with a layer of plain concrete, minimum 100mm (4") thick, and hand trowelled to obtain a pleasing appearance. If the cap is made more than 100mm thick, the Contractor shall provide two (2) continuous 15M reinforcing bars set at mid-depth and equally spaced in

the cap. The Contractor shall fill all voids between the concrete filled jute bags and the corrugated steel pipe with concrete, particular care being taken underneath the pipe haunches to fill all voids.

The completed jute bag headwalls shall be securely embedded into the drain bank a minimum of 450mm (18") measured perpendicular to the sideslopes of the drain.

As an alternate to constructing a concrete filled jute bag headwall, the Contractor may construct a grouted concrete rip rap headwall. The specifications for the installation of a concrete filled jute bag headwall shall be followed with the exception that broken pieces of concrete may be substituted for the jute bags. The concrete rip rap shall be approximately 460mm (18") square and 100mm (4") thick and shall have two (2) flat parallel sides. The concrete rip rap shall be fully mortared in place using a mixture composed of three (3) parts of clean sharp sand and one (1) part of Portland cement.

The complete placement and backfilling of the headwalls shall be performed to the full satisfaction of the Drainage Superintendent and the Engineer.

2. QUARRIED LIMESTONE ENDWALLS

The backfill over the ends of the corrugated steel pipe shall be set on a slope of 1-½ units horizontal to 1 unit vertical from the bottom of the corrugated steel pipe to the top of each end slope and between the drain banks. The top 305mm (12") in thickness of the backfill over the ends of the corrugated steel pipe shall be quarried limestone. The quarried limestone shall also be placed on a slope of 1-½ units horizontal to 1 unit vertical from the bottom of the corrugated steel pipe to the top of each bank of the drain adjacent each end slope. The quarried limestone shall have a minimum dimension of 100mm (4") and a maximum dimension of 250mm (10"). The end slope protection shall be placed with the quarried limestone pieces carefully tamped into place with the use of a shovel bucket so that, when complete, the end protection shall be consistent, uniform, and tightly laid in place.

Prior to placing the quarried limestone end protection over the granular backfill and on the drain banks, the Contractor shall lay non-woven geotextile filter fabric "GMN160" conforming to O.P.S.S. 1860 Class I or approved equal. The geotextile filter fabric shall extend from the bottom of the corrugated steel pipe to the top of each end slope of the bridge and along both banks of the drain to a point opposite the ends of the pipe.

The Contractor shall take extreme care not to damage the geotextile filter fabric when placing the quarried limestone on top of the filter fabric.

3. BRIDGE BACKFILL

After the corrugated steel pipe has been set in place, the Contractor shall backfill the pipe with Granular "B" material, O.P.S.S. Form 1010 with the exception of the top 305mm (12") of the backfill. The top 305mm (12") of the backfill for the full width of the excavated area (between each bank of the drain) and for the top width of the driveway, shall be Granular "A" material, O.P.S.S. Form 1010. The granular backfill shall be compacted in place to a Standard Proctor Density of 100% by means of mechanical compactors. All of the backfill material, equipment used, and method of compacting the backfill material shall be inspected and approved and meet with the full satisfaction of the Drainage Superintendent and Engineer.

4. GENERAL

Prior to the work commencing, the Drainage Superintendent and Engineer must be notified, and under no circumstances shall work begin without one of them being at the site. Furthermore, the grade setting of the pipe must be checked, confirmed, and approved by the Drainage Superintendent or Engineer prior to continuing on with the bridge installation.

The alignment of the new bridge culvert pipe shall be in the centreline of the existing drain, and the placing of same must be performed totally in the dry.

Prior to the installation of the new access bridge culvert, the existing sediment build-up in the drain bottom must be excavated and completely removed. This must be done not only along the drain where the bridge culvert pipe is to be installed, but also for a distance of 3.05 metres (10 ft.) both upstream and downstream of said new access bridge culvert. When setting the new bridge culvert pipe in place it must be founded on a good undisturbed base. If unsound soil is encountered, it must be totally removed and replaced with 20mm (3/4") clear stone, satisfactorily compacted in place.

When doing the excavation work or any other portion of the work relative to the bridge installation, care should be taken not to interfere with, plug up, or damage any existing surface drains, swales, and lateral or main tile ends. Where damage is encountered, repairs to correct same must be performed immediately as part of the work.

The Contractor and/or landowner performing the bridge installation shall satisfy themselves as to the exact location, nature and extent of any existing structure, utility or other object that they may encounter during the course of the work. The Contractor shall indemnify and save harmless the Town, or the Municipality, the Engineer, and their staff from any damages which it may cause or sustain during the progress of the work. It shall not hold them liable for any legal action arising out of any claims brought about by such damage caused by it.

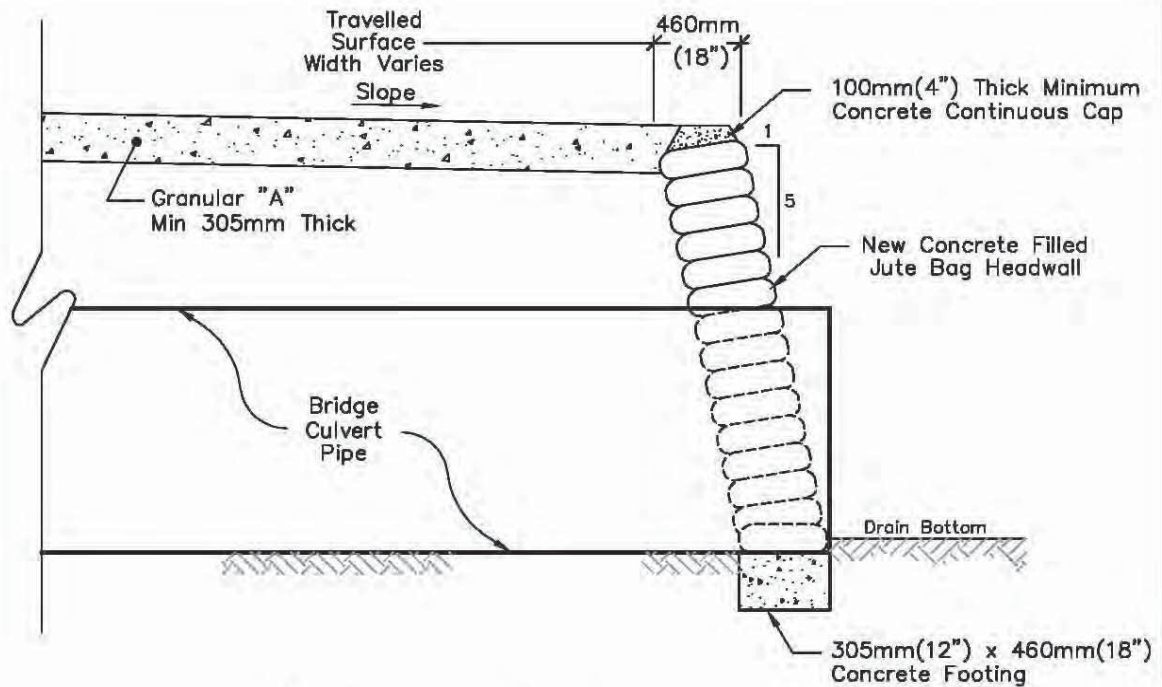
Where applicable, the Contractor and/or landowner constructing the new bridge shall be responsible for any damage caused by them to any portion of the Town road right-of-way. They shall take whatever precautions are necessary to cause a minimum of damage to same and must restore the roadway to its original condition upon completion of the works.

When working along a municipal roadway, the Contractor shall provide all necessary lights, signs, barricades and flagpersons as required to protect the public. All work shall be carried out in accordance with the requirements of the Occupational Health and Safety Act, and latest amendments thereto. If traffic control is required on this project, it is to comply with the M.T.O. Traffic Control Manual for Roadway Work Operations and Ontario Traffic Manual Book 7.

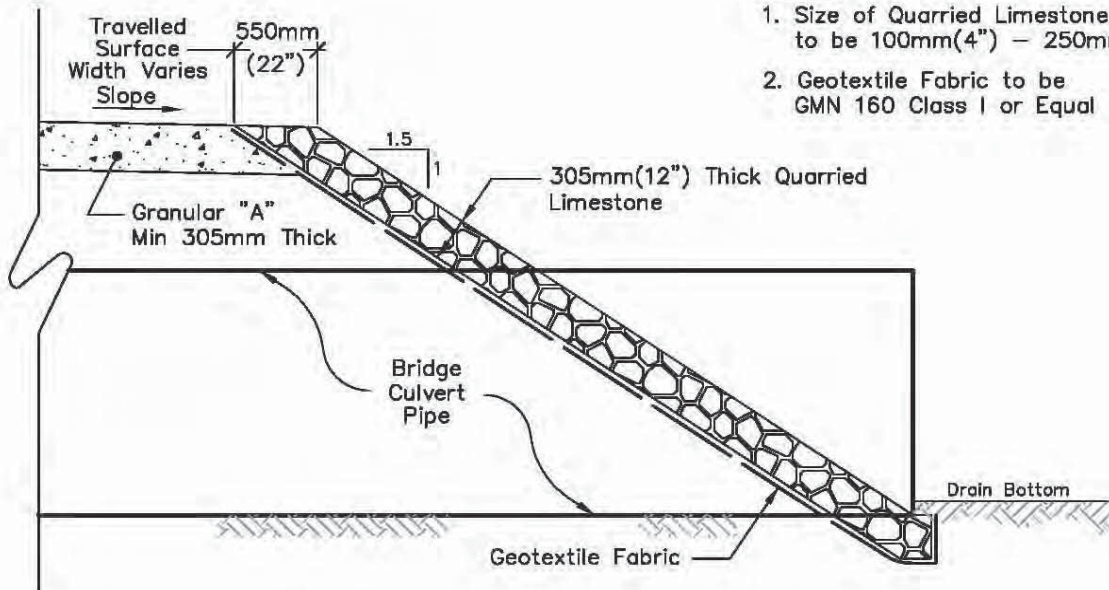
Once the bridge installation has been completed, the drain sideslopes directly adjacent the new headwalls and/or endwalls are to be completely restored including revegetation, where necessary.

All of the work required towards the installation of the bridge shall be performed in a neat and workmanlike manner. The general site shall be restored to its' original condition, and the general area shall be cleaned of all debris and junk, etc. caused by the work

All of the excavation, installation procedures, and parameters as above mentioned are to be carried out and performed to the full satisfaction of the Drainage Superintendent and Engineer.



Typical Jute Bag Headwall



NOTE:

1. Size of Quarried Limestone to be 100mm(4") – 250mm(10")
2. Geotextile Fabric to be GMN 160 Class I or Equal

Typical Quarried Limestone End Protection

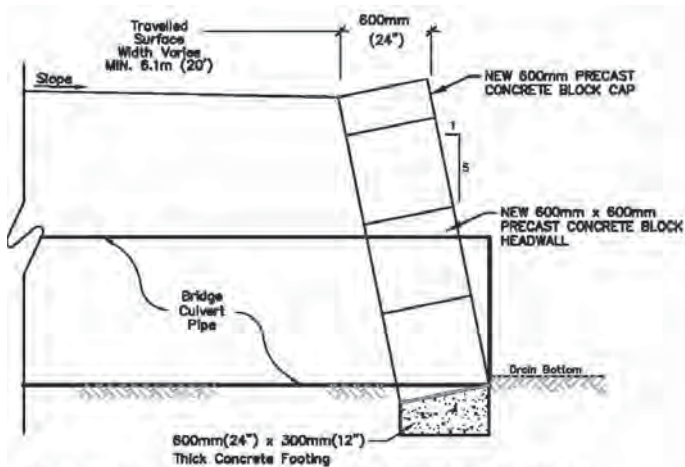
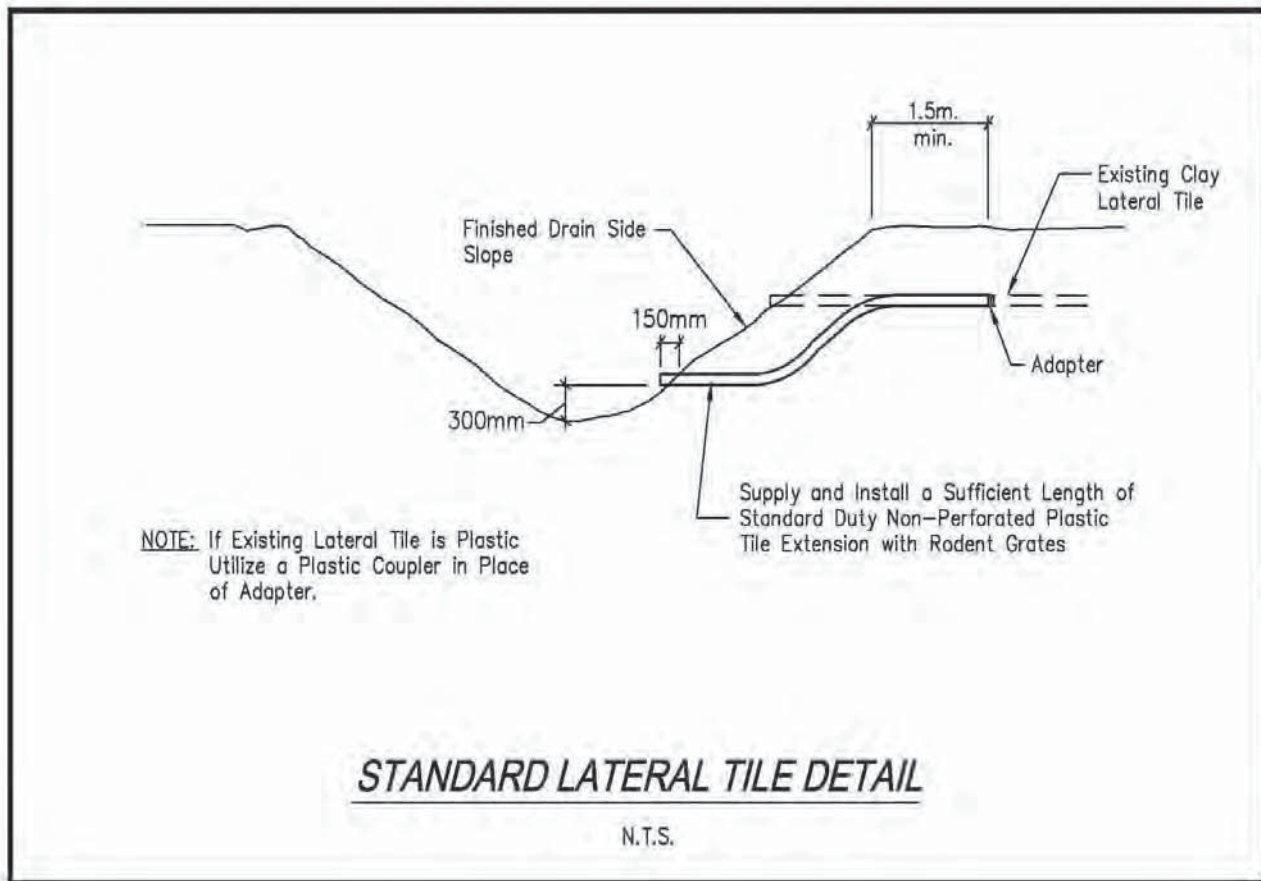
Rood Engineering Inc.

Consulting Engineers

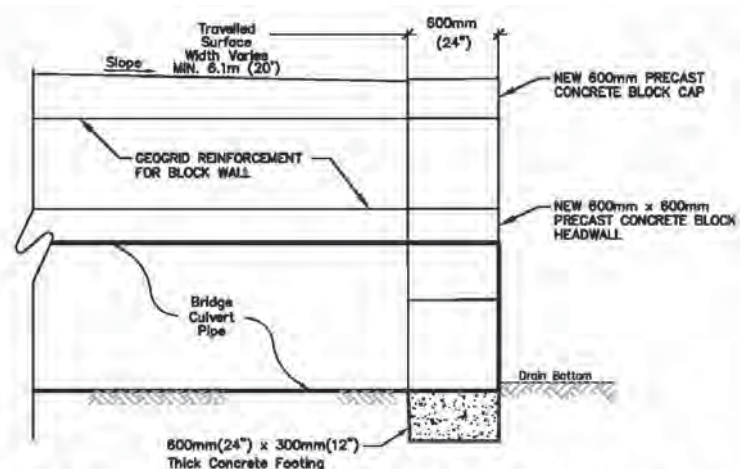
9 Nelson Street

Leamington, Ontario N8H 1G6

519-322-1621



TYPICAL PRECAST CONCRETE BLOCK END PROTECTION
Scale = N.T.S.



TYPICAL VERTICAL PRECAST CONCRETE BLOCK END PROTECTION
Scale = N.T.S.

APPENDIX “REI-D”

THE CORPORATION OF THE TOWN OF TECUMSEH

BY-LAW NO. 2007-51

Being a by-law to amend By-law No. 2007-41 to regulate the setting of open air fires and identify the precautions and conditions to be observed for such fires within The Corporation of the Town of Tecumseh.

WHEREAS Council considers excessive smoke, smell, airborne sparks or embers to be or could become or cause public nuisances by creating negative health effects on neighbouring residents, increasing fire exposure hazards, infringing the enjoyment of the use of neighbouring properties and generating false or nuisance alarms;

AND WHEREAS Council is empowered under Section 128 of the *Municipal Act* 2001, S.O. 2001, c. 25 as amended, to pass by-laws to prohibit and regulate public nuisances, including matters that, in the opinion of Council are, or could become or cause public nuisances;

AND WHEREAS in accordance with Section 425 of the *Municipal Act* 2001, S.O. 2001, c. 25 as amended, a municipality may pass by-laws providing that a person who contravenes a by-law of the municipality passed under this Act is guilty of an offence;

AND WHEREAS Section 444 of the *Municipal Act* 2001, c. 25 states if a municipality is satisfied that a contravention of a by-law of the municipality passed under this Act has occurred, the municipality may make an order requiring the person who contravened the by-law or who caused or permitted the contravention or the owner or occupier of the land on which the contravention occurred to discontinue the contravening activity;

AND WHEREAS the Council of The Corporation of the Town of Tecumseh enacted By-law No. 2007-41 on the 26th day of June, 2007 to regulate the setting of open air fires and identify the precautions and conditions to be observed for such fires within The Corporation of the Town of Tecumseh;

AND WHEREAS the Council of The Corporation of the Town of Tecumseh is desirous of amending By-law No. 2007-41;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF TECUMSEH ENACTS AS FOLLOWS:

1. **That** paragraph 4.9 be deleted and replaced with the following paragraph:
 - 4.9 Permitted fires, except those described in Section 4.4, shall,
 - a) be kept to manageable size that shall not be greater than one (1) square metre with flames no higher than one (1) metre in height; and,
 - b) in residentially zoned areas, be completely extinguished by 2:00 a.m.
2. **That** paragraph 5.2 be deleted and replaced with the following paragraph:
 - 5.2 An application for a Permit must be completed on the form/forms provided by the Tecumseh Fire/Rescue Services.

3. **That** paragraph 5.3 be deleted and replaced with the following paragraph:

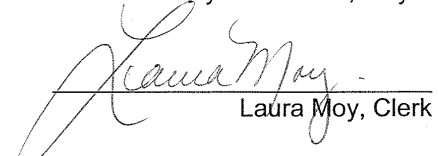
5.3 An application must be filed with the Chief Fire Official of the Tecumseh Fire/Rescue Services. Approved permits must be retained and presented to an attending fire official in the event that there is a need for a fire official to attend at the burn location due to complaint.

4. **That** this by-law shall take full force and effect on the third and final reading.

READ a first, second, third time and finally passed this 11th day of September, 2007.



Gary McNamara, Mayor



Laura Moy, Clerk

THE CORPORATION OF THE TOWN OF TECUMSEH

BY-LAW NUMBER 2007-41

A by-law to regulate the setting of open air fires and identify the precautions and conditions to be observed for such fires within The Corporation of the Town of Tecumseh.

WHEREAS Council considers excessive smoke, smell, airborne sparks or embers to be or could become or cause public nuisances by creating negative health effects on neighbouring residents, increasing fire exposure hazards, infringing on the enjoyment of the use of neighbouring properties and generating false or nuisance alarms;

AND WHEREAS Council is empowered under Section 128 of the *Municipal Act* 2001, S.O. 2001, c. 25 as amended, to pass bylaws to prohibit and regulate public nuisances, including matters that, in the opinion of Council are, or could become or cause public nuisances;

AND WHEREAS in accordance with Section 425 of the *Municipal Act* 2001, S.O. 2001, c. 25 as amended, a municipality may pass by-laws providing that a person who contravenes a by-law of the municipality passed under this Act is guilty of an offence;

AND WHEREAS Section 444 of the *Municipal Act* 2001 c. 25 states if a municipality is satisfied that a contravention of a by-law of the municipality passed under this Act has occurred, the municipality may make an order requiring the person who contravened the by-law or who caused or permitted the contravention or the owner or occupier of the land on which the contravention occurred to discontinue the contravening activity;

AND WHEREAS Section 446(1) of the *Municipal Act* 2001 c.25 states that if a municipality has the authority under this or any other Act or under a by-law under this or any other Act to direct or require a person to do a matter or thing, the municipality may:

- provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense;
- enter upon land at any reasonable time;
- recover the costs of doing a matter or thing from the person directed or required to do it by action or by adding the costs to the tax roll and collecting them in the same manner as property taxes; and
- that costs include interest calculated at a rate of 15 per cent or such lesser rate as may be determined by the municipality, calculated for the period commencing on the day the municipality incurs the costs;
- the costs, including interest, constitutes a lien on the land upon the registration in the proper land registry office of a notice of lien;

AND WHEREAS Section 390 of the *Municipal Act* 2001 c.25 provides that a "person" includes a municipality and a local board and the Crown;

AND WHEREAS Section 426 of the *Municipal Act* 2001 c. 25 provides that no person shall hinder or obstruct, or attempt to hinder or obstruct any person exercising a power or performing a duty under this Act or a by-law under this Act and that any person who contravenes subsection (1) is guilty of an offence;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF TECUMSEH ENACTS AS FOLLOWS:

1. DEFINITIONS

In this By-law:

- 1.1 "Burning Appliance" means any device designed or engineered to have a fire set within a contained area and totally enclosed by various means of screening and/or other methods.
- 1.2 "By-law Enforcement Officer" means the municipal person appointed by the Town of Tecumseh who shall be responsible for the enforcement of the provisions of this by-law.
- 1.3 "Chief Fire Official" means the Fire Chief of the Tecumseh Fire/ Rescue Services or designate.
- 1.4 "Competent Adult" means any person (18 years of age or older) who, in the opinion of those charged with enforcement of this By-Law, is capable of exercising the required judgement and capable of performing the necessary actions to control and prevent its unwanted spread.
- 1.5 "Farmer" means the owner or operator of an agricultural operation within an area zoned for agricultural pursuant to the *Farming & Food Protection Act*, 1998.
- 1.6 "Farmlands" means land designated "agricultural".
- 1.7 "Firefighter" means any person or any rank of person employed in, or appointed to the Tecumseh Fire/Rescue Services and assigned to undertake fire protection or fire prevention services.
- 1.8 "Full Cost Recovery Basis" has the meaning as described in Schedule "A" attached hereto.
- 1.9 "Open Air" means any open place, yard, field, lot, part lot or construction area which is not enclosed by a building or structure.
- 1.10 "Open Air Burning" means any fire set in the Open Air.
- 1.11 "Owner" means the registered owner or any person, firm or corporation having control over, or possession, of any portion of the building or property under consideration and includes the persons in the building or on the property.
- 1.12 "Permit" means a permit issued by the Chief Fire Official to set a fire in the Open Air for a specified date and period of time.
- 1.13 "Person" means an individual, business, a partnership or a corporation.
- 1.14 "Pit" means an area dug into the ground and/or surrounded by materials designed to contain the fire and prevent its spread to areas beyond the Pit.
- 1.15 "Police Officer" means any member of the Ontario Provincial Police.
- 1.16 "Tenant" means the occupant having possession or Person having control of a property or premises.
- 1.17 "Town" means The Corporation of the Town of Tecumseh.

2. ADMINISTRATION AND ENFORCEMENT

- 2.1 The Chief Fire Official shall be responsible for the administration of this by-law.
- 2.2 Enforcement of this by-law is the responsibility of the Chief Fire Official, any Fire-fighter, any Police Officer or any By-law Enforcement Officer.
- 2.3 The Chief Fire Official may refuse to issue a Permit or revoke any or all issued Permits.
- 2.4 The Fire Chief, Firefighters or Police Officers may, at all times enter and inspect any property or premises in order to ascertain whether the provisions of this by-law are complied with and to enforce or carry into effect the by-law.
- 2.5 Any person who fails to comply with the provisions of this by-law or fails to extinguish a fire once notification to do so has been given to him by the Chief Fire Official, a Police Officer or a Firefighter shall, in addition to any penalty provided herein, be liable to the municipality for all expenses incurred for the purposes of controlling and extinguishing of any fire so set or left to burn and such expenses may be recovered by court action or in a like manner as municipal taxes.

3. ENVIRONMENT

- 3.1 All Open Air Burning shall comply with the provisions of the *Environmental Protection Act*, R.S.O. 1990. c. E19.
- 3.2 No Open Air Burning shall be permitted when a smog alert has been issued for the region of Essex County, which includes the Town.
- 3.3 No Open Fire shall be started or maintained when wind condition is in such direction or intensity so as to cause any or all of the following:
 - (a) decrease in visibility on any highway or roadway;
 - (b) threaten a rapid spread of fire through a grass or brush area;
 - (c) smoke which causes annoyance or irritation to adjacent persons, properties or premises.

4. GENERAL PROVISIONS

- 4.1 No Person being the Owner or Tenant in possession of lands within the Town shall allow a fire to be set or burn on such lands unless a Permit has been obtained.
- 4.2 No Person shall allow a fire to be set or burned exceeding the requirements of Sections 4.8 and 4.9.
- 4.3 Notwithstanding any provisions herein, no Person shall set or maintain a fire,
 - (a) in contravention of the *Ontario Fire Code*, the *Environmental Protection Act* or any other statutory requirements of the Province of Ontario or the Government of Canada;
 - (b) where the consumption of material or size and area of the fire will exceed the limits set by the Chief Fire Official and/or listed within this by-law in Sections 4.8 and 4.9.

- 4.4 (a) No Permit shall be required for domestic barbeques or permanent outdoor fireplaces used solely for the cooking of food on a grill and extinguished immediately upon completion of the cooking process or any Burning Appliance, or a Pit or open area where the requirements of Sections 4.8 and 4.9 are not exceeded;
- (b) installation and location of Burning Appliances must meet the manufacturer's specifications.
- 4.5 (a) A farmer who intends to set or maintain a fire in the Open Air on a specified day for disposal of vegetable matter or vegetation on Farmlands which is normal and incidental for farming purposes shall obtain a Permit to cover the period of the proposed Open Air fire, and will be required to notify the Tecumseh Fire/Rescue Services for each day that the proposed Open Air fire will take place;
- (b) an Open Air fire shall be supervised by a Competent Adult equipped with sufficient equipment to control and contain the Open Air fire to prevent the spread of the Open Air fire that would endanger or put at risk other properties or premises;
- (c) an Open Air fire shall be restricted to daylight hours only;
- (d) an Open Air fire shall be surrounded by a tilled area wide enough to prevent an Open Air fire from jumping across the tilled area and to maintain the area of the burn to be no greater than one (1) hectare in size;
- (e) the leading edge of the flame of an Open Air fire shall not exceed thirty (30) metres in length.
- 4.6 No Person shall set any fire in the Open Air to burn asphalt products, tires, treated wood, construction materials or rubble, kitchen garbage or any garbage or trash, rubber plastics and like items.
- 4.7 No Person shall set any fire in the Open Air except where permitted and only in the presence of a Competent Adult. The Competent Adult shall not leave the burning operation until such time as the fire has been completely extinguished and there is no threat of re-ignition or spreading of the fire.
- 4.8 Every Person that starts a fire in the Open Air shall ensure that there are adequate tools and/or water on hand to contain or extinguish the fire.
- 4.9 Permitted fires, except those described in Section 4.4, shall be kept to manageable size that shall not be greater than one (1) square metre with flames no higher than one (1) metre in height.
- 4.10 Every Person who sets an Open Air fire in the Town of Tecumseh shall be:
- (a) responsible and liable for any damage to property or injury to person occasioned by said fire;
- (b) liable for all costs incurred by the Town of Tecumseh, including but not limited to, the Fire/Rescue Services, including personnel and other agencies called to control and extinguish said fire on a Full Cost Recovery Basis. All fees and charges to be paid under this subsection shall be payable in the manner and subject any interest and penalties set forth in paragraph 5 and 6 of the Administrative Fees and Charges By-law 2007-12, as may be amended or repealed from time to time;

- (c) the fees and charges under this section shall not be payable by that class of persons which have obtained a permit for an Open Air fire and complied with the terms of such permit.

- 4.11 Notwithstanding the aforementioned sections listed herein, the Fire Chief may issue a Permit upon application and approve the setting of any fire subject to the fire being adequately supervised and controlled through special conditions addressed by the Chief Fire Official.
- 4.12 No fire shall be set to dispose of commercial, industrial or construction waste or other like materials in areas zoned for commercial or industrial occupancies and such aforementioned materials shall not be transported to residential or agricultural areas for burning purposes.
- 4.13 No fires shall be set at construction and/or demolition sites for the purpose of disposing of waste, building material or rubble.

5. FIRES REQUIRING PERMITS

- 5.1 Except as provided in section 4.3 of this by-law, no Person shall set, maintain or cause to be set or maintained, a fire in the Open Air unless a Permit has been issued by the Chief Fire Official.
- 5.2 An application for a Permit must be completed on the form/forms provided by the Tecumseh Fire/Rescue Services. Such forms are available to fill out by telephone call to Tecumseh Fire Station No. 1, Monday to Friday from 08:30 hr to 16:30 hr.
- 5.3 Each completed application for a Permit must be filed with the Chief Fire Official of the Tecumseh Fire/Rescue Services, at the administration offices located at 985 Lesperance Road, Tecumseh, Ontario.
- 5.4 In issuing a Permit under this part for Open Air Burning, the Chief Fire Official may impose any additional requirements or conditions as may be deemed necessary.

6. OFFENCES

- 6.1 (a) Any person who contravenes any of the provisions of this by-law is guilty of an Offence;
- (b) any person who hinders or obstructs a person lawfully carrying out the enforcement of this by-law is guilty of an Offence.

7. FINES

- 7.1 Every Person who is convicted of an Offence is liable to a Fine of not more than Five Thousand (\$5,000.00) Dollars as provided for in the *Provincial Offences Act*, R. S.O. 1990, Chap. P.33.

8. SEVERABILITY

- 8.1 If any section or sections of this by-law or parts thereof are found in any court to be illegal or beyond the power of Council to enact, such section or sections or parts thereof shall be deemed severable and all other sections or parts of this by-law shall be deemed separate and independent there from and enacted as such.

9. **SHORT TITLE**

9.1 The short title of this by-law shall be TECUMSEH OPEN AIR BURNING BY-LAW.

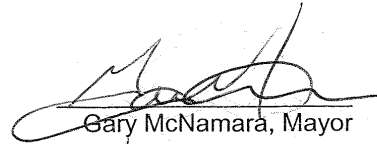
10. **EFFECTIVE DATE**

10.1 This by-law shall come into full force and take effect on the 1st day of July, 2007.

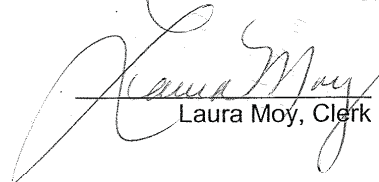
11. **REPEAL**

11.1 By-law No. 2005-57 is hereby repealed.

READ a first, second, third time and finally passed this 26th day of June, 2007.



Gary McNamara, Mayor



Laura Moy, Clerk

SCHEDULE "A"
By-law Number 2007-41

**THE CORPORATION OF THE TOWN OF TECUMSEH
TECUMSEH FIRE/RESCUE SERVICES EQUIPMENT SERVICES RATES**

"Full Cost Recovery Basis" includes any and all charges and costs howsoever incurred by the Town directly or indirectly in controlling and extinguishing the Open Air fire and shall include without limitations:

Emergency Services Rendered:

- (a) \$350.00 first hour or part thereof per piece of equipment;
- (b) \$175.00 each additional half-hour or part thereof per piece of equipment;
- (c) \$42.00 first hour or part thereof per firefighter who responds to the call;
- (d) \$27.50 for each additional hour or part thereof per firefighter until all equipment is cleaned, checked and returned to service;
- (e) the cost of all extinguishing agents required to extinguish the fire.

No Emergency Services Rendered:

- (a) \$350.00 flat rate per piece of equipment where services are not required nor provided;
- (b) \$42.00 flat rate per firefighter who responds to the call for service.

APPENDIX “REI-E”

WATERSHED PLAN, PROFILE, SECTIONS, & BRIDGE PLANS

OF THE

SULLIVAN CREEK DRAIN

(Geographic Township of Sandwich South)

IN THE

TOWN OF TECUMSEH

IN THE

COUNTY OF ESSEX • ONTARIO

GERARD ROAD, P.ENG.

ROOD
ENGINEERING
INC.

CONSULTING ENGINEERS
Leamington, Ontario
519-322-1621

DATE: January 9th, 2023

TOWN OF TECUMSEH

MAYOR: Gary McNamara
CLERK: Laura May
DRAINAGE SUPERINTENDENT: Alessia Mussio

ROLL INFORMATION:

TOWN OF TECUMSEH:

- Michael Lutsch
460-01000 MN 6098
- Thomas Halford
460-01100 MN 5680
- Thomas & Linda Halford
460-01200 MN 5660
- Rosemary Halford
460-01300 MN 5580
- Thomas Halford
460-01400
- Michael & Helen Lavin
460-01500 MN 5580
- John Lafferty
460-01600
- Frank & Catherine Lafferty
460-01601
- Frank Lafferty Limited
460-01700
- Frank Lafferty
460-01800 MN 5369
- Transportation Ministry
460-01801
- Catherine Lafferty
460-01900 MN 5395
- 538073 Ontario Inc.
460-01901
- Catherine Lafferty & Mary Thompson
460-02000
- 538073 Ontario Inc.
460-02100 MN 6615
- Empty placeholder; skip ID No. 16
- Empty placeholder; skip ID No. 17
- Alexander Chevalier & Jessie Darmon
480-08200 MN 6840
- Ali Khafaja
480-08250 MN 6812
- Sandwich South Farms Inc.
480-08300
- Sandwich South Farms Inc.
480-08300
- Gerald & Agnes Lavin
480-08400 MN 6420
- Gerald & Agnes Lavin
480-08410 MN 6420
- Joseph McCarthy
480-08500 MN 6084
- Richard McCarthy
480-08600 MN 5676
- Transportation Ministry
480-08611
- David & Margaret Pringle
480-08700 MN 5412
- Joseph & Marilyn McCarthy
480-08750 MN 5550
- 538073 Ontario Inc.
480-08800
- Josef Dworatschek
480-08801 MN 5450

- Kevin & Melissa McCarthy
480-08803 MN 5500
- Ravinder & Mavi Singh
480-08900 MN 6703
- Rose Jobin & Jole Reyner
480-09000 MN 8639
- Tammy & John Flood
480-09010 MN 8559
- Jason Hill & Wendy Ouellette-Hill
480-09100 MN 8639
- Jacqueline Mailoux
480-09110 MN 8719
- Khmer Buddhist Santivararam Windsor
490-00100 MN 5300
- 538073 Ontario Inc.
490-10200
- Robert & Richard McCarthy
490-10300
- Rose, Philip, Paul, Jole & Joslyne Jobin
510-01500
- Rose Jobin
510-01550
- Philip Jobin
510-01590 MN 4780
- Paul & Rose Jobin
510-01600 MN 4710
- Philip Jobin
510-01610
- Wilfred O'Neil
510-01700 MN 4640
- Wilfred O'Neil
510-01800
- Wilfred O'Neil
510-01900
- Ruth Battersby
510-02000 MN 4428
- James Battersby
510-02005
- Laurie Knight
510-02010 MN 4372
- Helene Battersby
510-02100 MN 4320
- Rose Jobin
520-00700
- Rose, Philip & Paul Jobin, &
Jobin Farms Inc.
520-00750
- Hardershan Brar
520-00900 MN 8280
- Union Gas Limited
520-01000
- Guy & Tina Robertson
520-01100 MN 5372
- Charles Matthews
520-01210 MN 5296
- Kenneth & Barbara McCarthy
520-01300 MN 5056
- Barbara McCarthy
520-01301 MN 5056
- Roger Lemmon
520-01350 MN 5000

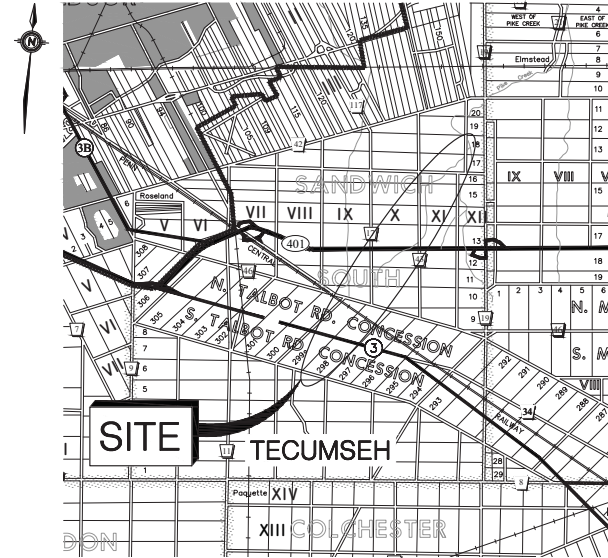
- Joseph & Helen Diesbourg
520-03400 MN 9209
- Clifford & Connie Campeau
520-03500
- Jacob Carlesimo
520-03800 MN 9801
- Clifford & Connie Campeau
520-03900 MN 4327
- Clifford & Connie Campeau
520-03901 MN 4311
- Herbert Henricks & Marianne Scarpelli
520-03920 MN 4357
- Susanna Mackenzie-Russell
520-04000 MN 4397
- Sanward Enterprises Inc.
520-04100
- Edward Chittle Jr.
520-04200
- Jeremy Knezev
520-04250 MN 4505
- Luigina Gobbo
520-04300 MN 4529
- Philip Jobin
520-04400 MN 4707
- Sandwich South Farms Limited
520-04500 MN 4831
- Brian Chittle
520-04550 MN 4831
- Steno Novelletta & Rosanne St. Louis
520-04600 MN 4835
- Gerald & Agnes Lavin
520-04700 MN 4995
- Thomas & Mary Moore
520-04750 MN 5015
- Wayne & Carol O'Neil
520-04800 MN 5235
- Deana & Mario Liburdi
560-08500 MN 3572
- Diklich Capital Corp.
530-00100 MN 7254
- Sanward Enterprises Inc.
530-04770
- Edward Chittle Jr.
530-04775
- Lee Simpson
530-04800 MN 5427
- Crossway Church
560-00300 MN 4215
- Susanna Mackenzie
560-03900 MN 4127

CITY OF WINDSOR:

- Sandwich South Farms Limited
090-030-04700
- 1027414 Ontario Inc.
090-030-04800
- Rose Jobin
090-030-05000 MN 4856
- John Wilson
090-030-05200 MN 4800
- Norbert St. Louis
090-030-05400 MN 4732
- Gerald Lavin
090-030-05600
- 2017345 Ontario Limited
090-030-05850
- 1741077 Ontario Inc.
090-030-06000
- 1583925 Ontario Limited
090-030-06110
- 2187065 Ontario Limited
090-030-06200 MN 4310
- Robert Coupe
090-030-06300 MN 8355
- Thomas Crouchman
090-030-06400 MN 8475
- Gregory Maxwell
090-030-06500 MN 8515
- 106 Joseph Gagnon
090-030-06600 MN 9039
- Rouslan Rakhoutine
090-030-06700 MN 9129

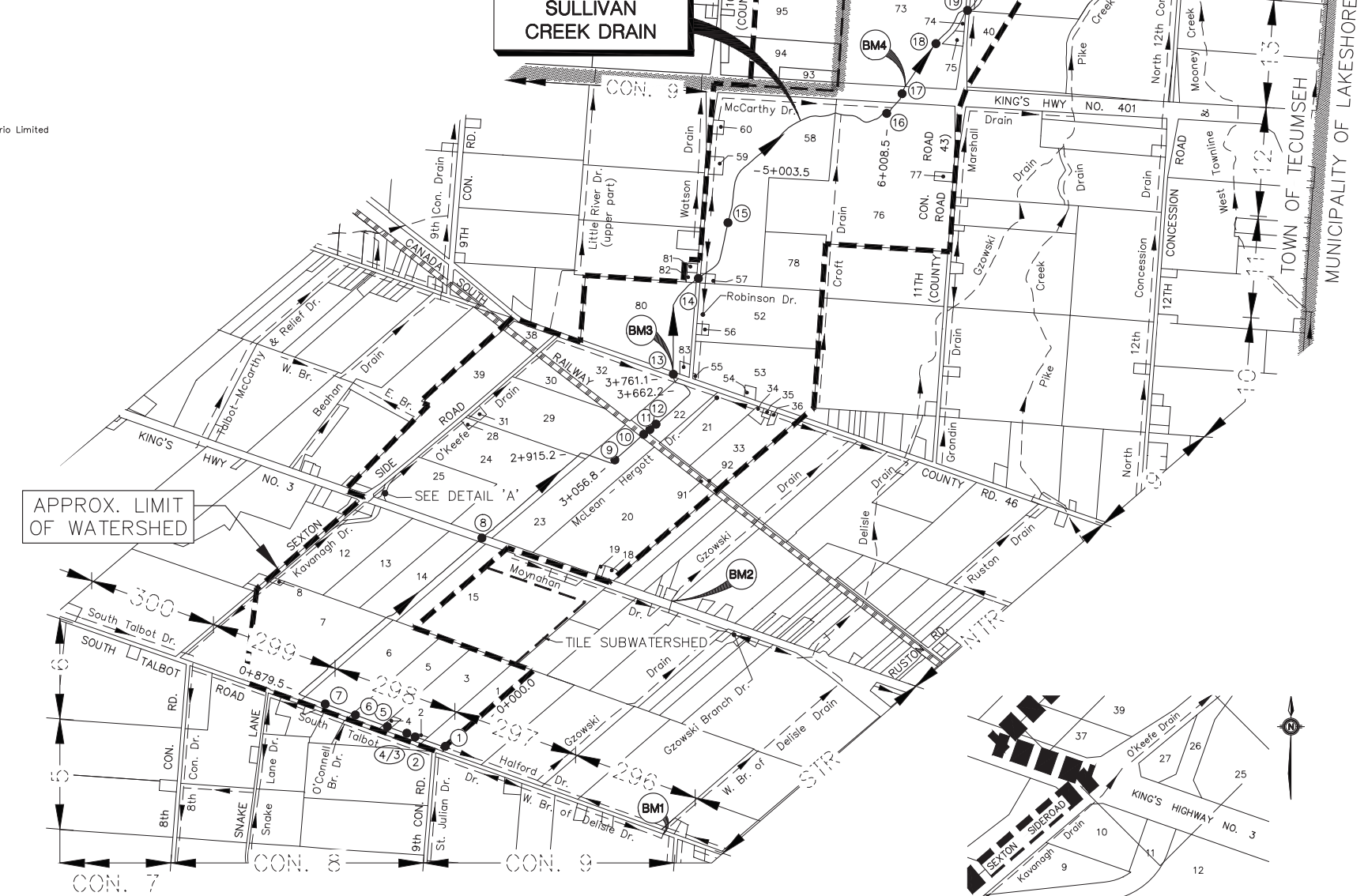
BENCHMARKS:

- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT SOUTH TALBOT ROAD & WEST BRANCH OF DELISLE DRAIN.
ELEV. = 191.812m
- CUT CROSS AT TOP NORTHEAST CORNER OF HEADWALL OF CONCRETE BRIDGE AT GZOWSKI DRAIN & NORTH SIDE OF HIGHWAY NO. 3.
ELEV. = 189.897m
- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT COUNTY ROAD 46 & SULLIVAN CREEK DRAIN.
ELEV. = 189.301m
- TOP MIDDLE OF NORTH DECK OF CONCRETE BRIDGE AT HIGHWAY 401 & SULLIVAN CREEK DRAIN.
ELEV. = 186.113m
- TOP NORTHWEST CORNER OF NORTH DECK OF CONCRETE BRIDGE AT BASELINE ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 183.557m
- TOP MIDDLE OF WEST HEADWALL OF CONCRETE BRIDGE AT 12TH CONCESSION ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 182.943m



KEY MAP

SCALE=1:100,000



WATERSHED PLAN

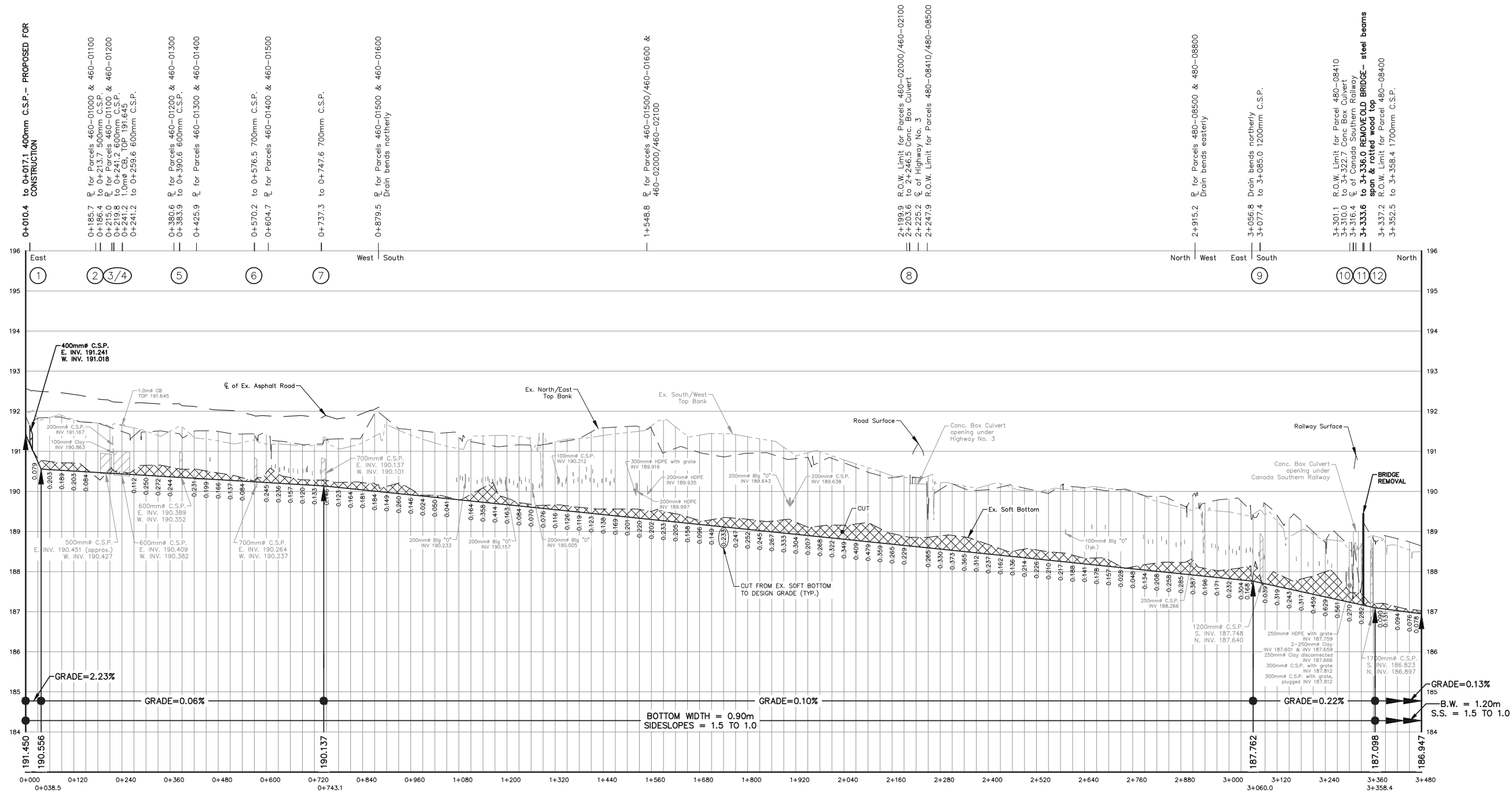
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DETAIL 'A'

SCALE=1:3,000

THESE PLANS HAVE BEEN REDUCED
AND THE SCALE THEREFORE VARIES.
FULL SCALE PLANS MAY BE VIEWED
AT THE MUNICIPAL OFFICE.

DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 1 OF 51



PROFILE OF SULLIVAN CREEK DRAIN- STA. 0+000 TO STA. 3+480

SCALE=1:5000 hor.
1:50 vert.

BENCHMARKS:

- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT SOUTH TALBOT ROAD & WEST BRANCH OF DELJSLE DRAIN.
ELEV. = 191.812m
- CUT CROSS AT TOP NORTHEAST CORNER OF HEADWALL OF CONCRETE BRIDGE AT SZOWSKI DRAIN & NORTH SIDE OF HIGHWAY NO. 3.
ELEV. = 189.897m
- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT COUNTY ROAD 46 & SULLIVAN CREEK DRAIN.
ELEV. = 189.301m
- TOP MIDDLE OF NORTH DECK OF CONCRETE BRIDGE AT HIGHWAY 401 & SULLIVAN CREEK DRAIN.
ELEV. = 186.113m
- TOP NORTHWEST CORNER OF NORTH DECK OF CONCRETE BRIDGE AT BASELINE ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 183.557m
- TOP MIDDLE OF WEST HEADWALL OF CONCRETE BRIDGE AT 12TH CONCESSION ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 182.581m

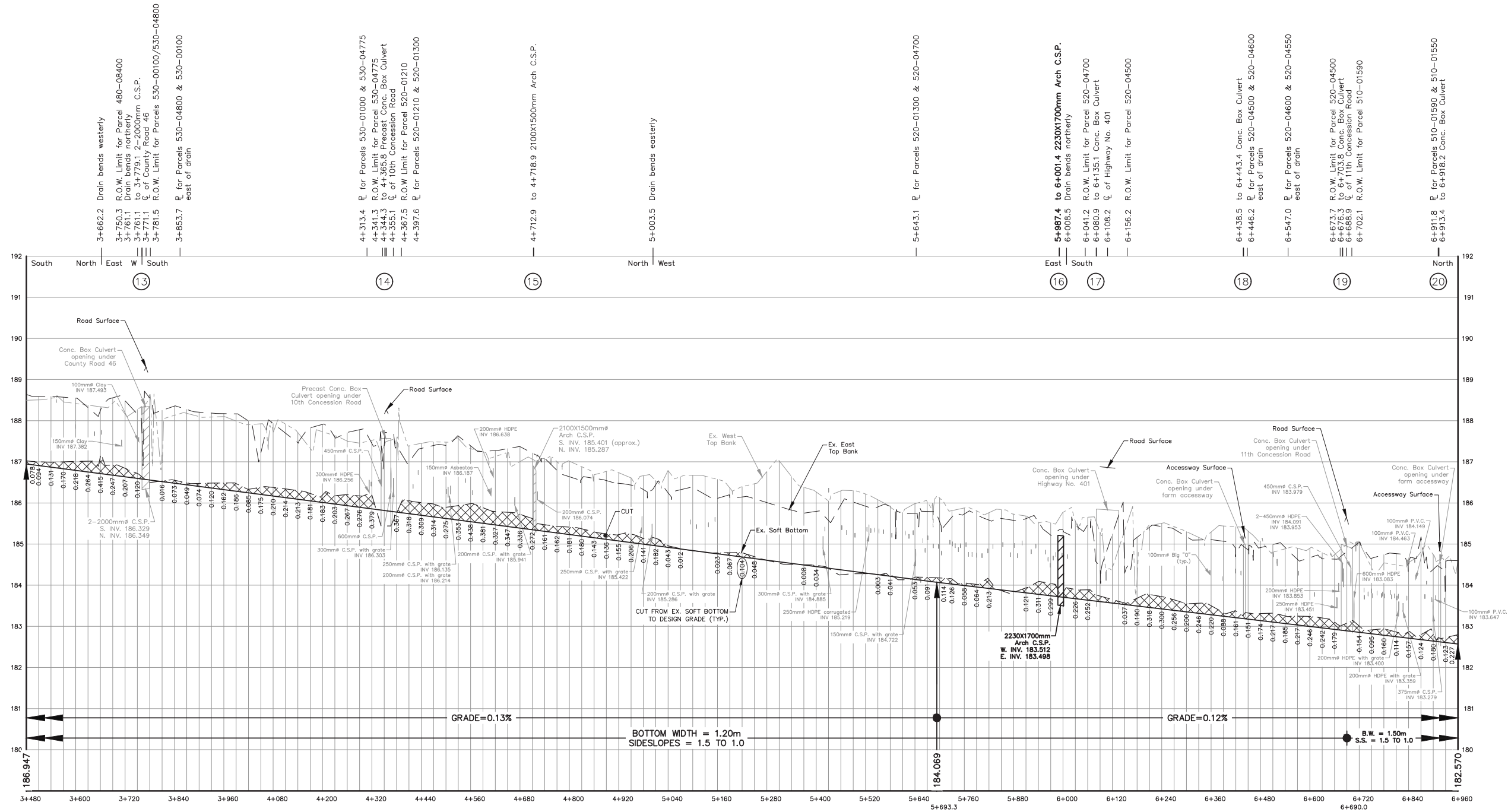
ROAD & RAILWAY C CROSSINGS:

KING'S HIGHWAY NO. 3, STA 2+225.2	ELEV: 191.200m
CANADA SOUTH RAILWAY, STA 3+316.4	ELEV: 190.901m
COUNTY ROAD 46, STA 3+771.1	ELEV: 189.300m
10TH CONCESSION ROAD, STA 4+355.1	ELEV: 188.245m
KING'S HIGHWAY NO. 401, STA 6+108.2	ELEV: 186.853m (approx.)
11TH CONCESSION ROAD, STA 6+688.9	ELEV: 185.655m
BASELINE ROAD, STA 8+795.3	ELEV: 183.907m
12TH CONCESSION ROAD, STA 9+839.5	ELEV: 182.537m

REFER TO SHEET 3 FOR PROFILE OF SULLIVAN CREEK DRAIN- STA 3+480 TO 6+960.
REFER TO SHEET 4 FOR PROFILE OF SULLIVAN CREEK DRAIN- STA 6+960 TO 9+962.9.

THESE PLANS HAVE BEEN REDUCED
AND THE SCALE THEREFORE VARIES.
FULL SCALE PLANS MAY BE VIEWED
AT THE MUNICIPAL OFFICE.

DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 2 OF 51



PROFILE OF SULLIVAN CREEK DRAIN— STA. 3+480 TO STA. 6+960

SCALE=1:5000 hor.
1:50 vert.

BENCHMARKS:

- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT SOUTH TALBOT ROAD & WEST BRANCH OF DELUSLE DRAIN.
ELEV. = 191.812m
- CUT CROSS AT TOP NORTHEAST CORNER OF HEADWALL OF CONCRETE BRIDGE AT SZOWSKI DRAIN & NORTH SIDE OF HIGHWAY NO. 3.
ELEV. = 189.897m
- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT COUNTY ROAD 46 & SULLIVAN CREEK DRAIN.
ELEV. = 189.301m
- TOP MIDDLE OF NORTH DECK OF CONCRETE BRIDGE AT HIGHWAY 401 & SULLIVAN CREEK DRAIN.
ELEV. = 186.113m
- TOP NORTHWEST CORNER OF NORTH DECK OF CONCRETE BRIDGE AT BASELINE ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 183.557m
- TOP MIDDLE OF WEST HEADWALL OF CONCRETE BRIDGE AT 12TH CONCESSION ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 182.581m

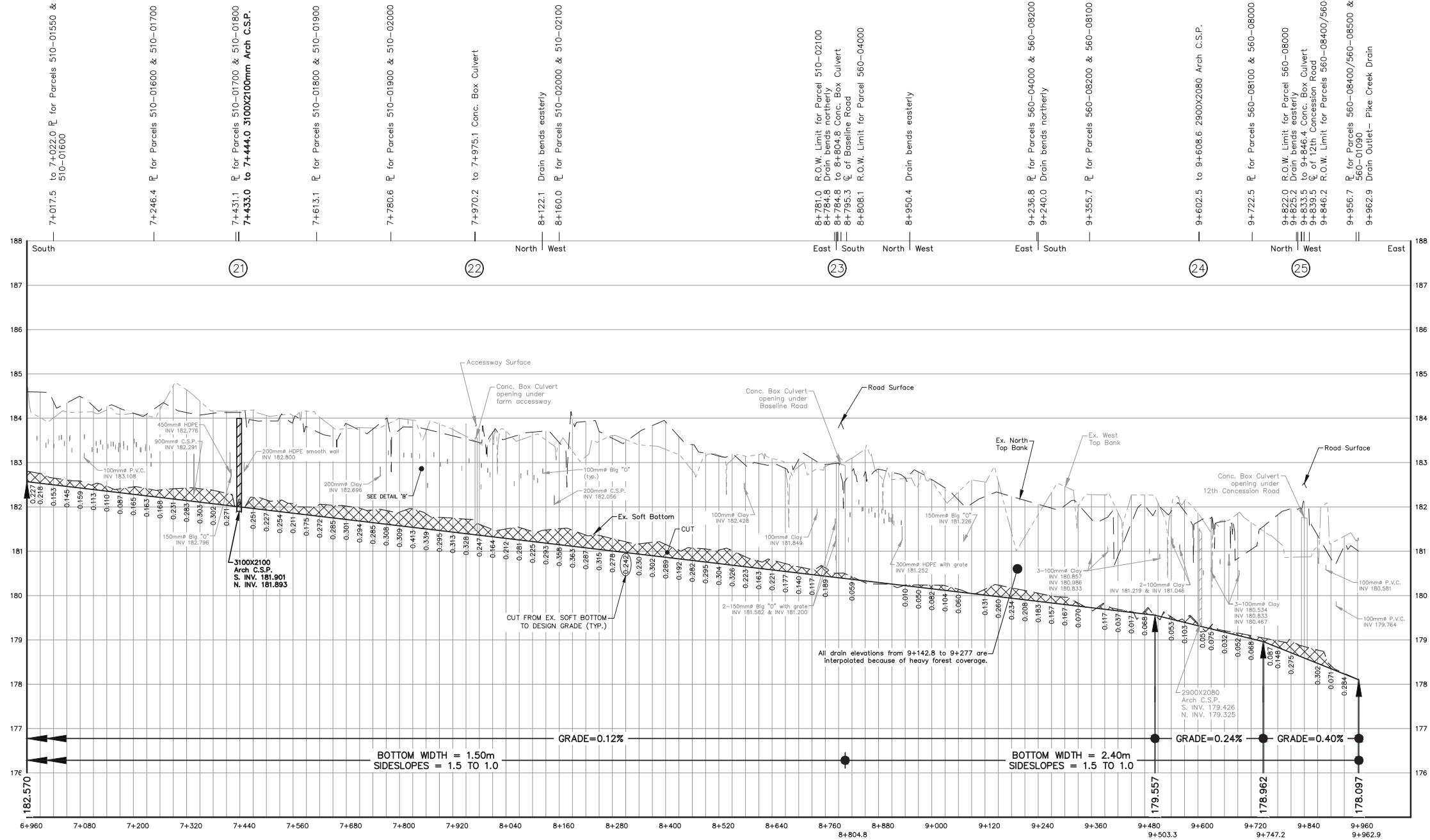
ROAD & RAILWAY C CROSSINGS:

KING'S HIGHWAY NO. 3, STA 2+225.2	ELEV: 191.200m
CANADA SOUTH RAILWAY, STA 3+316.4	ELEV: 190.901m
COUNTY ROAD 46, STA 3+771.1	ELEV: 189.300m
10TH CONCESSION ROAD, STA 4+355.1	ELEV: 188.245m
KING'S HIGHWAY NO. 401, STA 6+108.2	ELEV: 186.853m (approx.)
11TH CONCESSION ROAD, STA 6+688.9	ELEV: 185.655m
BASELINE ROAD, STA 6+795.3	ELEV: 183.907m
12TH CONCESSION ROAD, STA 9+839.5	ELEV: 182.537m

REFER TO SHEET 2 FOR PROFILE OF SULLIVAN CREEK DRAIN— STA 0+000 TO 3+480.
REFER TO SHEET 4 FOR PROFILE OF SULLIVAN CREEK DRAIN— STA 6+960 TO 9+962.9.

THESE PLANS HAVE BEEN REDUCED
AND THE SCALE THEREFORE VARIES.
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PROFILE OF SULLIVAN CREEK DRAIN- STA. 6+960 TO STA. 9+962.9

SCALE=1:5000 hor.
1:50 vert.

BENCHMARKS:

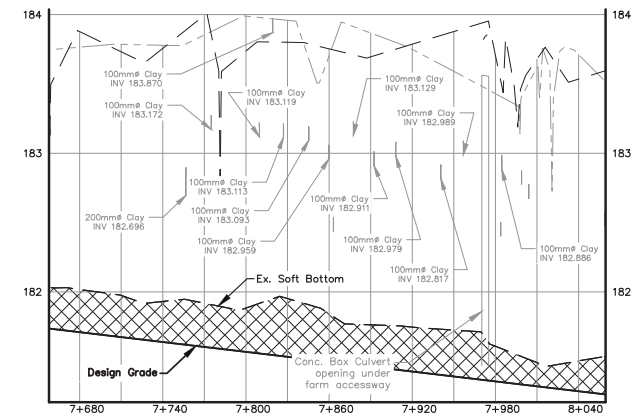
- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT SOUTH TALBOT ROAD & WEST BRANCH OF DELISLE DRAIN.
ELEV. = 191.812m
- CUT CROSS AT TOP NORTHEAST CORNER OF HEADWALL OF CONCRETE BRIDGE AT GZOWSKI DRAIN & NORTH SIDE OF HIGHWAY NO. 3.
ELEV. = 189.897m
- TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT COUNTY ROAD 46 & SULLIVAN CREEK DRAIN.
ELEV. = 189.301m
- TOP MIDDLE OF NORTH DECK OF CONCRETE BRIDGE AT HIGHWAY 401 & SULLIVAN CREEK DRAIN.
ELEV. = 186.113m
- TOP NORTHWEST CORNER OF NORTH DECK OF CONCRETE BRIDGE AT BASELINE ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 183.557m
- TOP MIDDLE OF WEST HEADWALL OF CONCRETE BRIDGE AT 12TH CONCESSION ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 182.581m

ROAD & RAILWAY C CROSSINGS:

KING'S HIGHWAY NO. 3, STA 2+225.2
CANADA SOUTH RAILWAY, STA 3+316.4
COUNTY ROAD 46, STA 3+771.1
10TH CONCESSION ROAD, STA 4+355.1
KING'S HIGHWAY NO. 401, STA 6+108.2
11TH CONCESSION ROAD, STA 6+688.9
BASELINE ROAD, STA 8+795.3
12TH CONCESSION ROAD, STA 9+839.5

ELEV. 191.200m
ELEV. 190.901m
ELEV. 189.300m
ELEV. 188.245m
ELEV. 186.853m (approx.)
ELEV. 185.655m
ELEV. 183.907m
ELEV. 182.537m

REFER TO SHEET 2 FOR PROFILE OF SULLIVAN CREEK DRAIN- STA 0+000 TO 3+480.
REFER TO SHEET 3 FOR PROFILE OF SULLIVAN CREEK DRAIN- STA 3+480 TO 6+960.



DETAIL 'B'

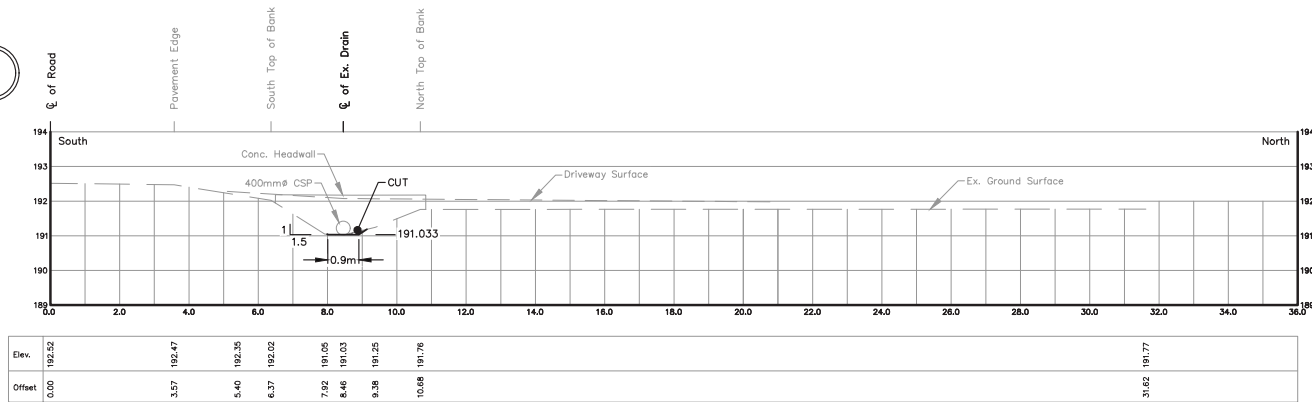
SCALE=1:2500 hor.
1:25 vert.

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FULL SCALE PLANS MAY BE VIEWED
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 4 OF 51

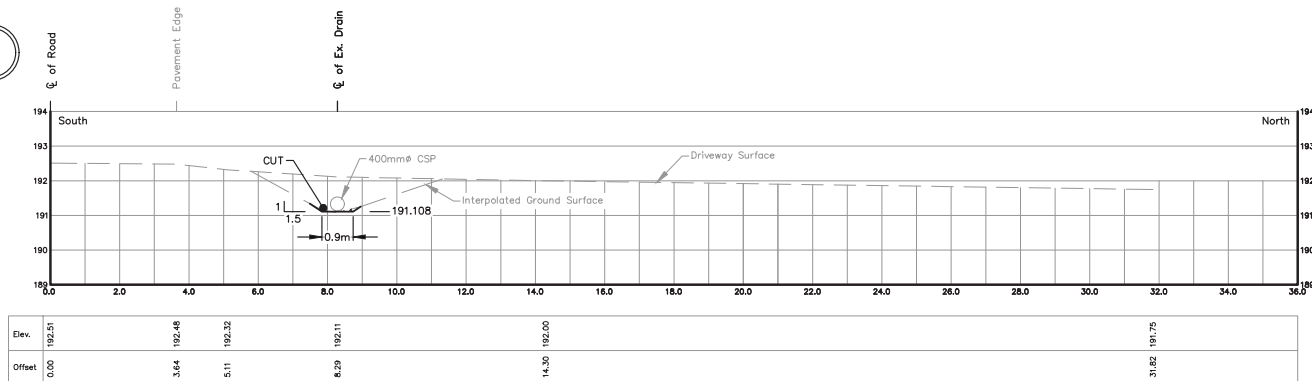
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections A.dwg 2021-05-16

1



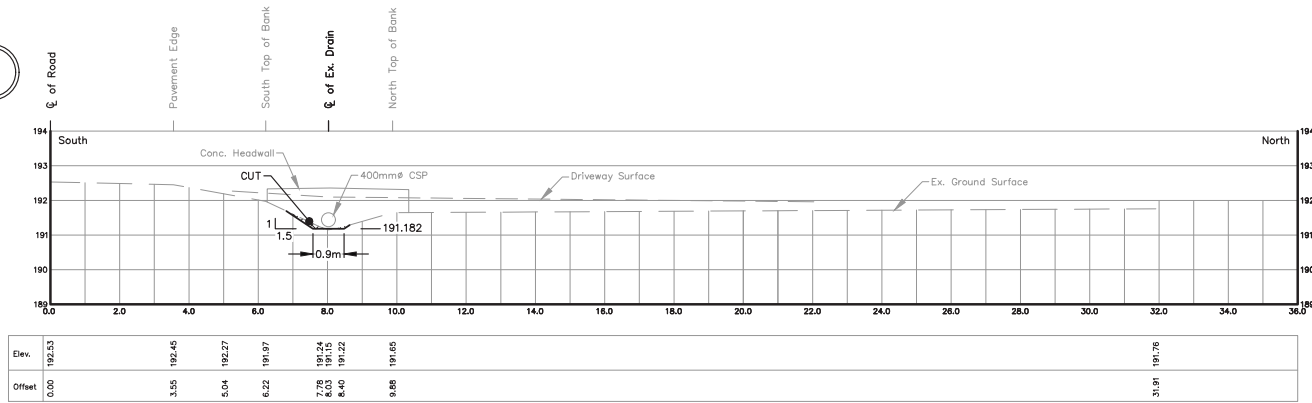
STA. 0+017.1
Scale = 1:100

1

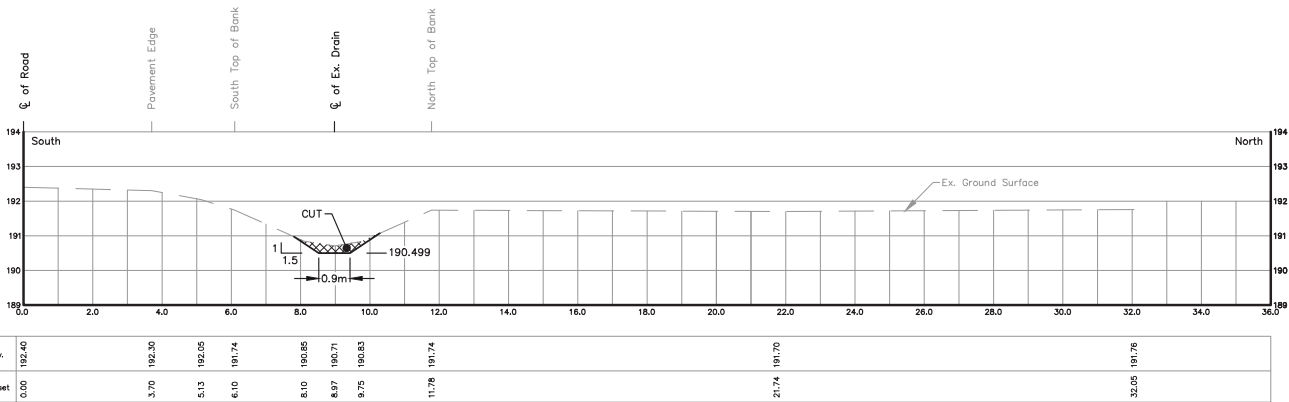


STA. 0+013.7
Scale = 1:100

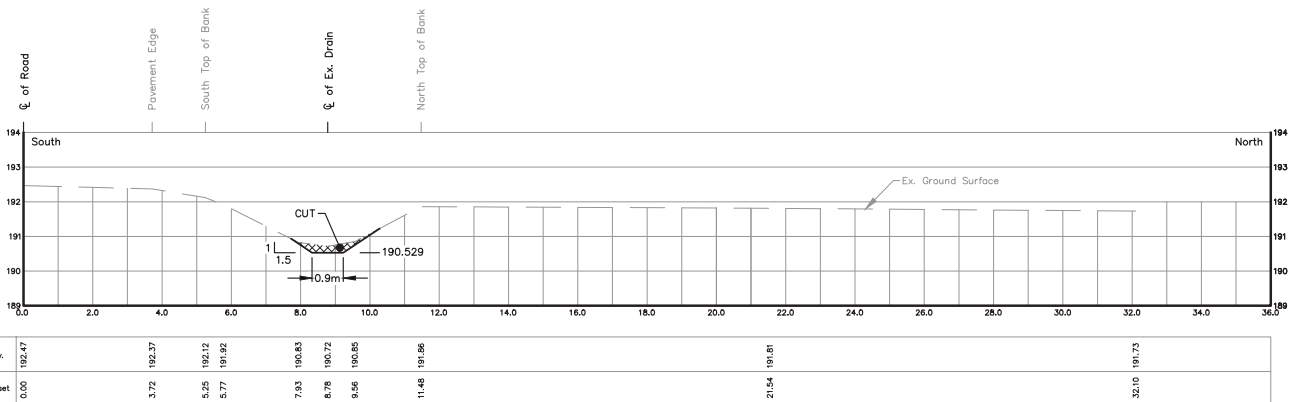
1



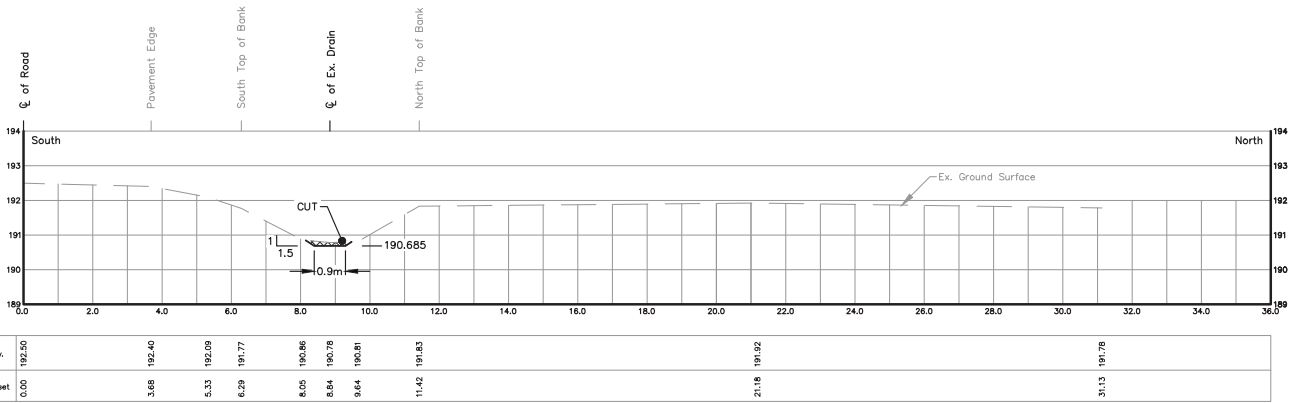
STA. 0+010.4
Scale = 1:100



STA. 0+133.8
Scale = 1:100



STA. 0+083.8
Scale = 1:100

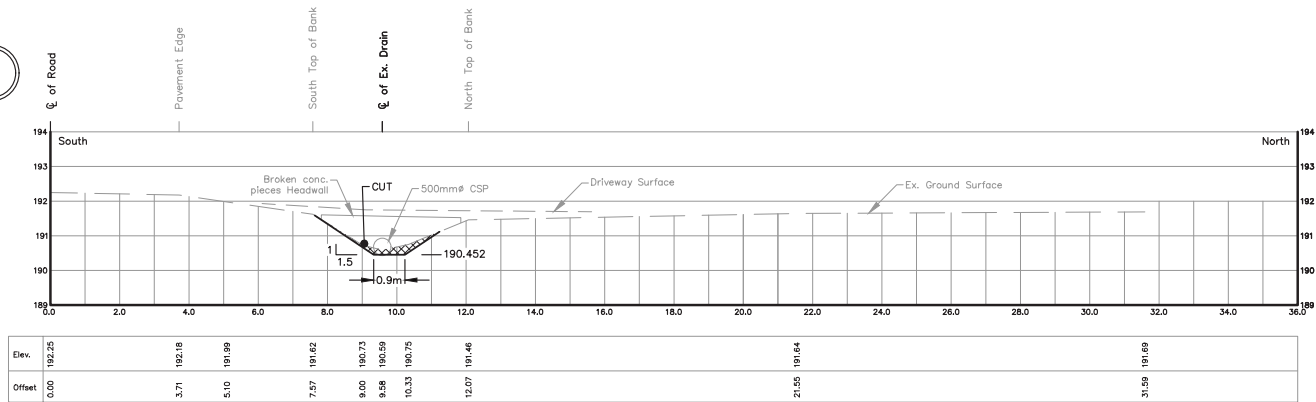


STA. 0+032.7
Scale = 1:100

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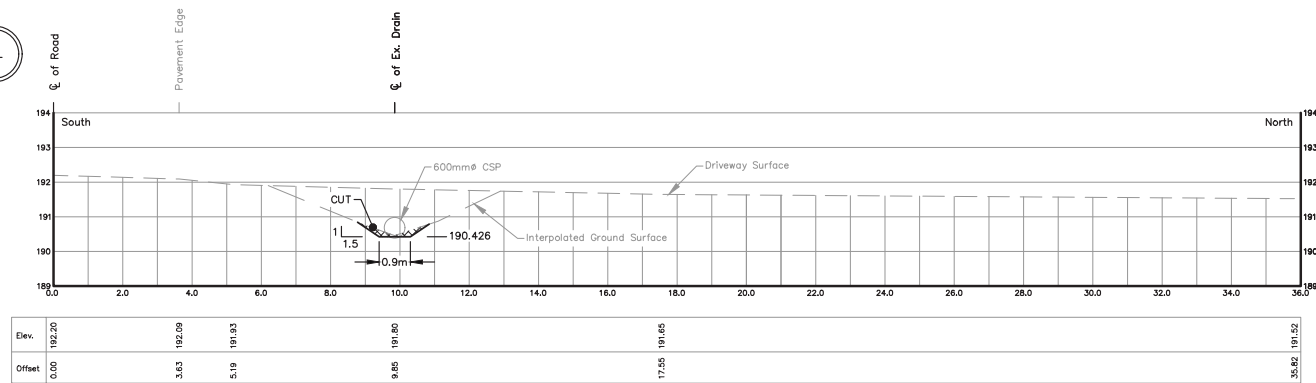
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 5 OF 51

2



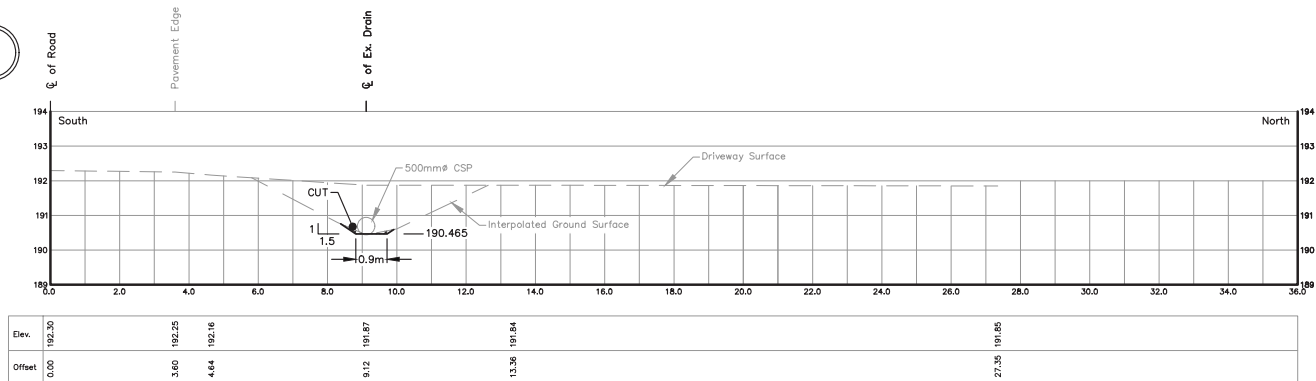
STA. 0+213.7
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4



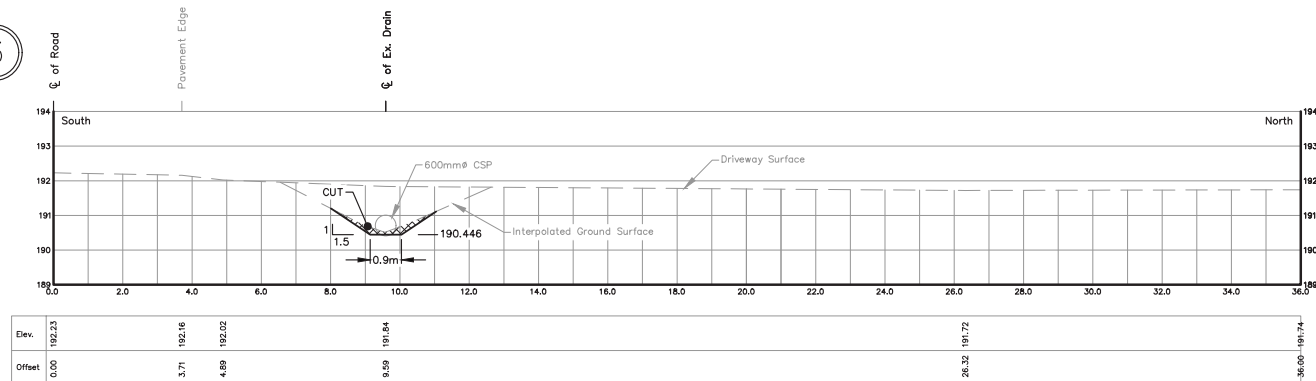
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2



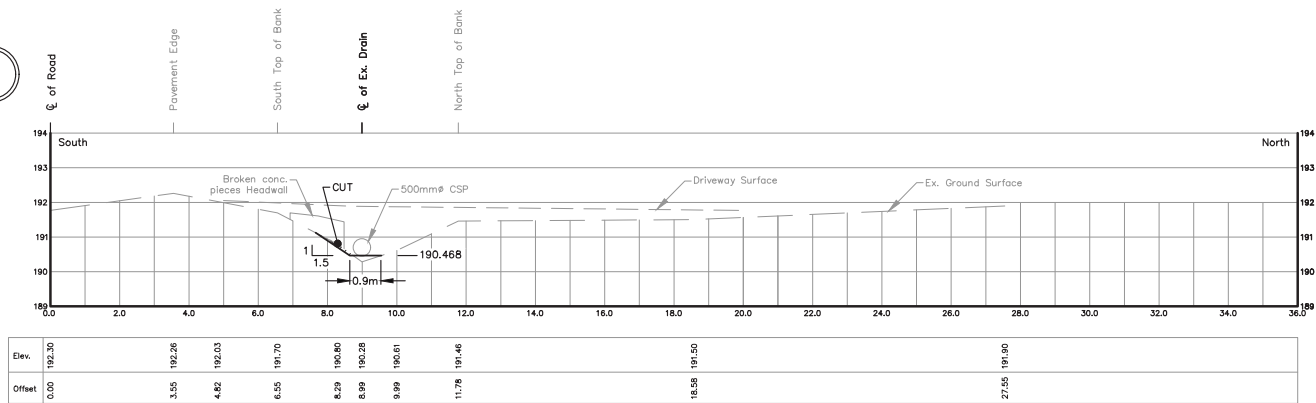
STA. 0+191.0
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3



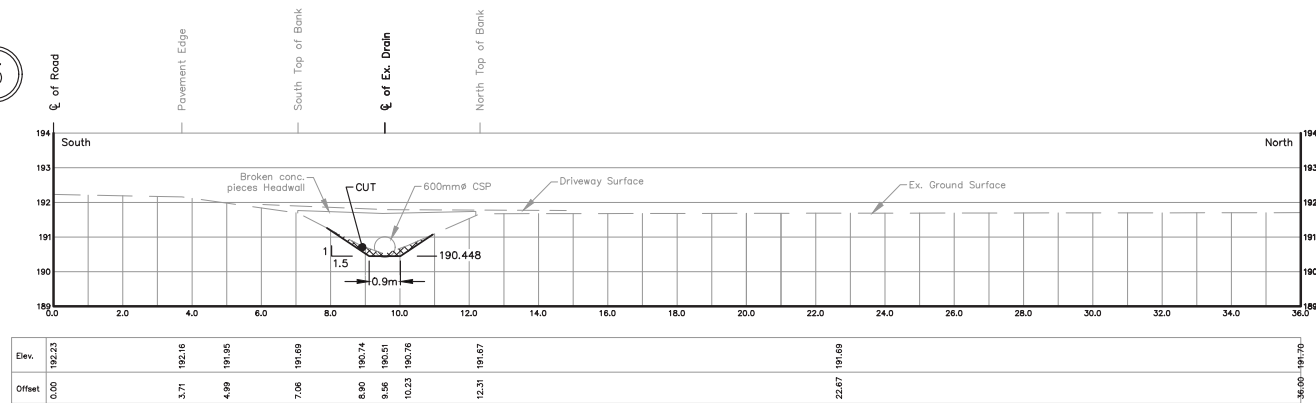
STA. 0+223.1
Scale = 1:100

2



STA. 0+186.4
Scale = 1:100

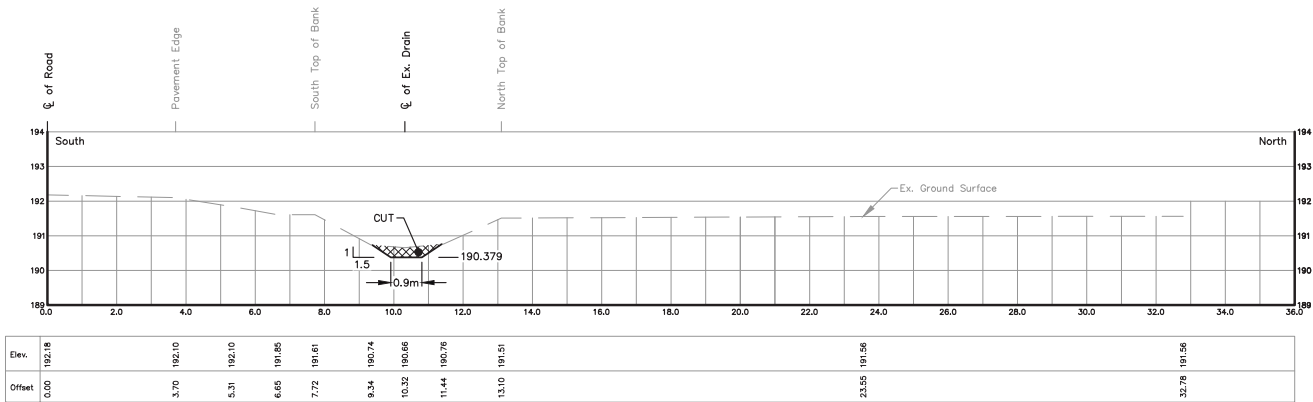
3



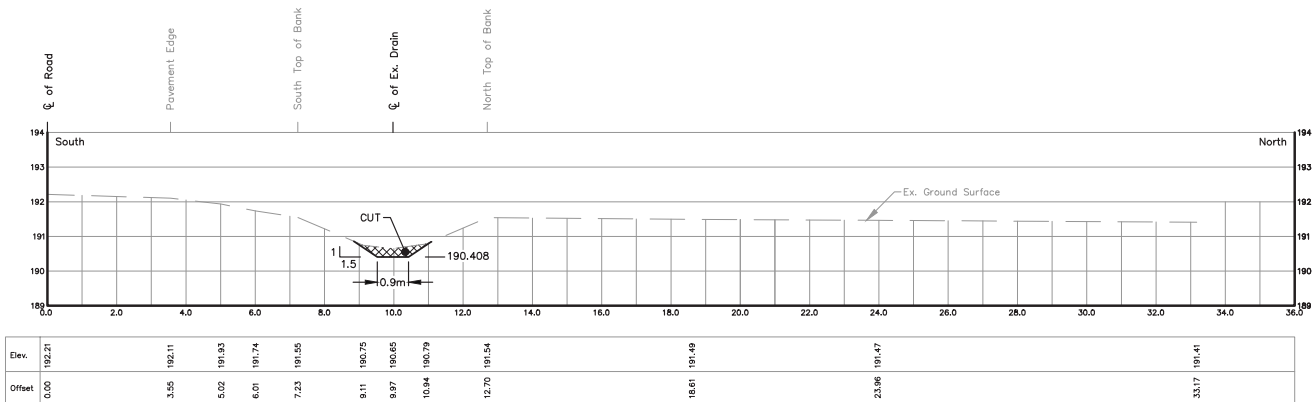
STA. 0+219.8
Scale = 1:100

THESE PLANS HAVE BEEN REDUCED
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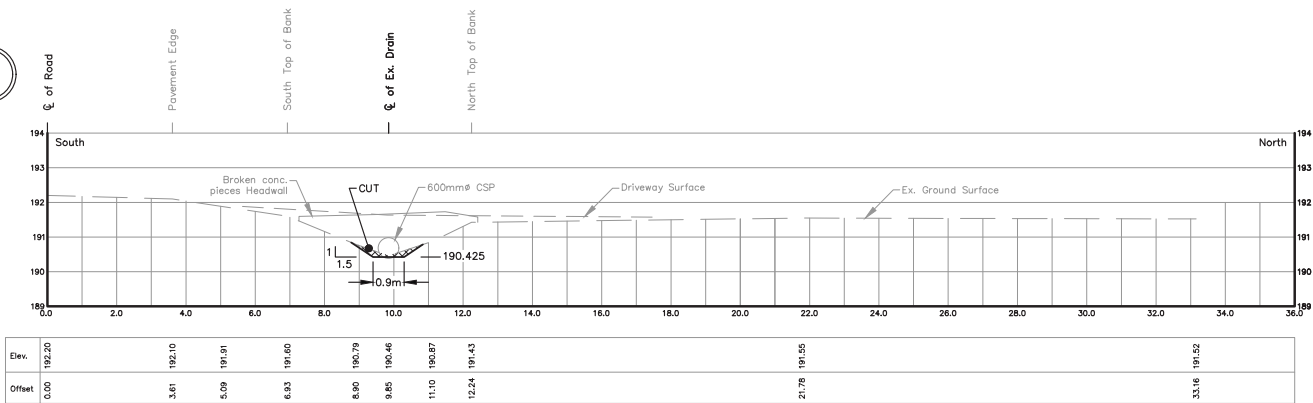
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 6 OF 51



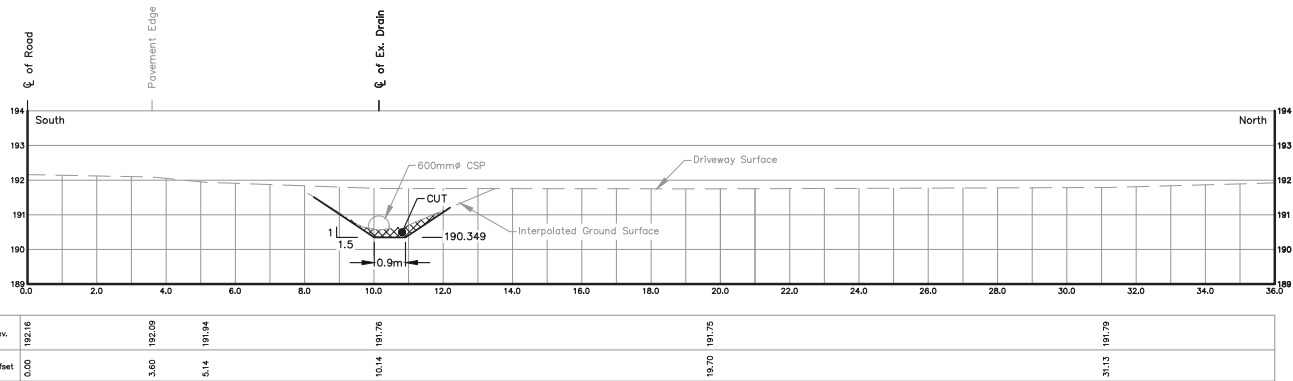
STA. 0+336.1
Scale = 1:100



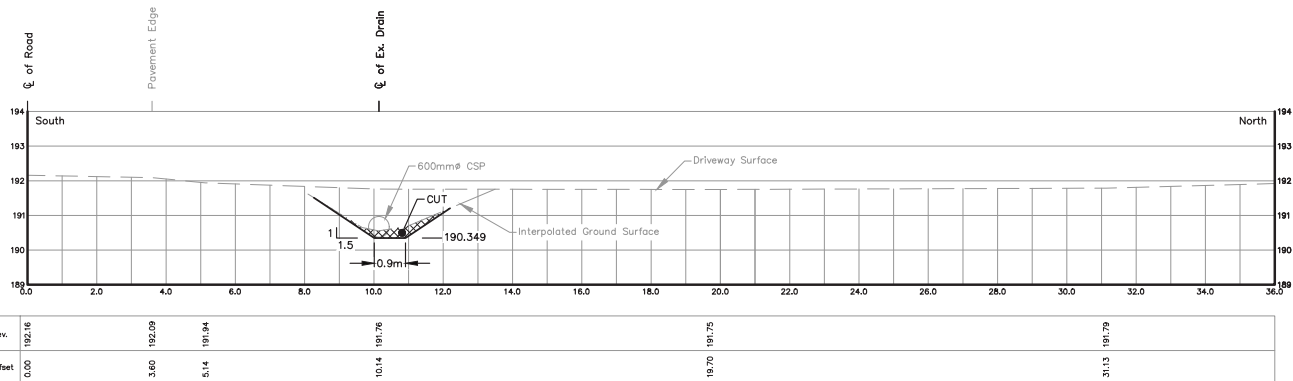
STA. 0+286.6
Scale = 1:100



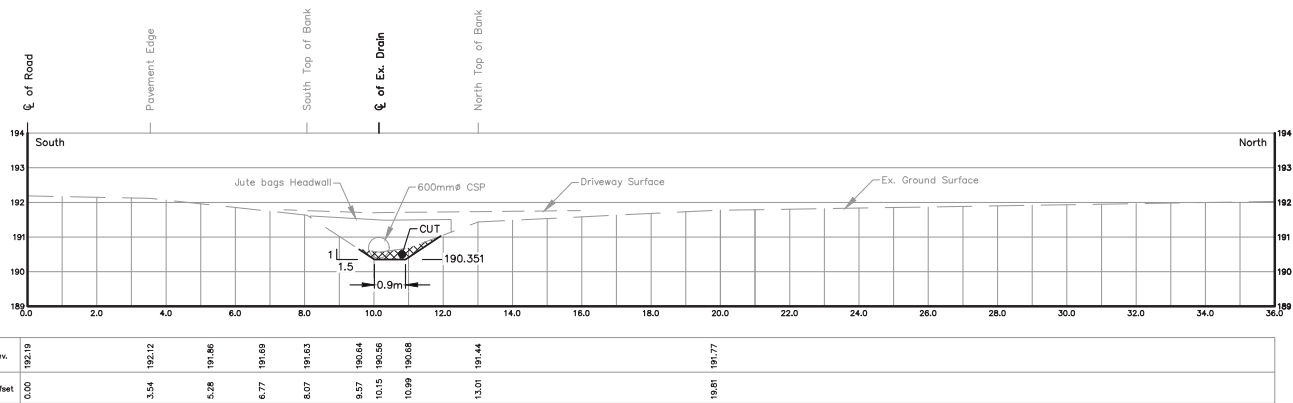
STA. 0+259.6
Scale = 1:100



STA. 0+387.2
Scale = 1:100



STA. 0+387.2
Scale = 1:100

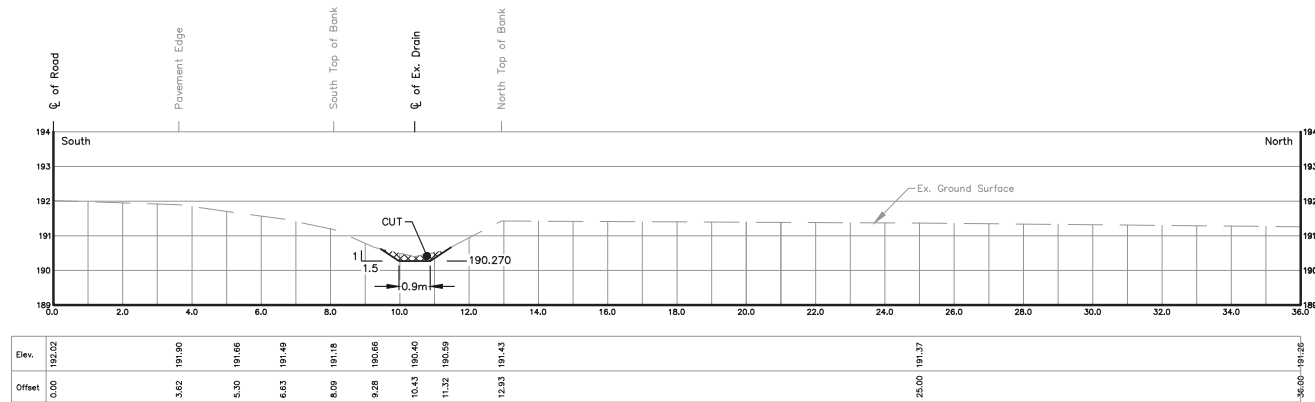


STA. 0+383.9
Scale = 1:100

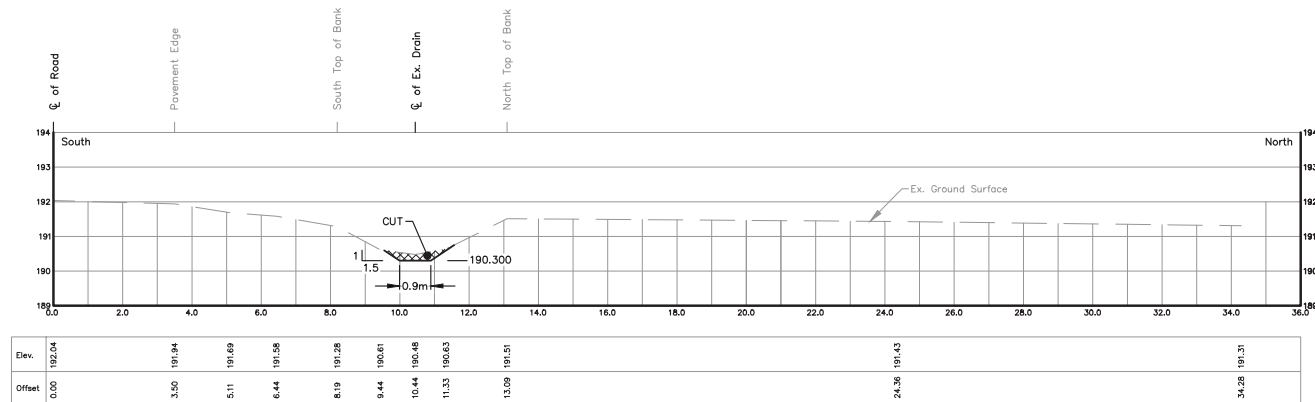
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 7 OF 51

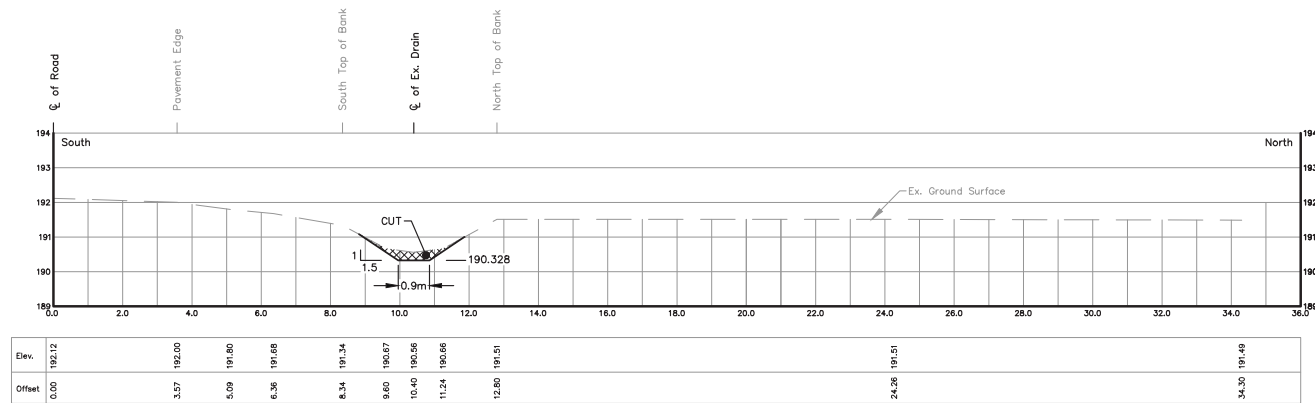
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



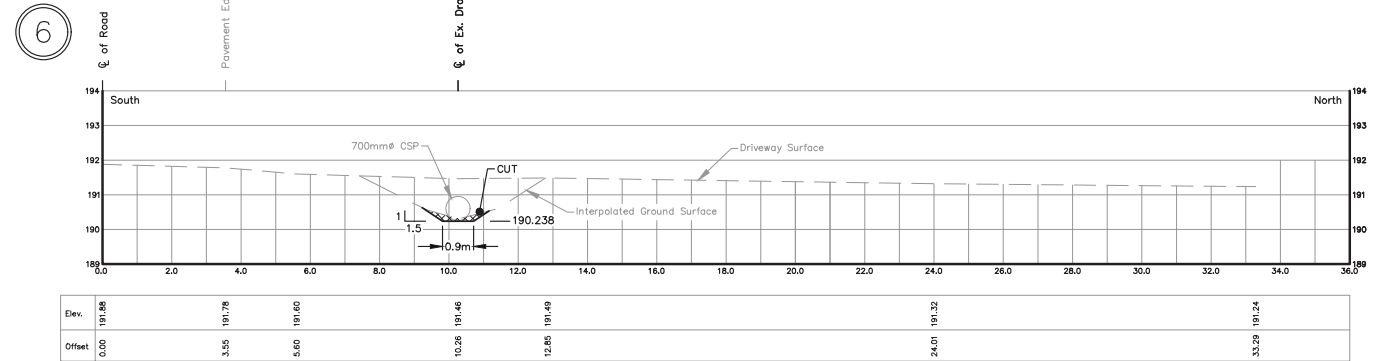
STA. 0+519.7
Scale = 1:100



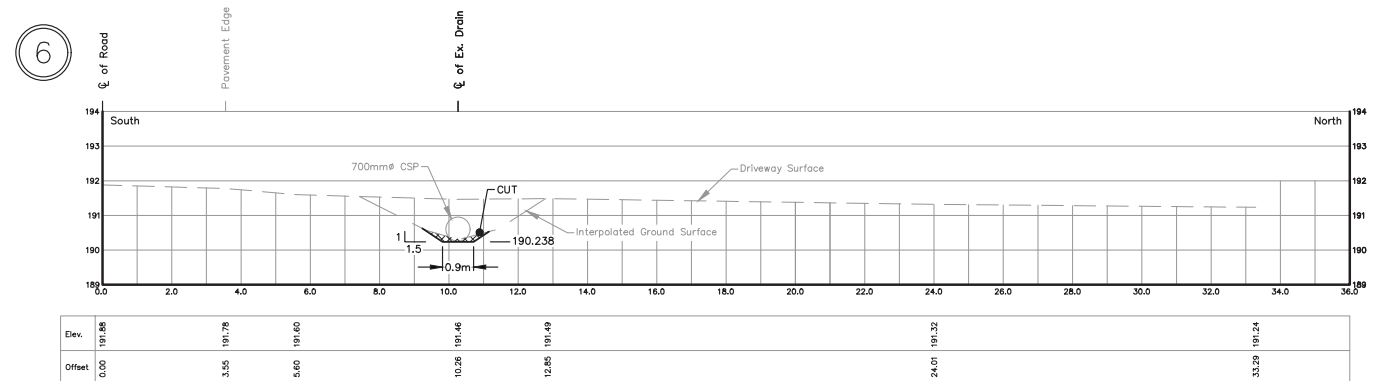
STA. 0+469.1
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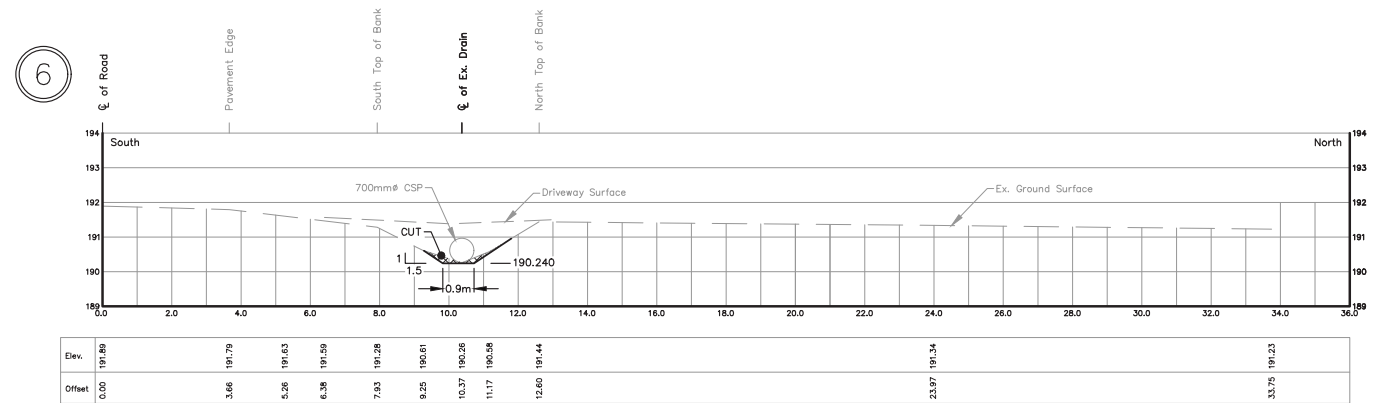
STA. 0+421.5
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STA. 0+573.0
Scale = 1:100



STA. 0+573.0
Scale = 1:100

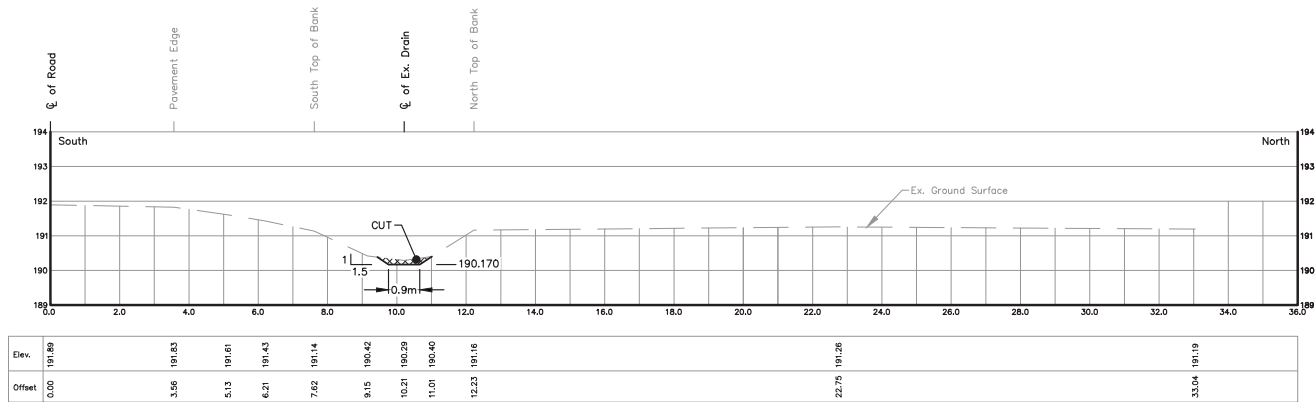


STA. 0+570.2
Scale = 1:100

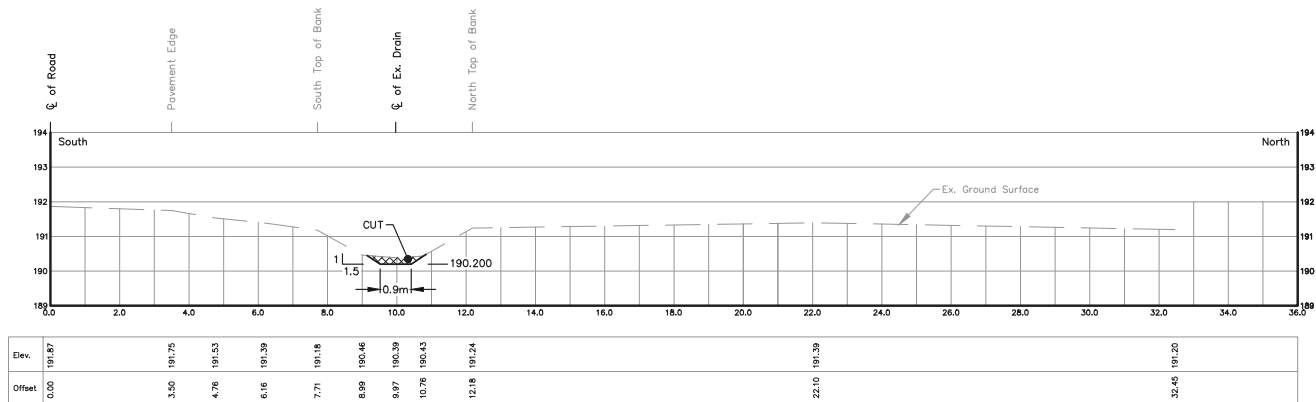
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 8 OF 51

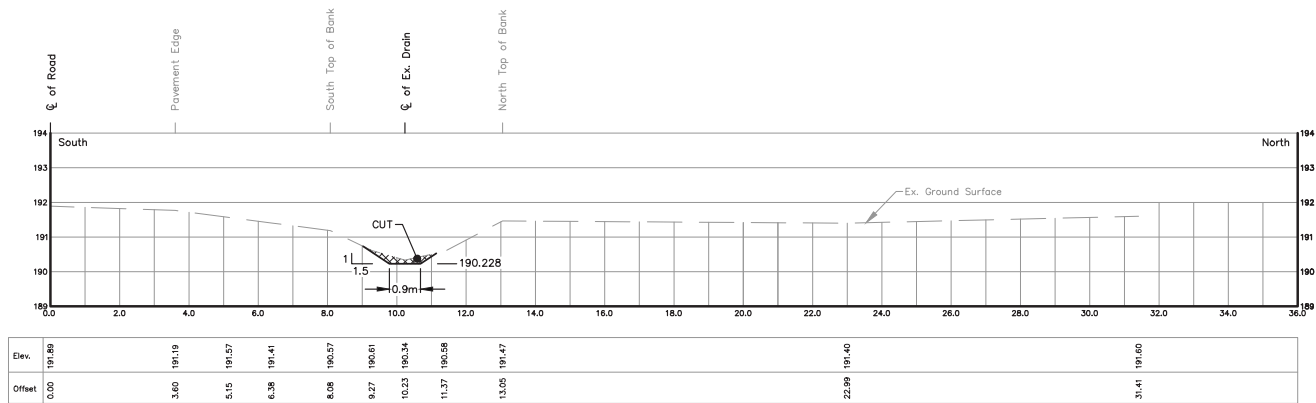
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



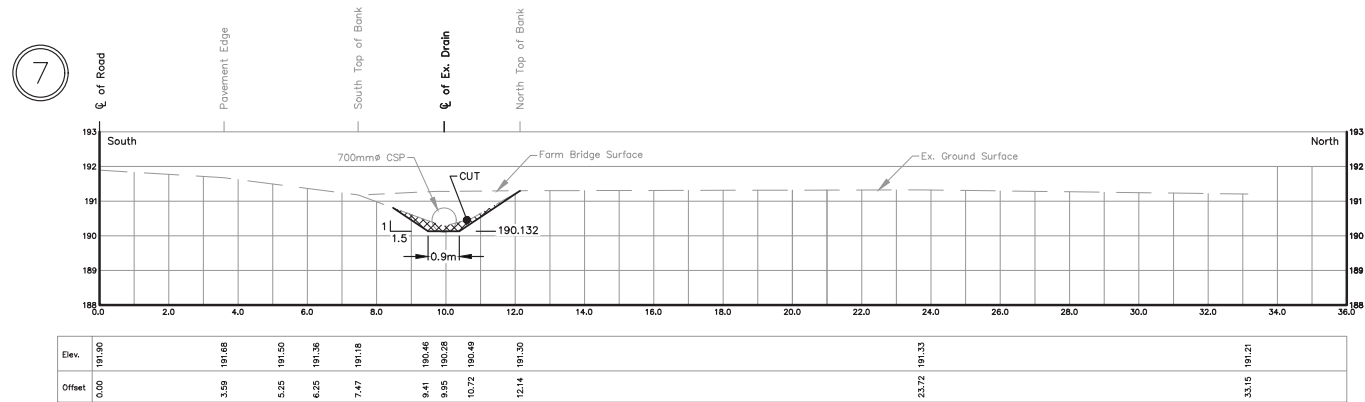
STA. 0+687.4
Scale = 1:100



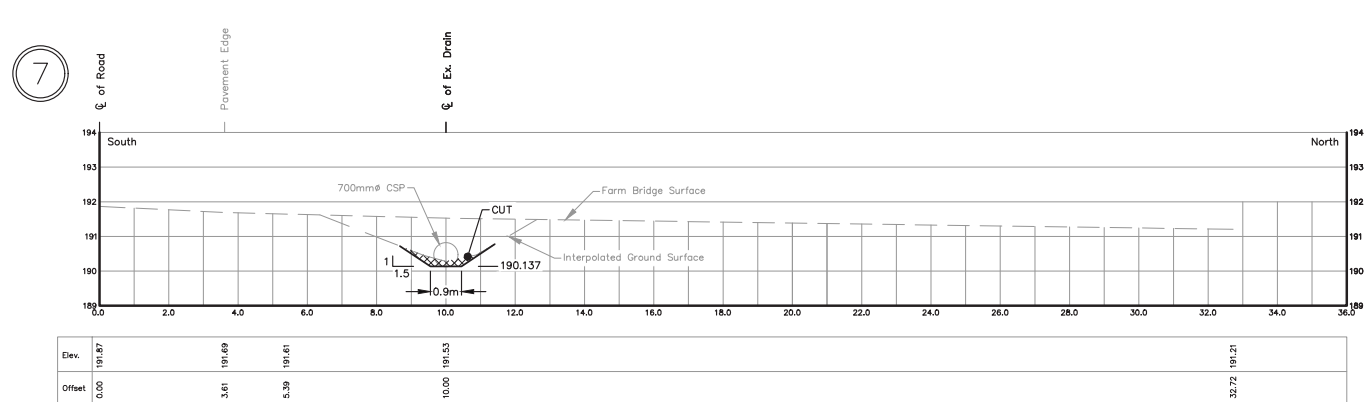
STA. 0+638.0
Scale = 1:100



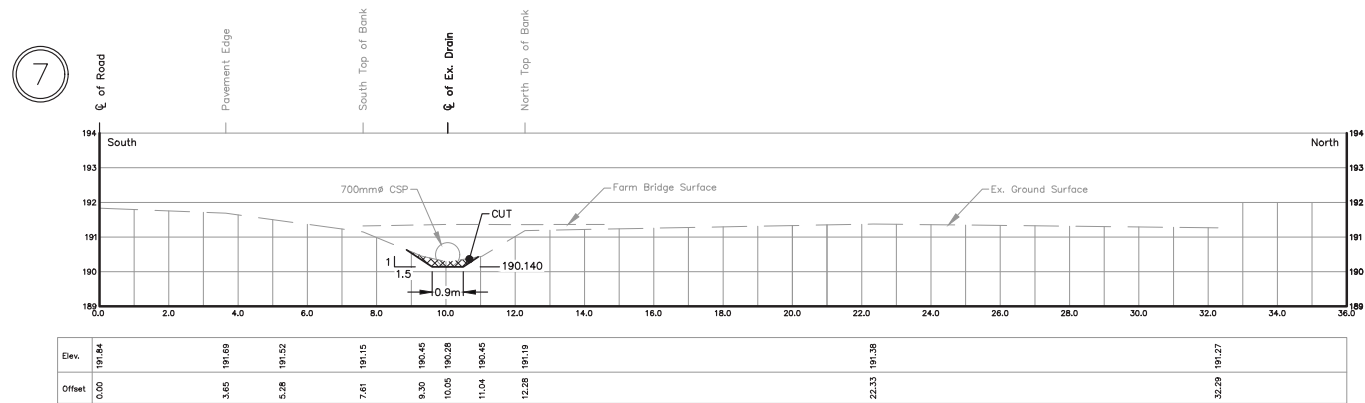
STA. 0+589.7
Scale = 1:100



STA. 0+747.6
Scale = 1:100



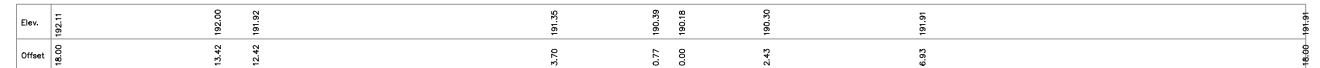
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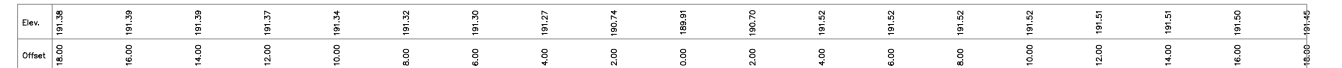
STA. 0+737.3
Scale = 1:100

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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 9 OF 51



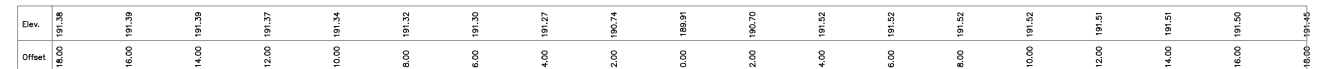
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STA. 0+986.7
Scale = 1:100



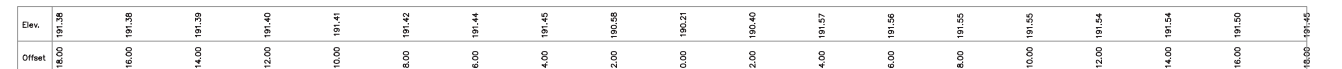
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Scale = 1:100



STA. 0+986.7
Scale = 1:100



STA. 0+775.8
Scale = 1:100



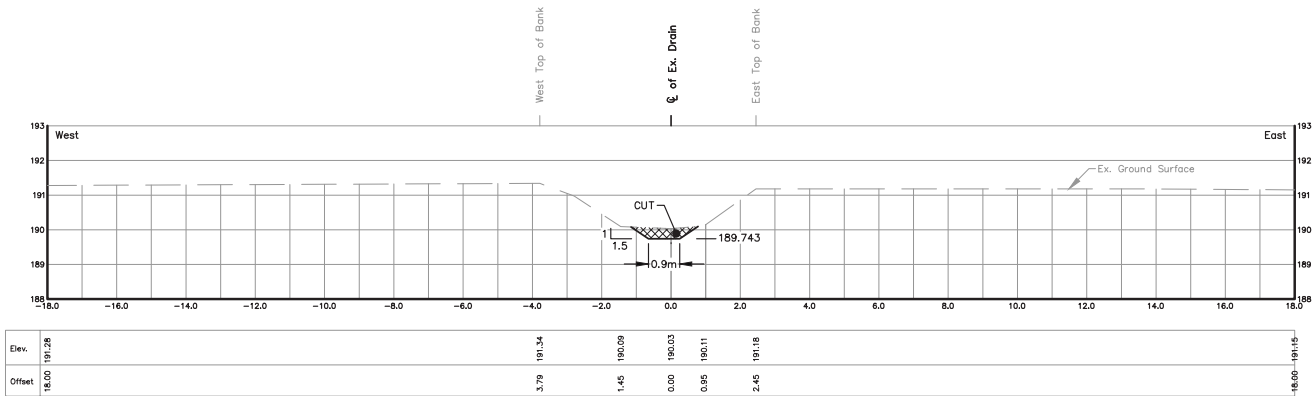
STA. 0+933.0
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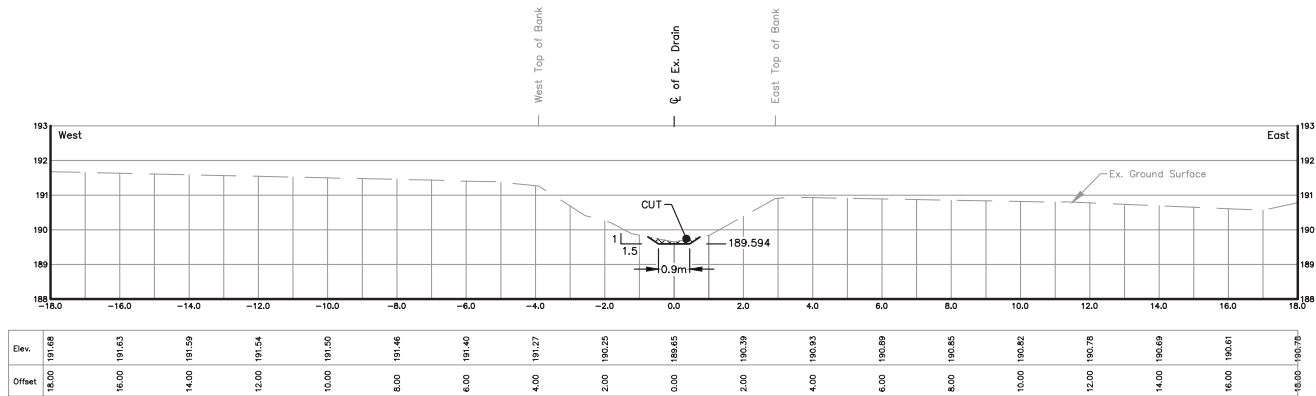
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG

FILE No.:	SHEET No.:
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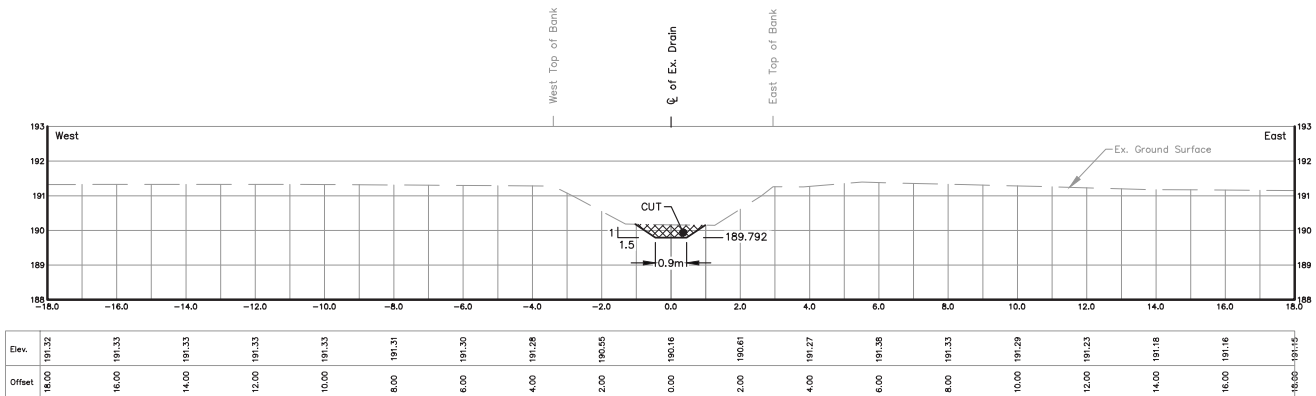
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



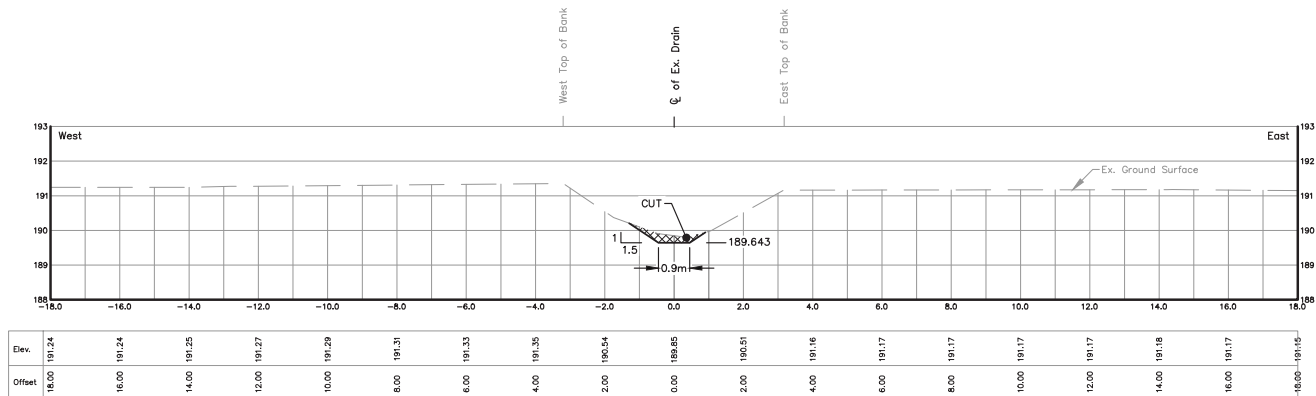
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Scale = 1:100



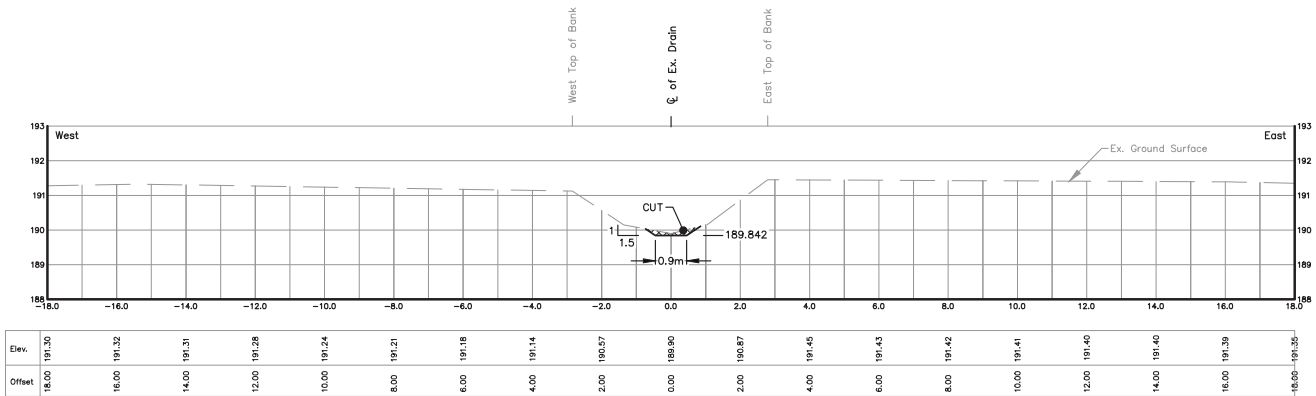
STA. 1+280.7
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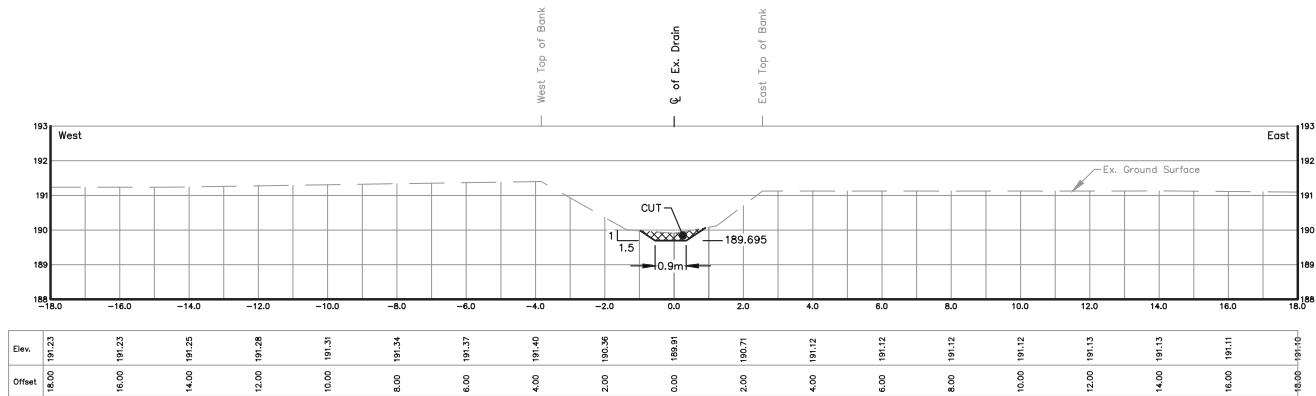
STA. 1+089
Scale = 1:100



STA. 1+231.4
Scale = 1:100



STA. 1+034.4
Scale = 1:100



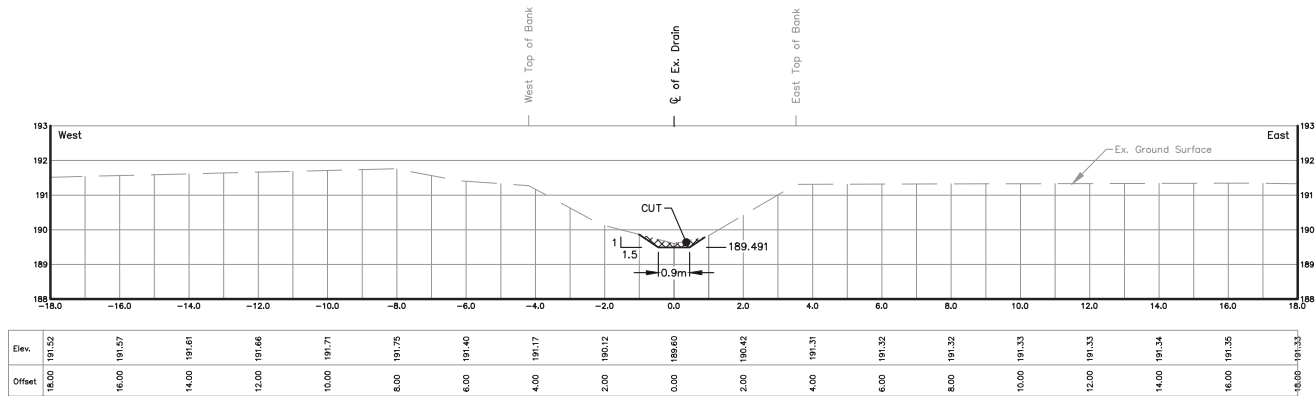
STA. 1+180.0
Scale = 1:100

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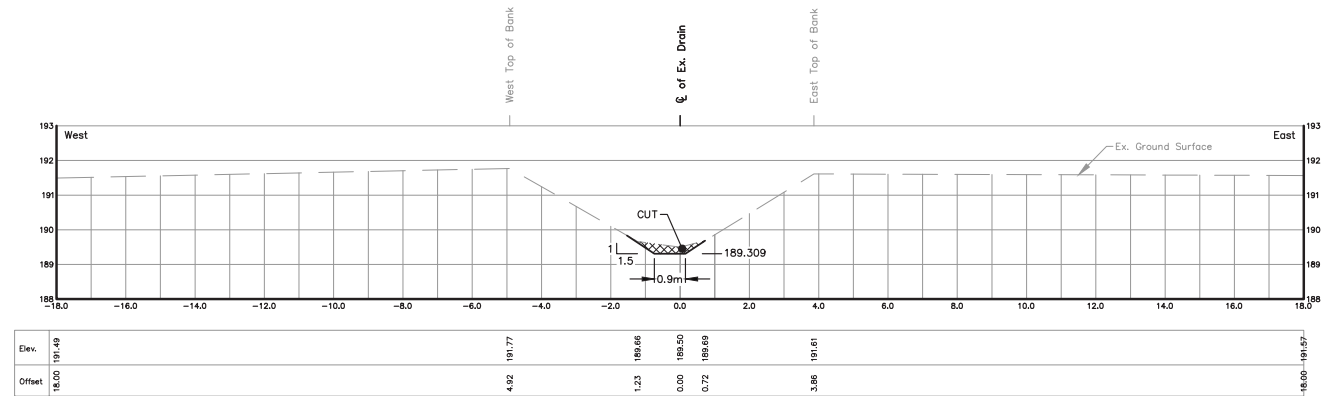
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG

FILE No.: SHEET No.:
2015D010 11 OF 51

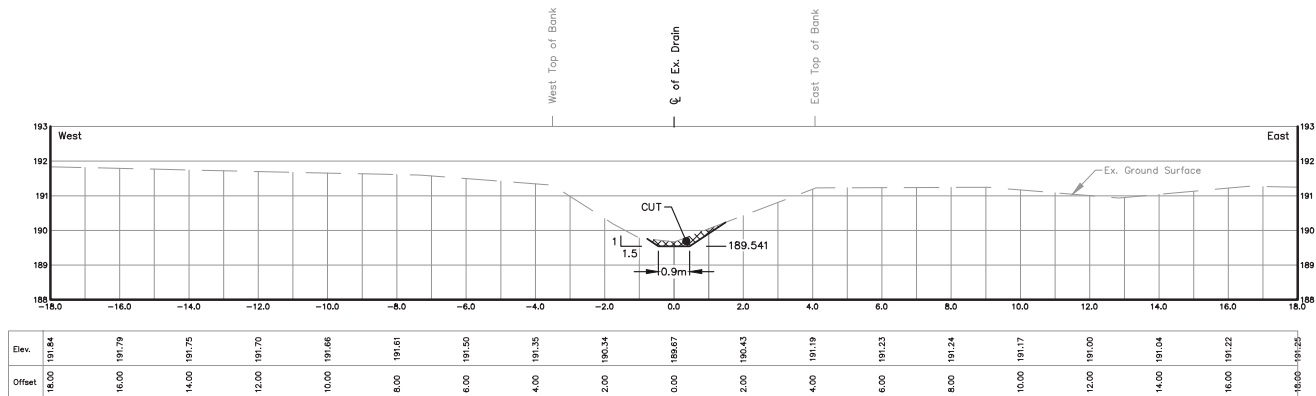
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



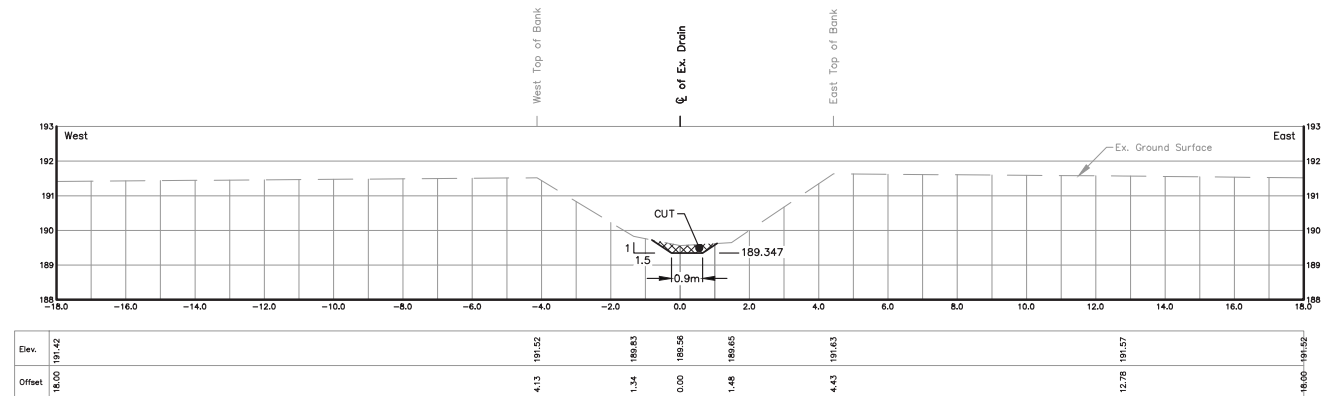
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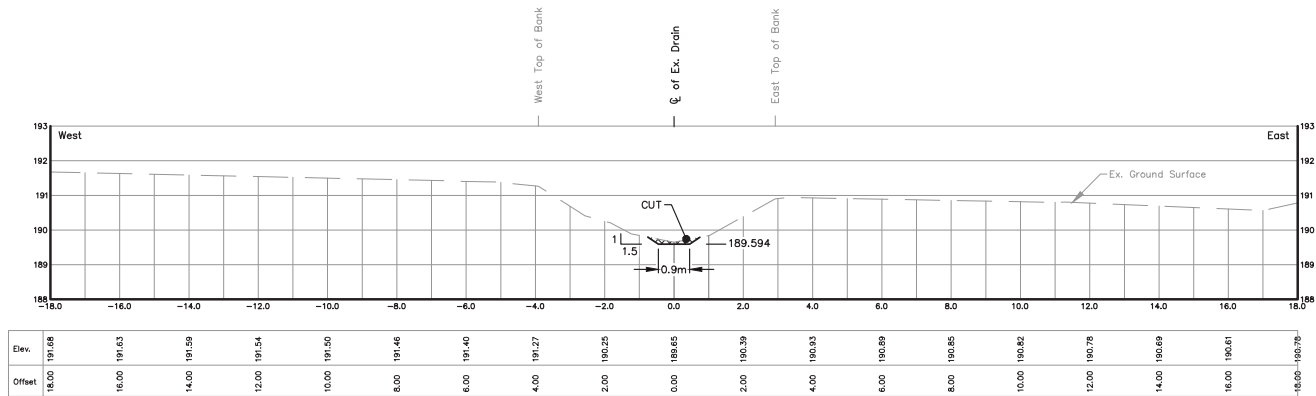
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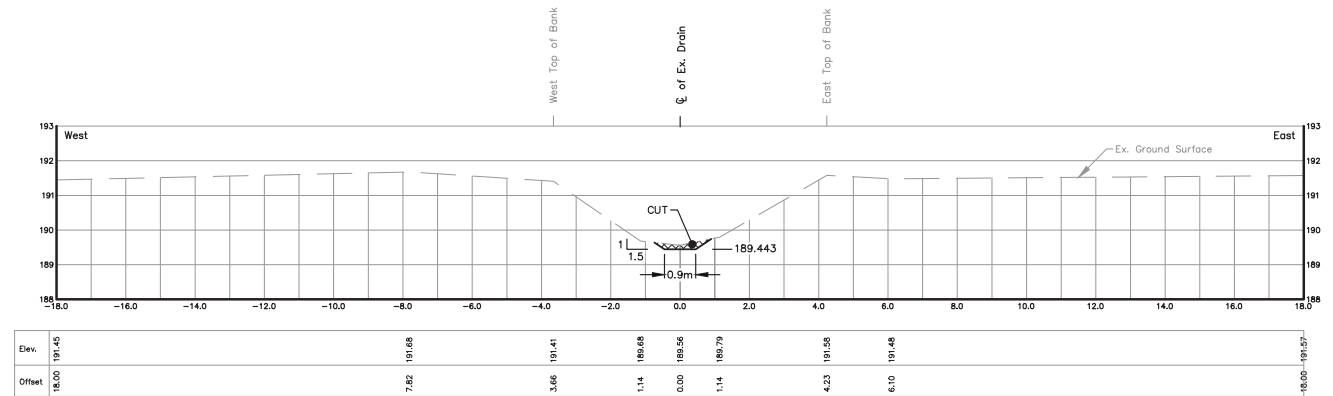
STA. 1+332.2
Scale = 1:100



STA. 1+524.1
Scale = 1:100



STA. 1+280.7
Scale = 1:100

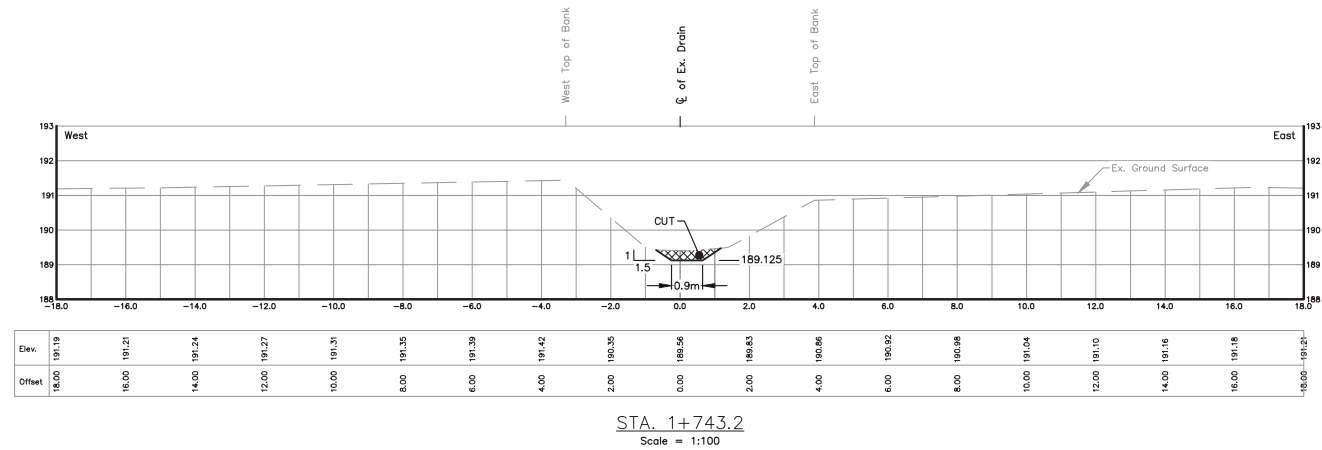
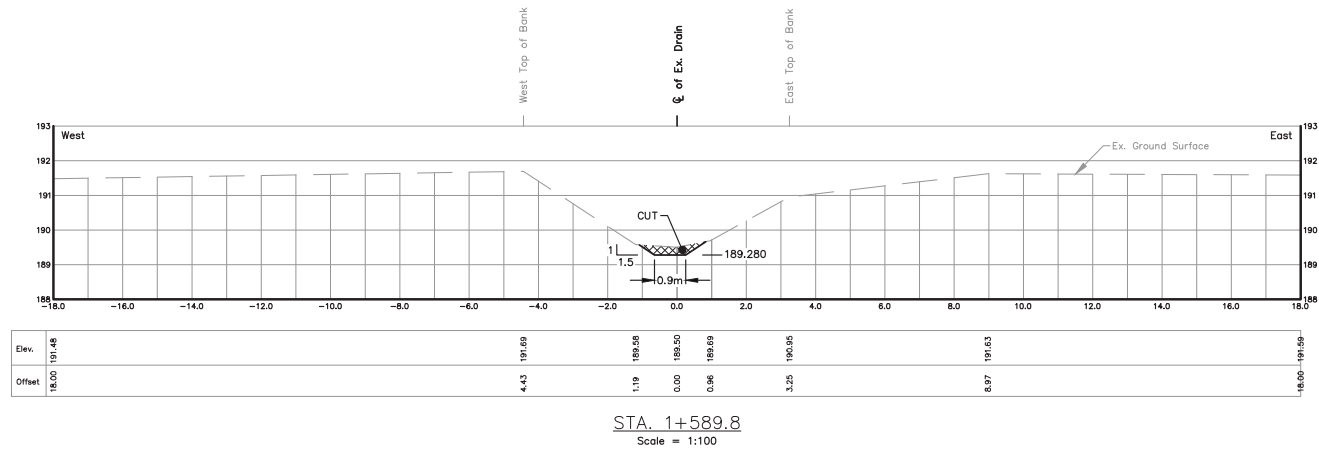
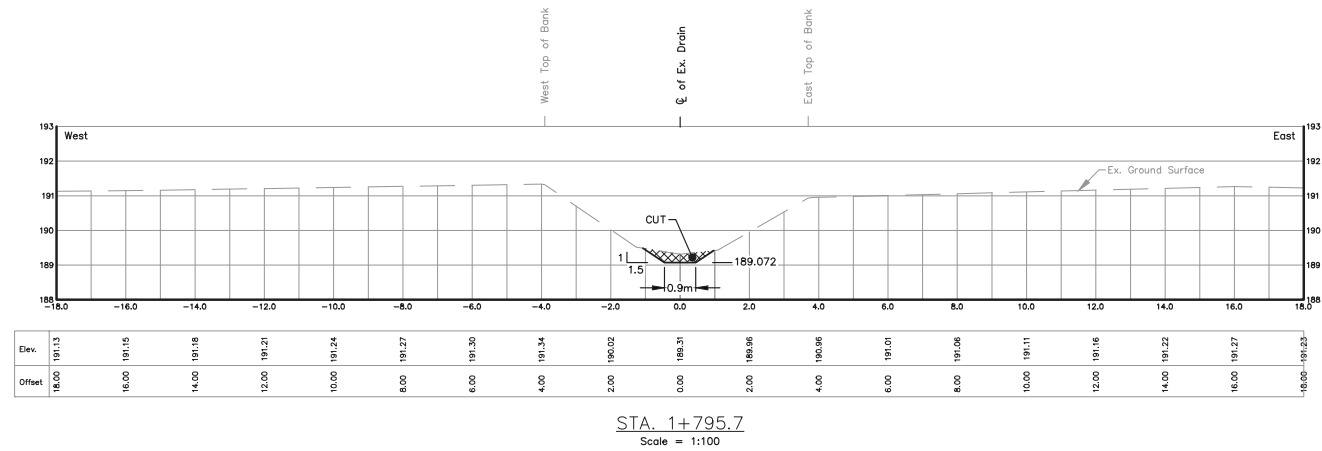
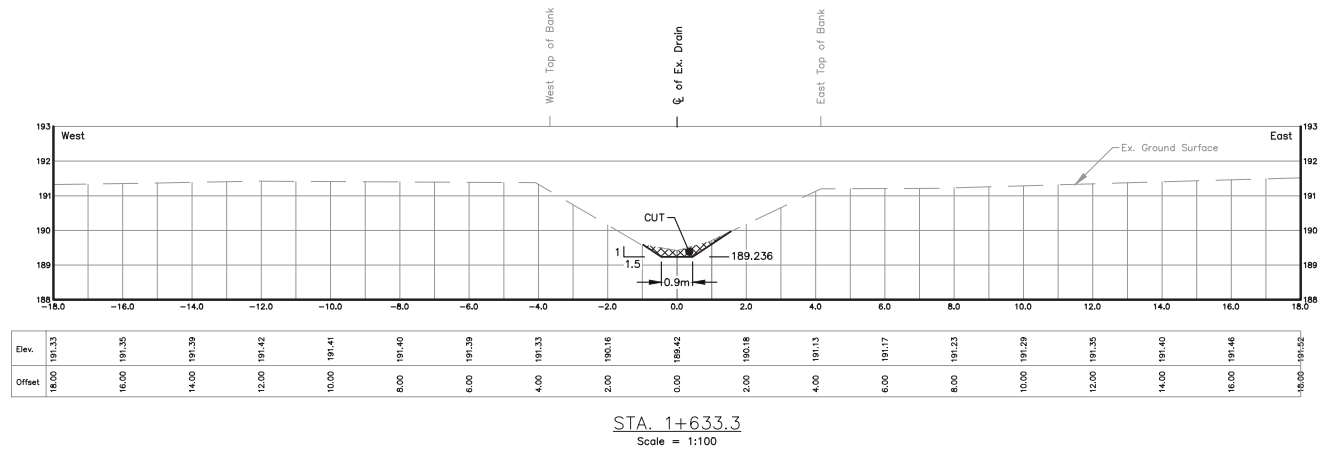
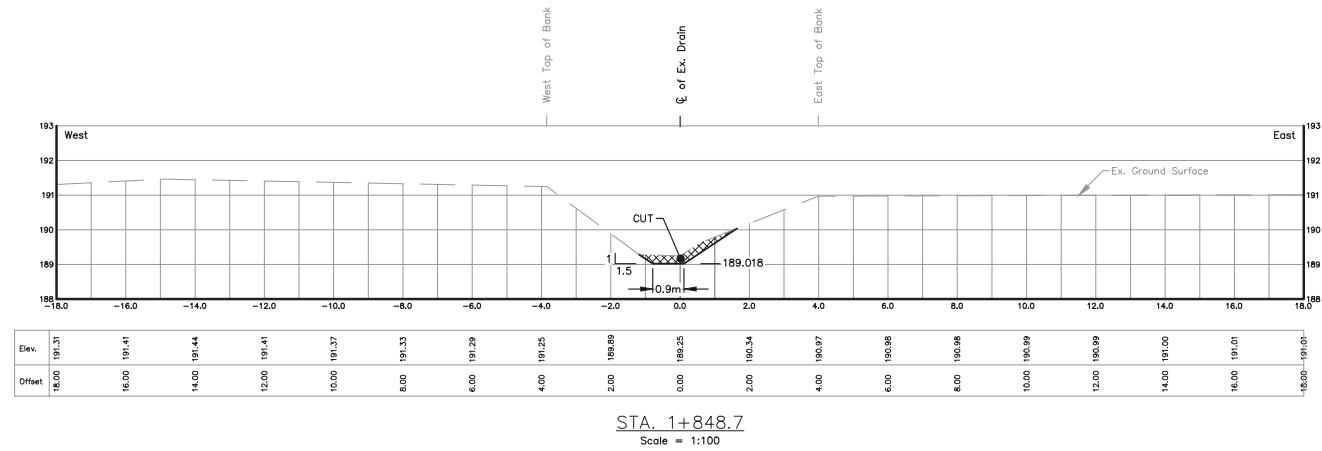
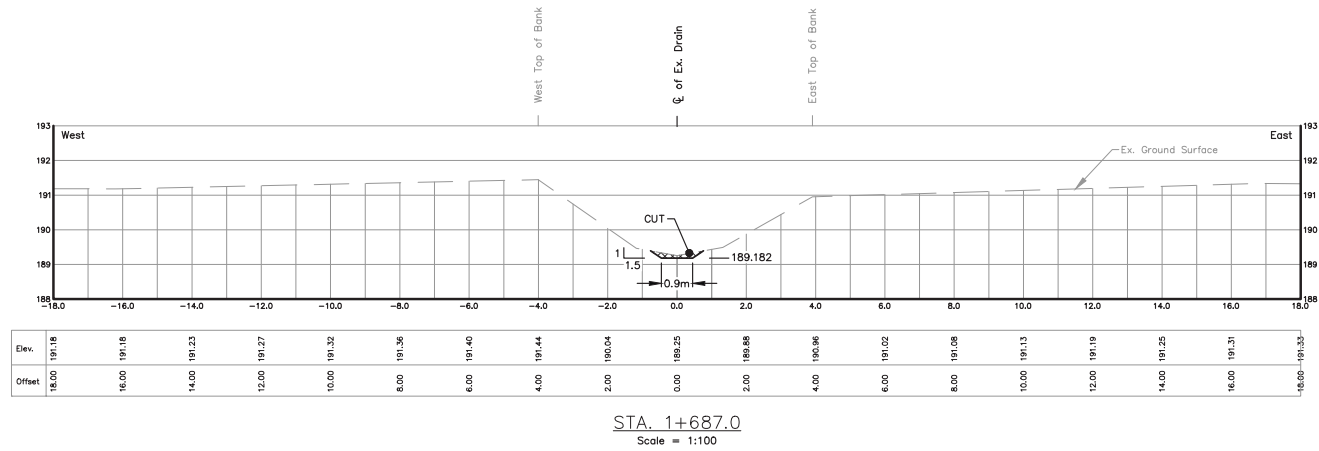


STA. 1+428.8
Scale = 1:100

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DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 12 OF 51

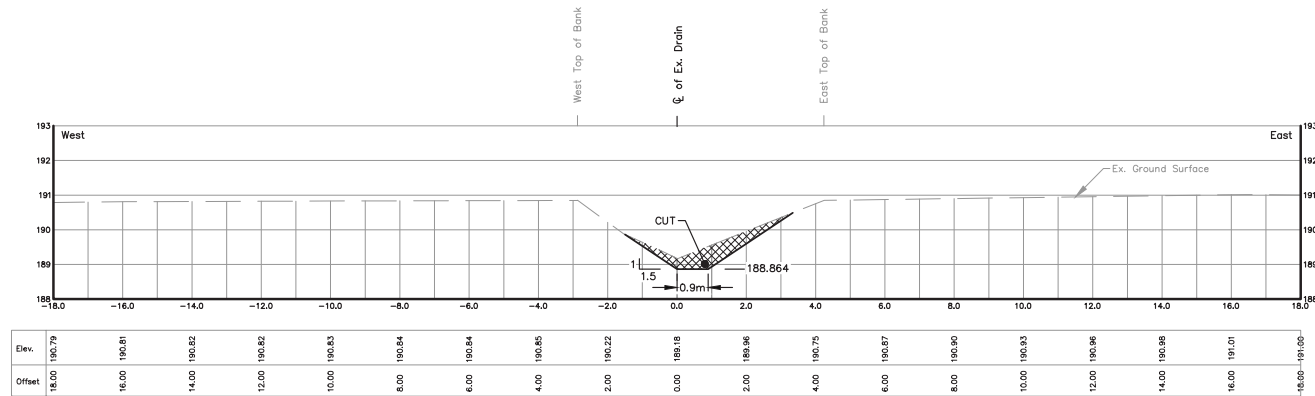
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



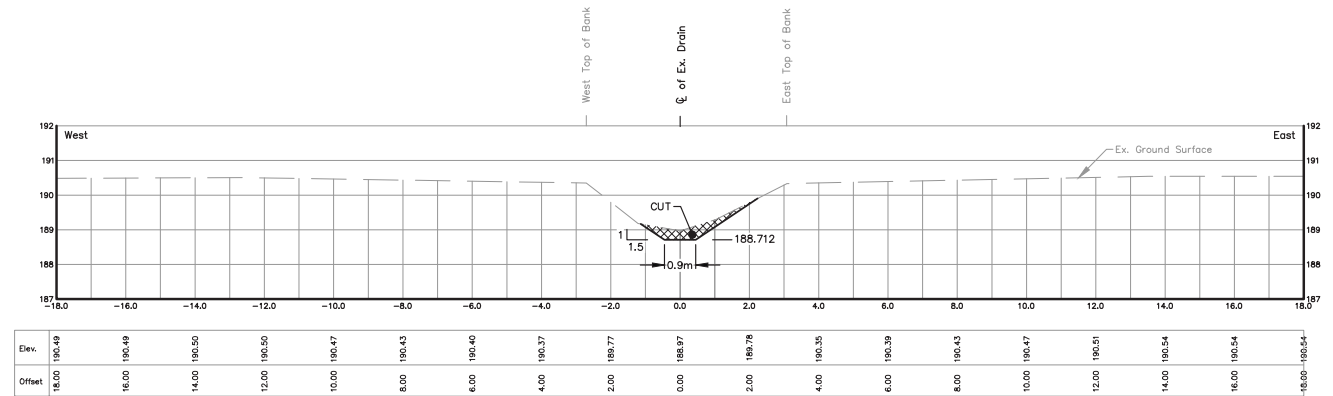
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DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 13 OF 51

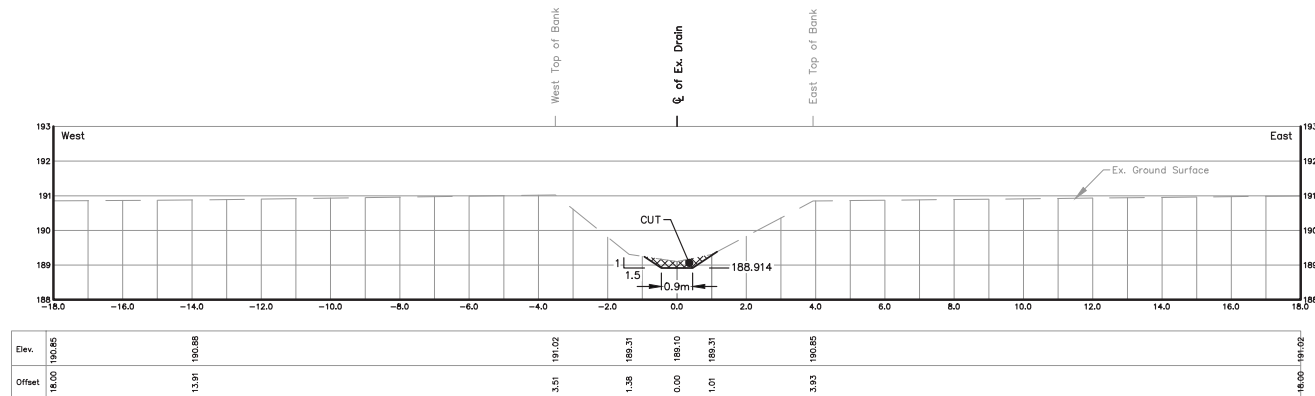
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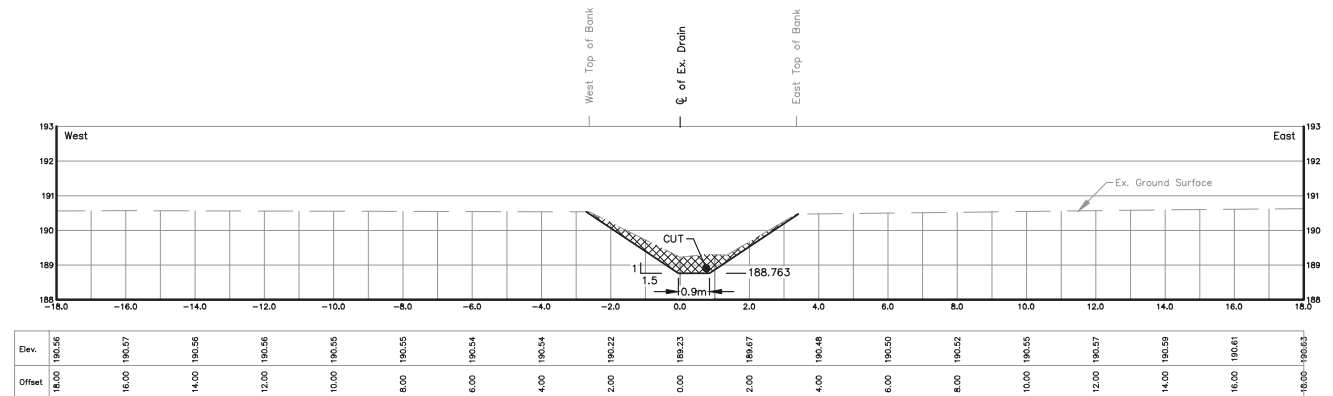
STA. 2+001.1
Scale = 1:100



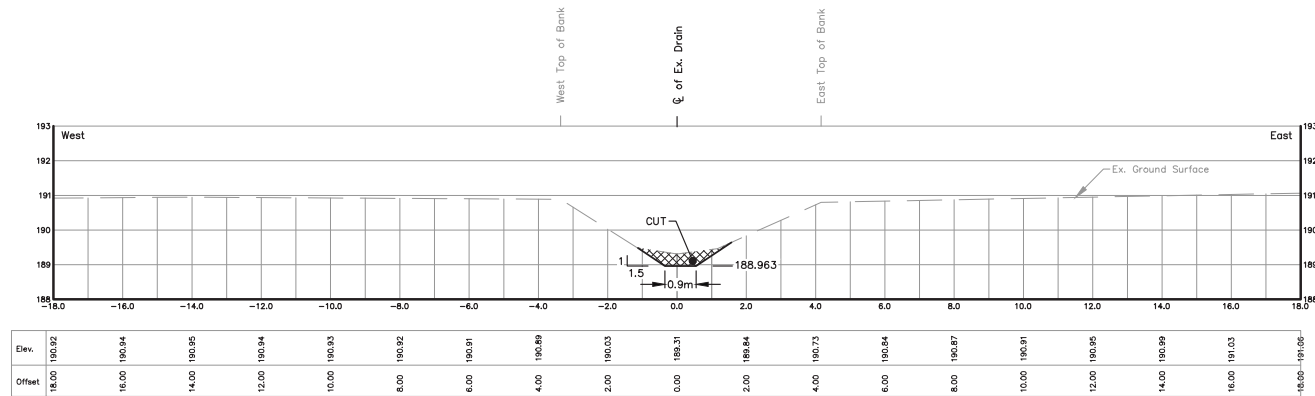
STA. 2+151.2
Scale = 1:100



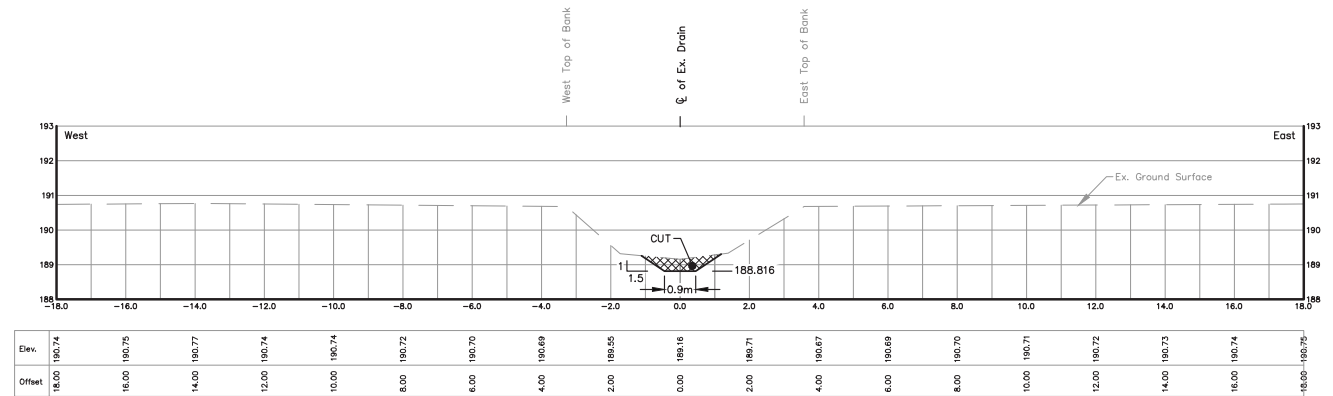
STA. 1+952.0
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STA. 2+100.5
Scale = 1:100



STA. 1+903.2
Scale = 1:100

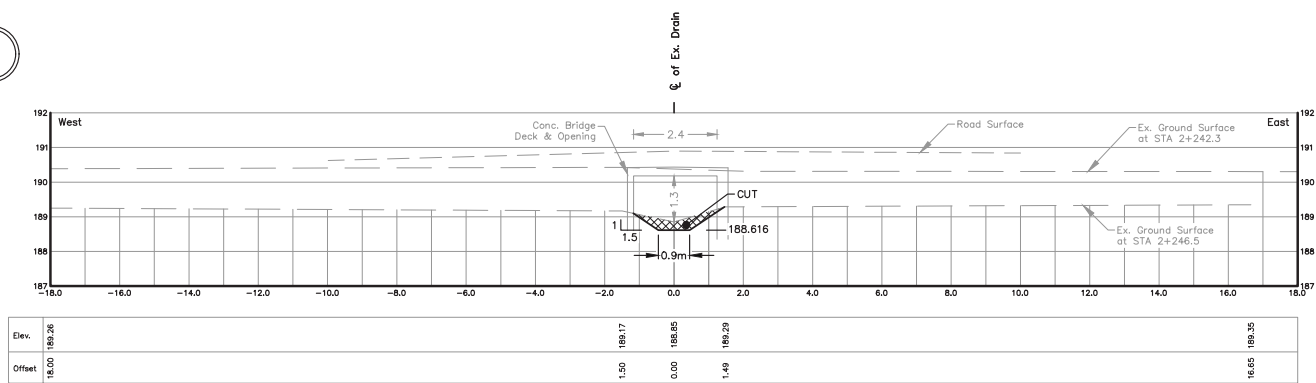


STA. 2+048.8
Scale = 1:100

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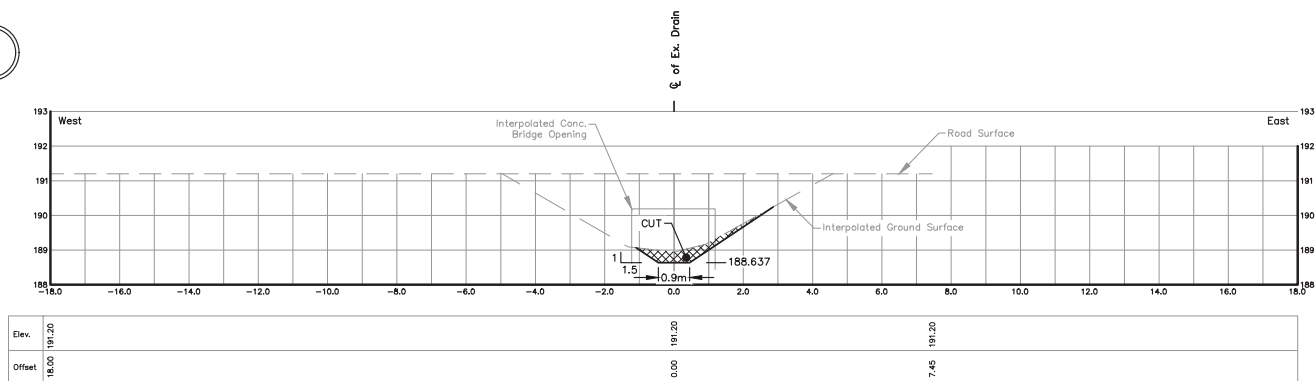
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
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8



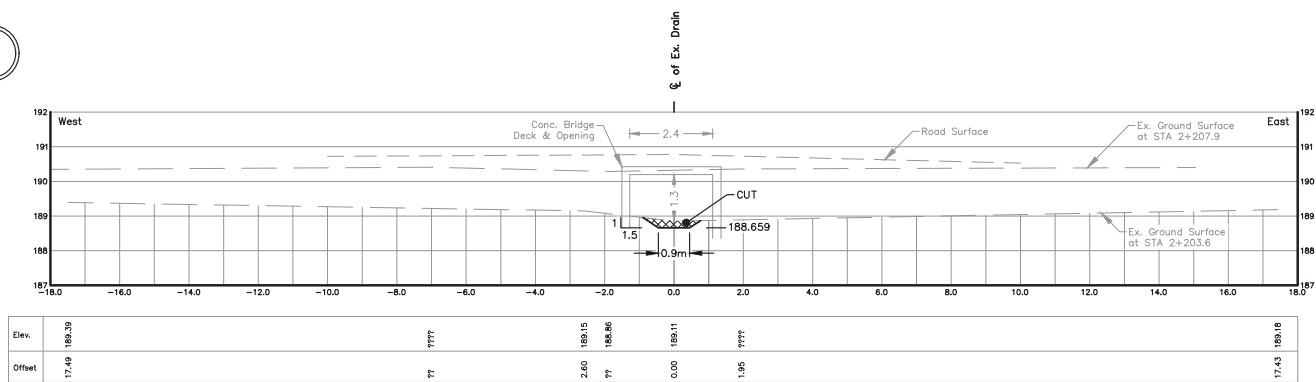
STA. 2+246.5
Scale = 1:100

8

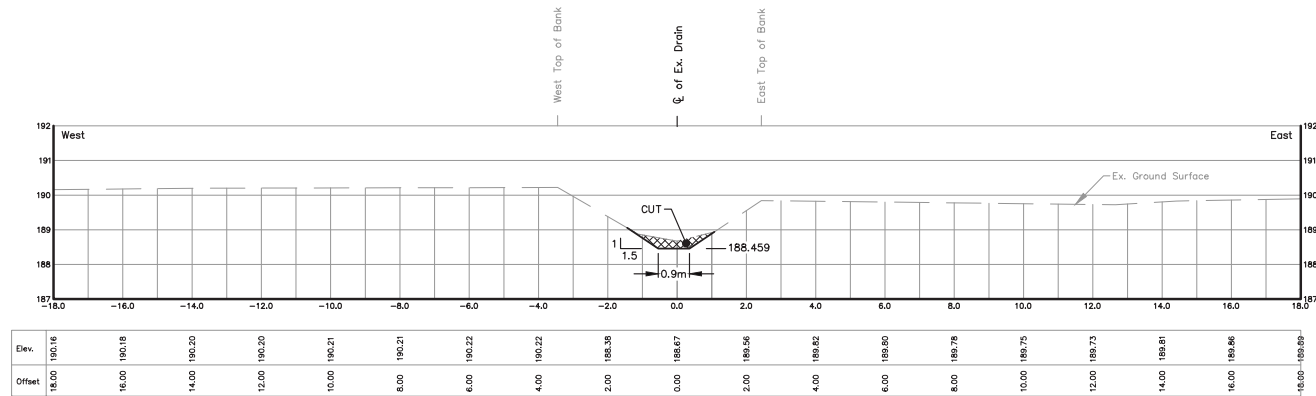


STA. 2+225.2
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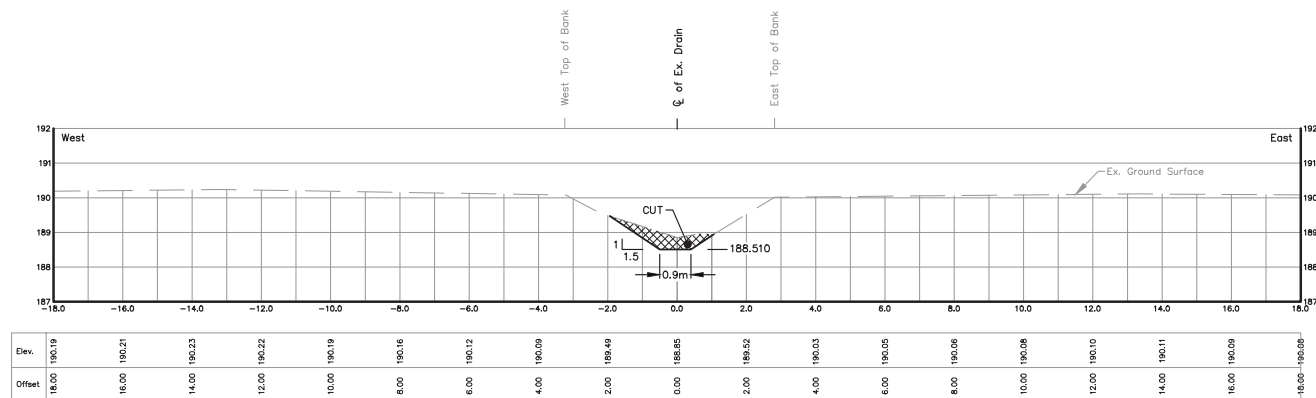
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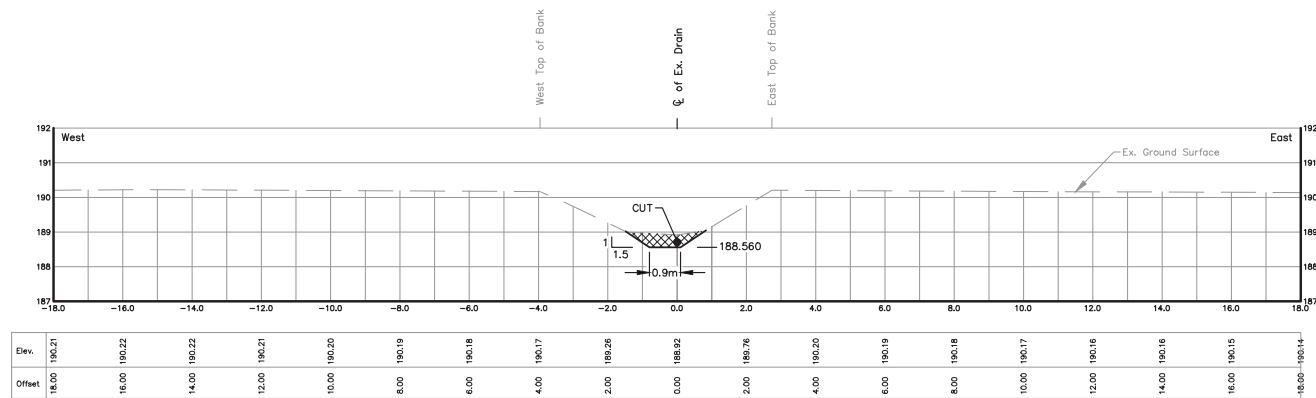
STA. 2+203.6
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STA. 2+401.4
Scale = 1:100



STA. 2+350.4
Scale = 1:100

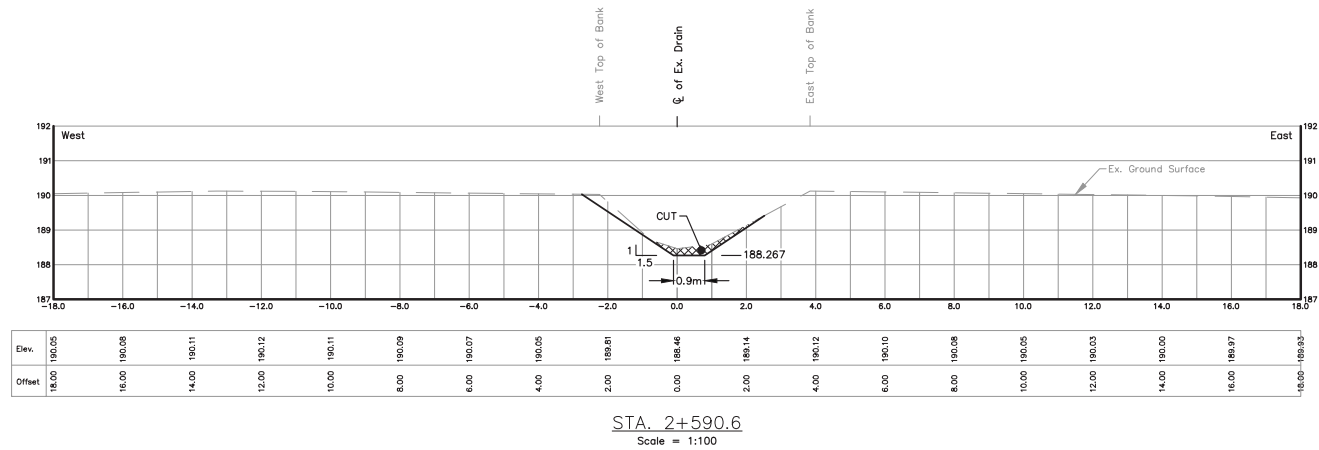
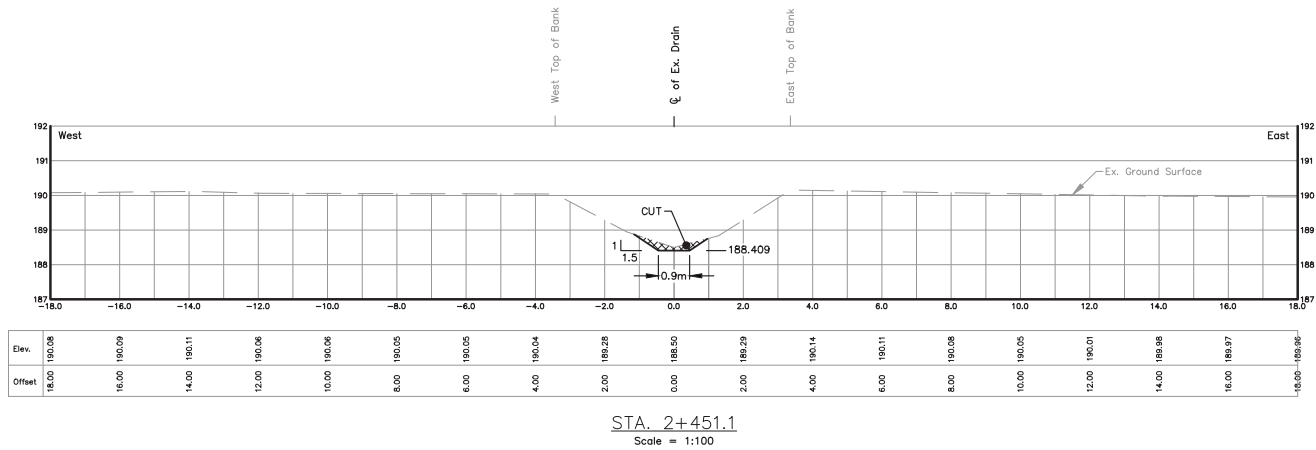
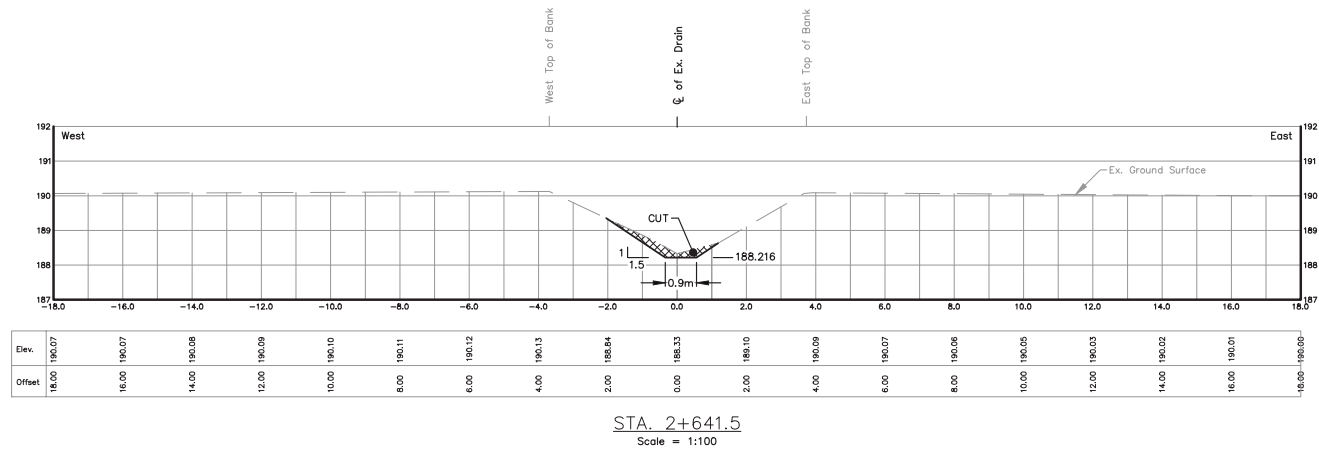
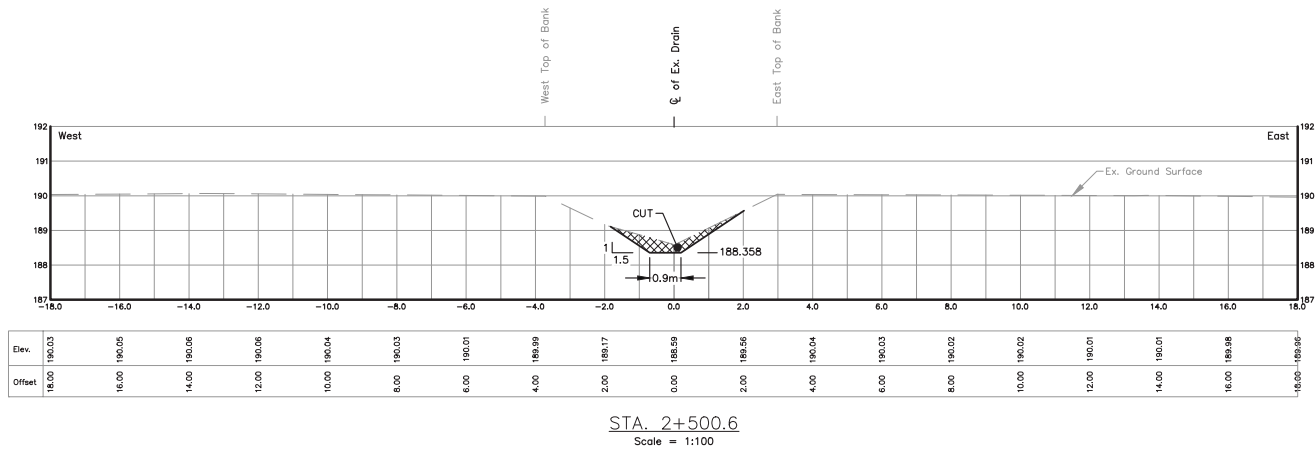
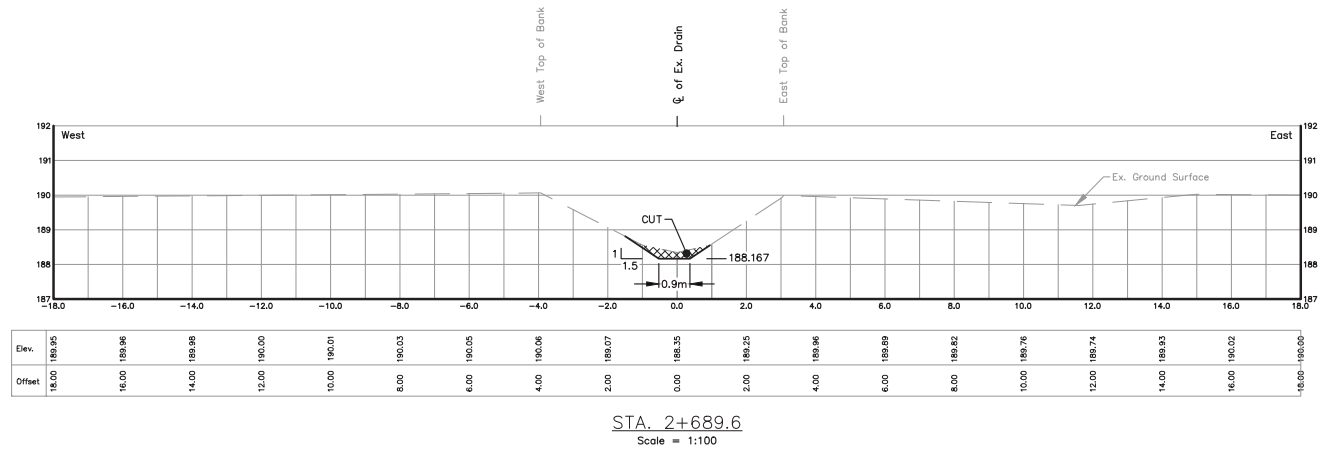
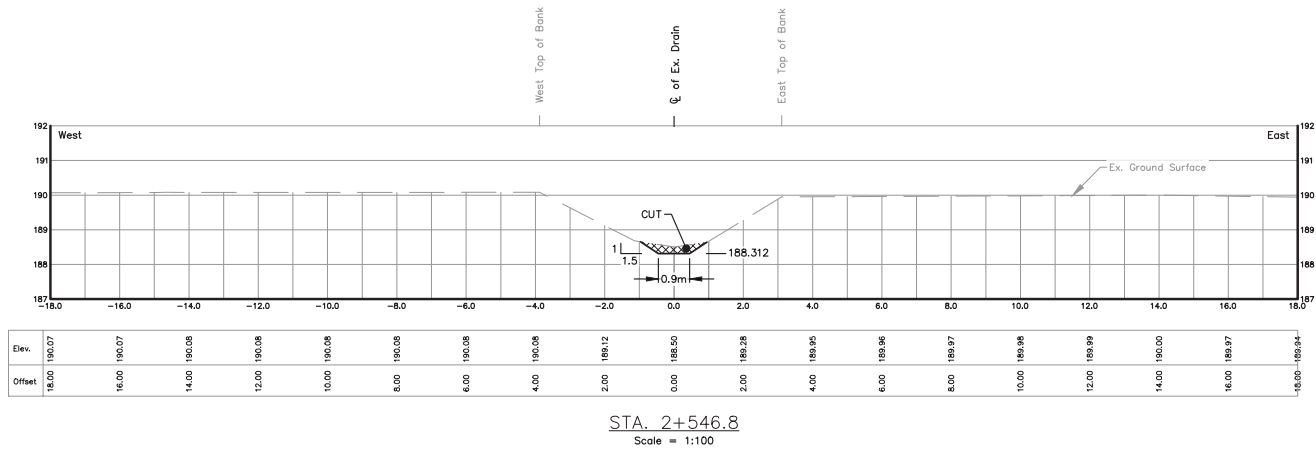


STA. 2+301.9
Scale = 1:100

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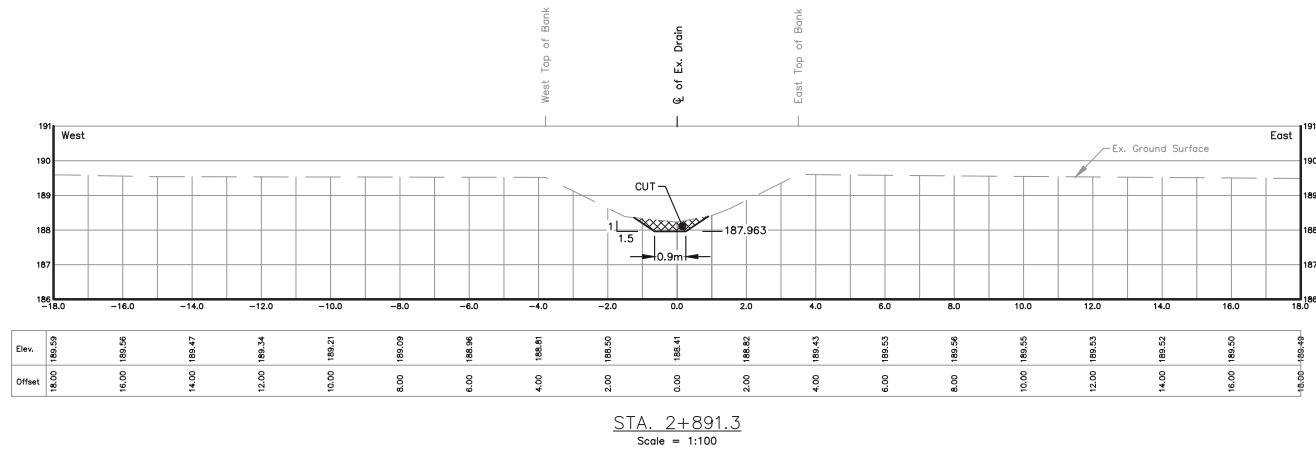
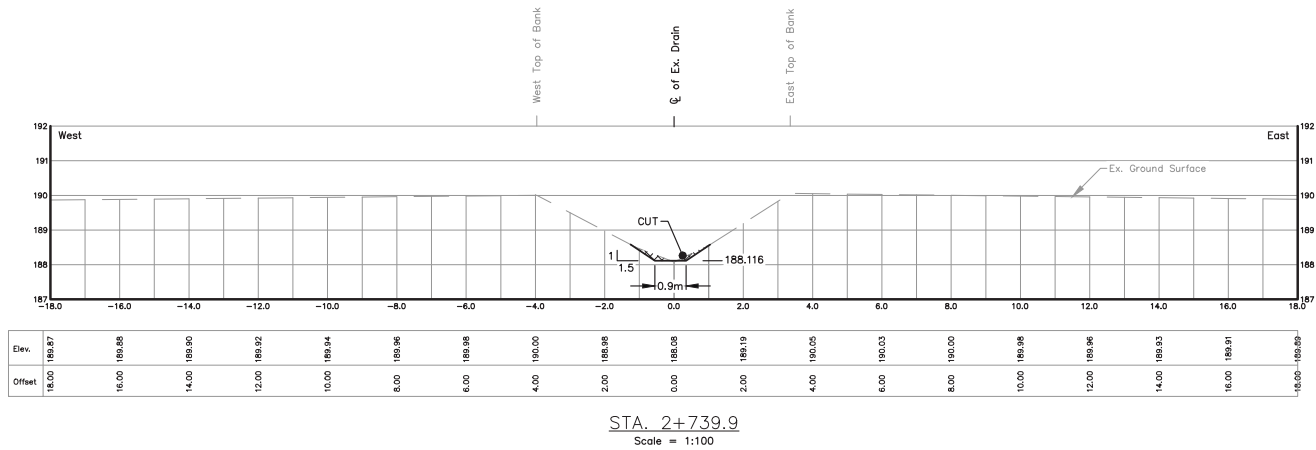
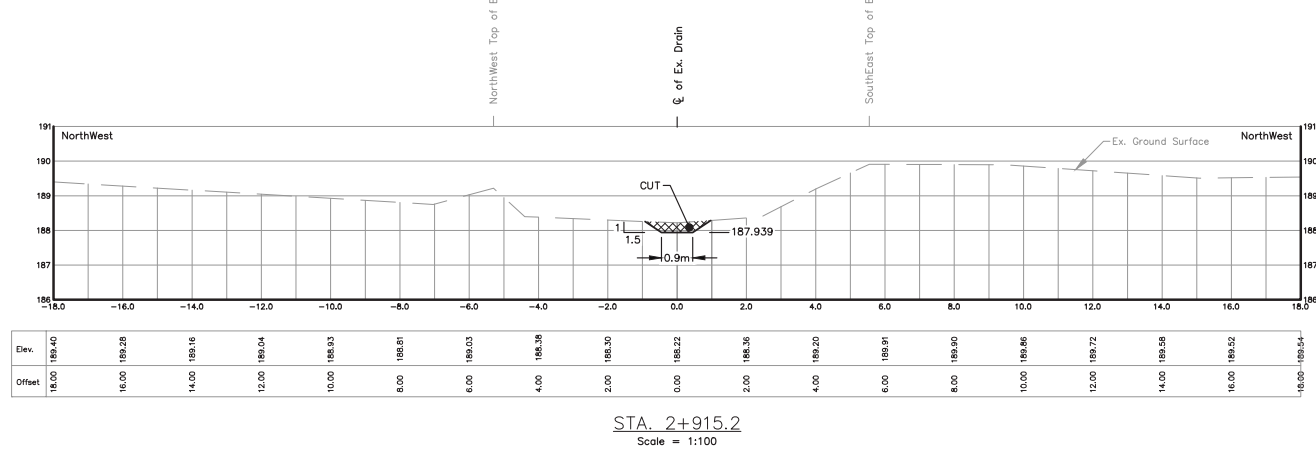
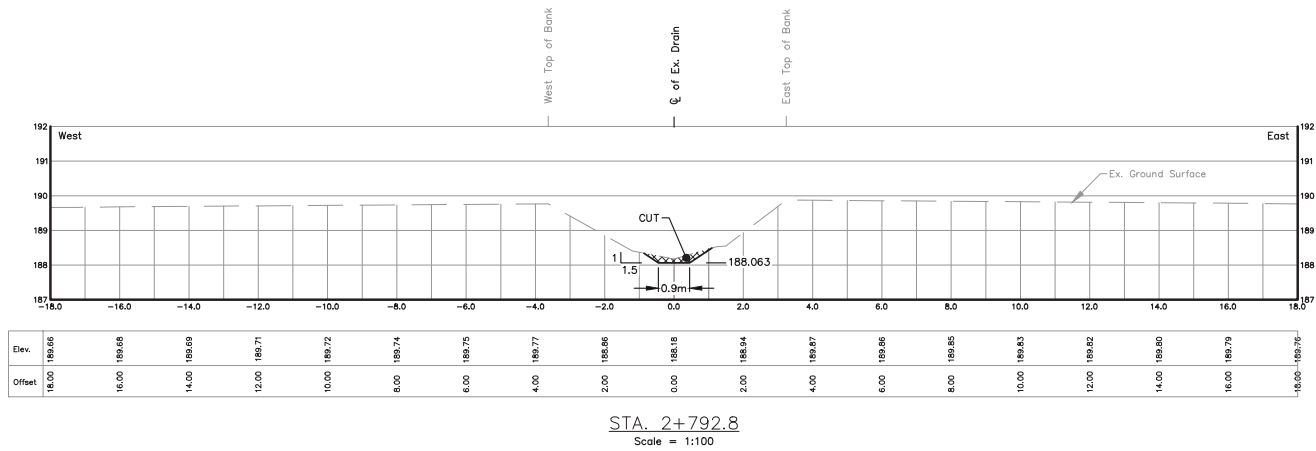
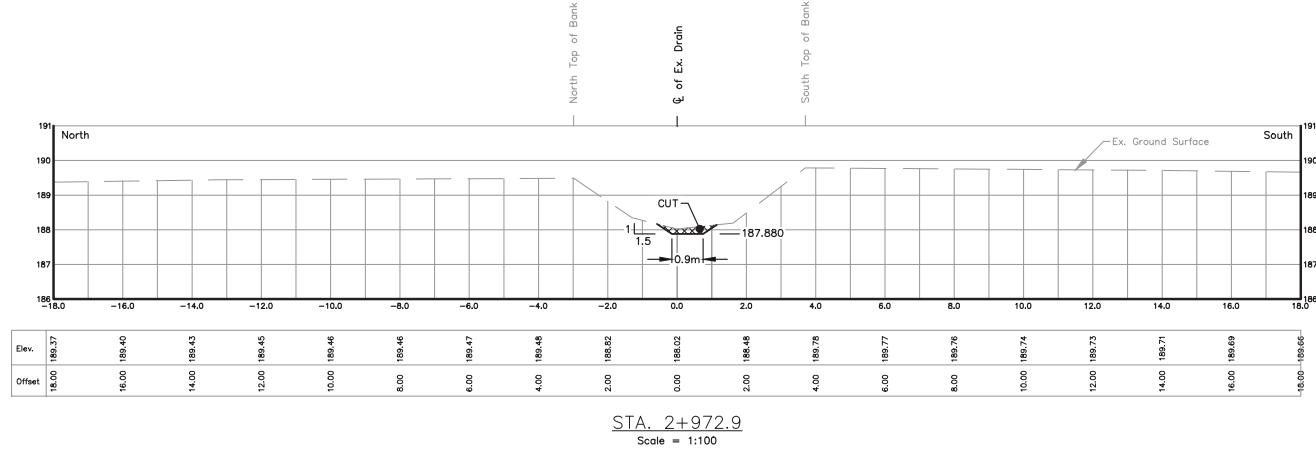
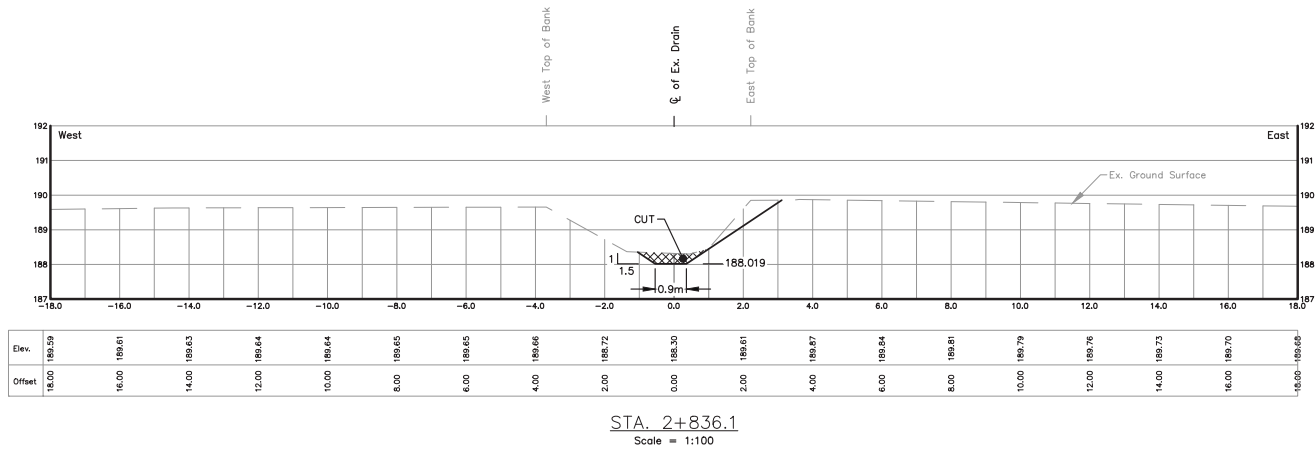
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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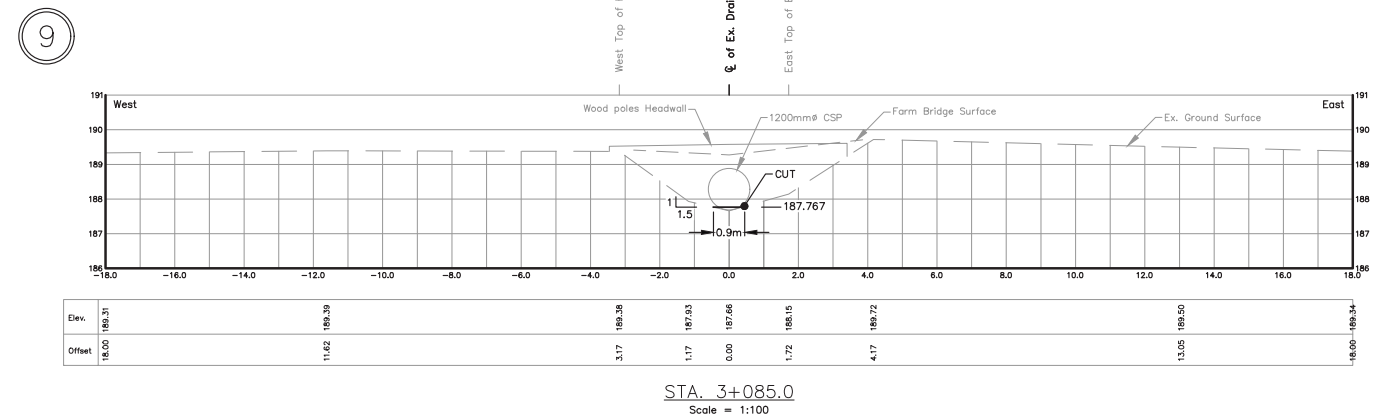
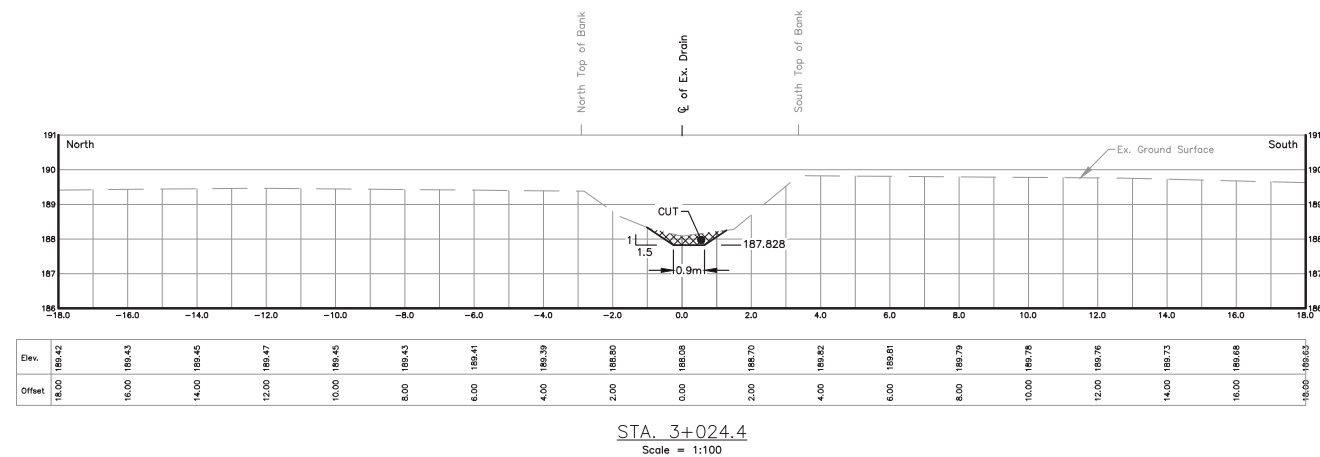
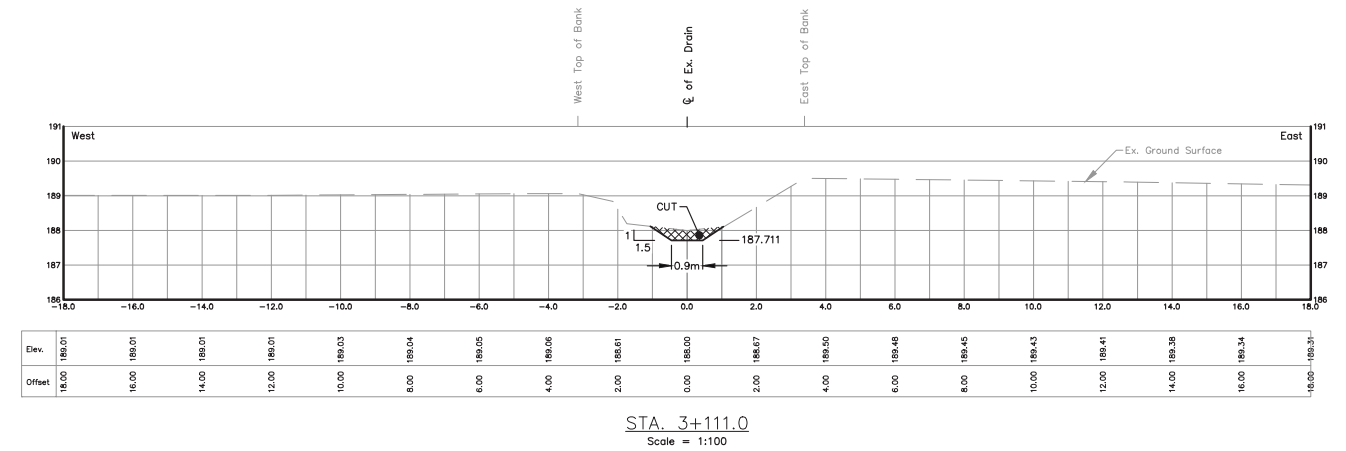
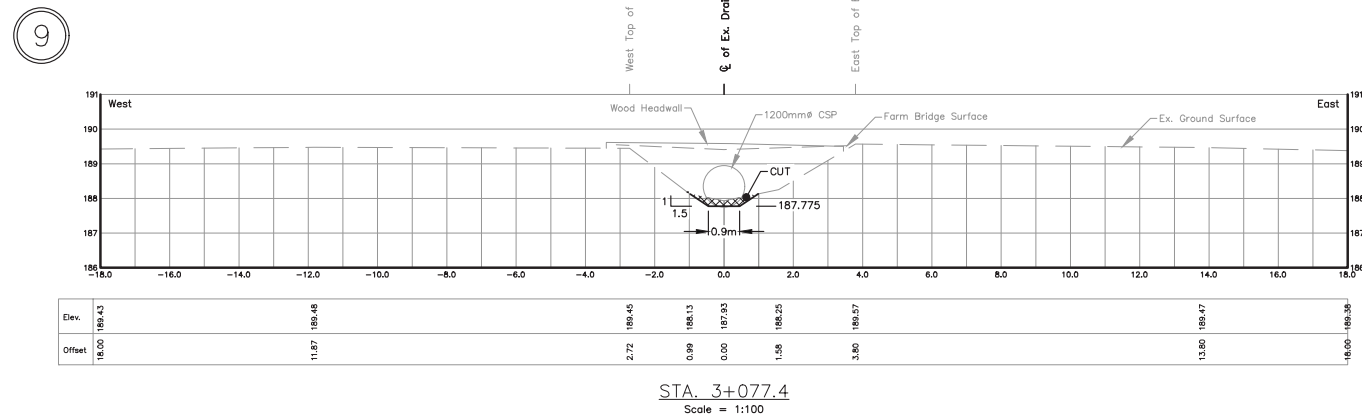
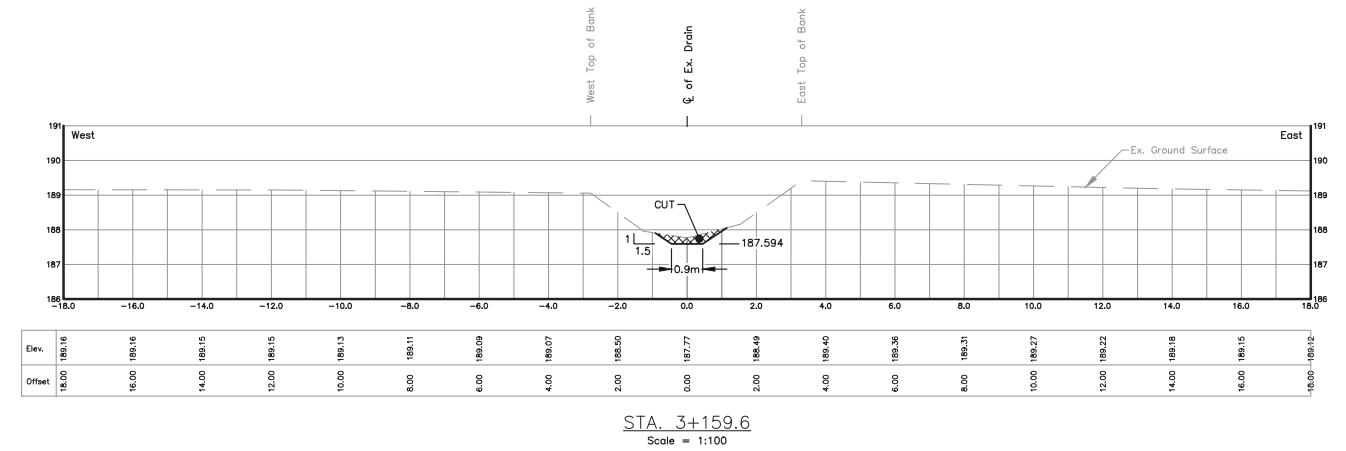
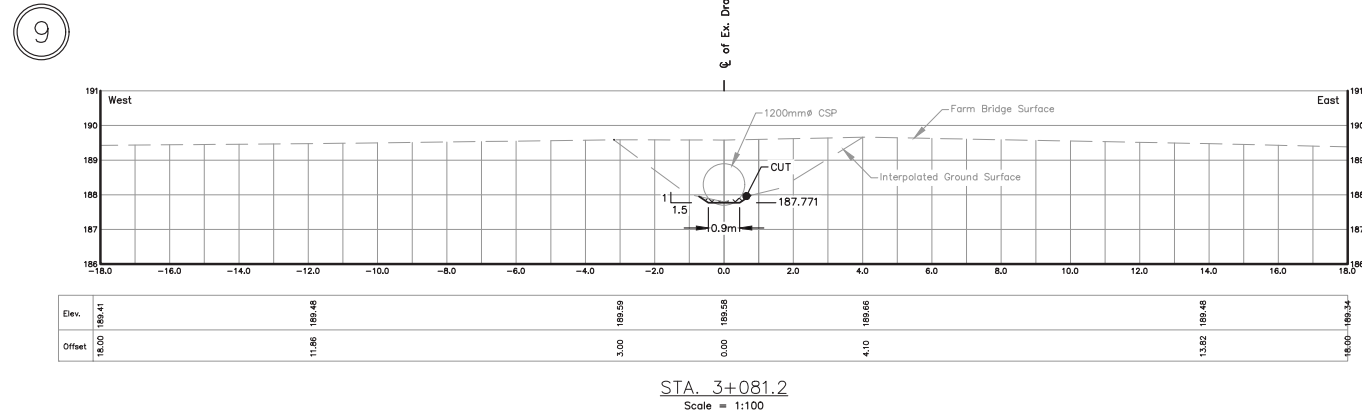
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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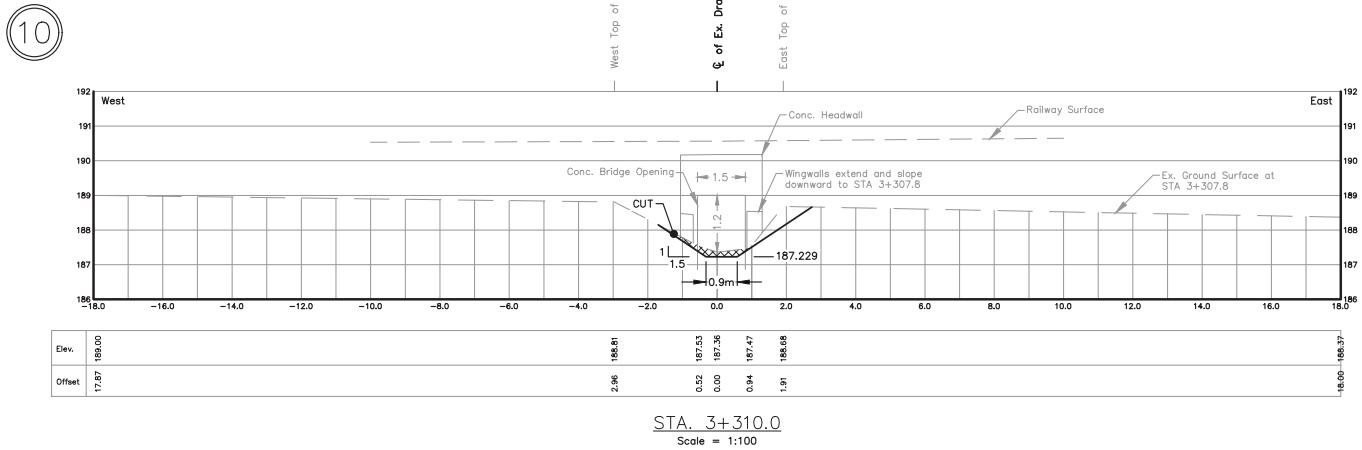
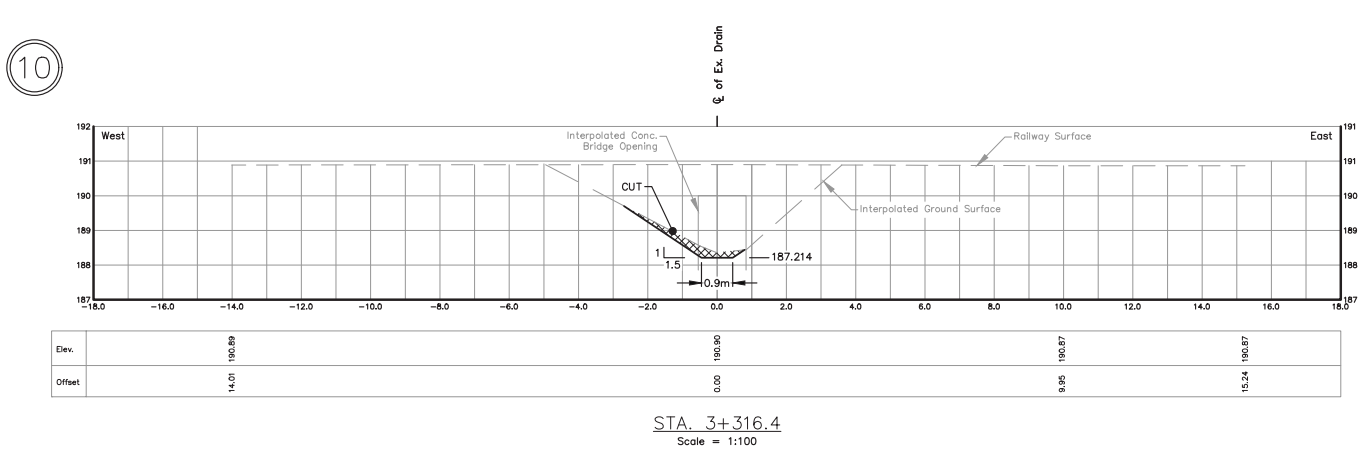
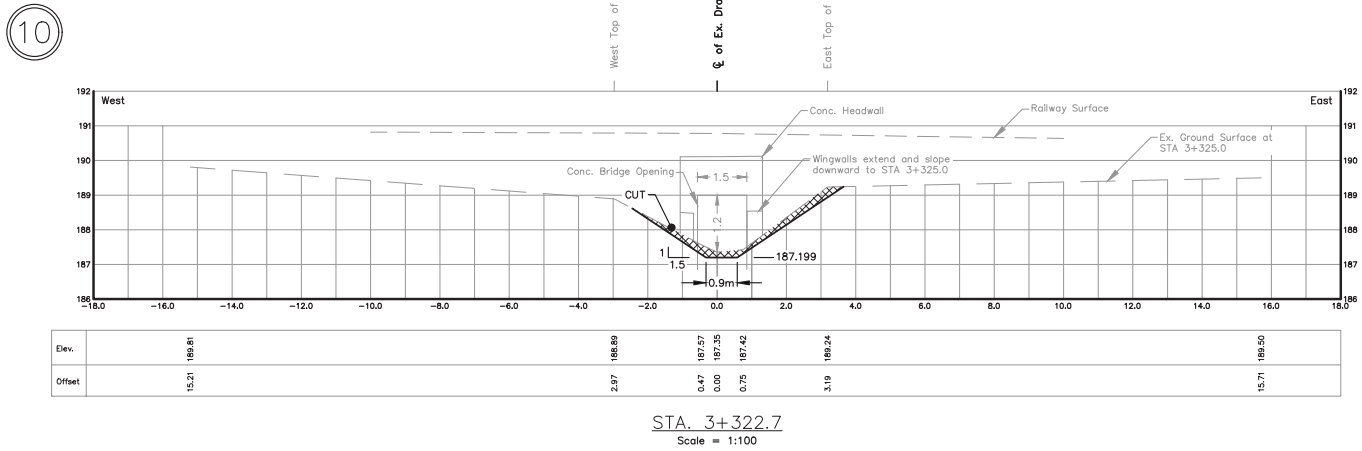
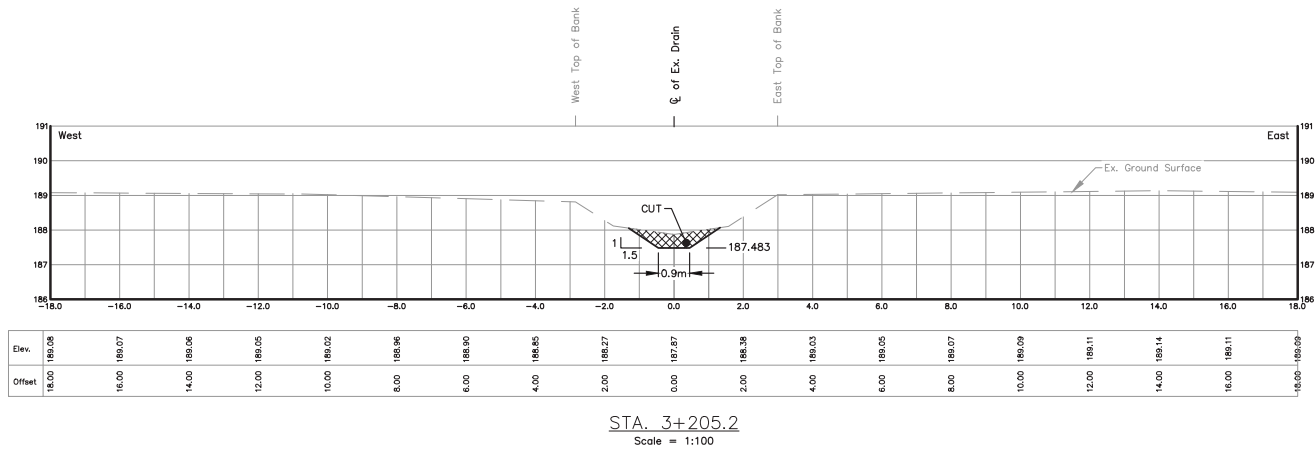
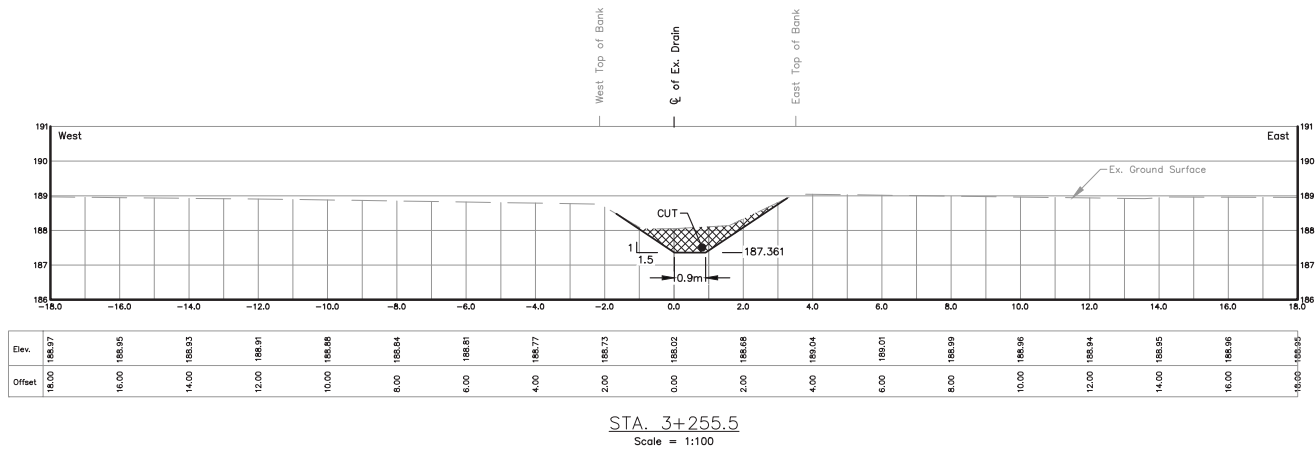
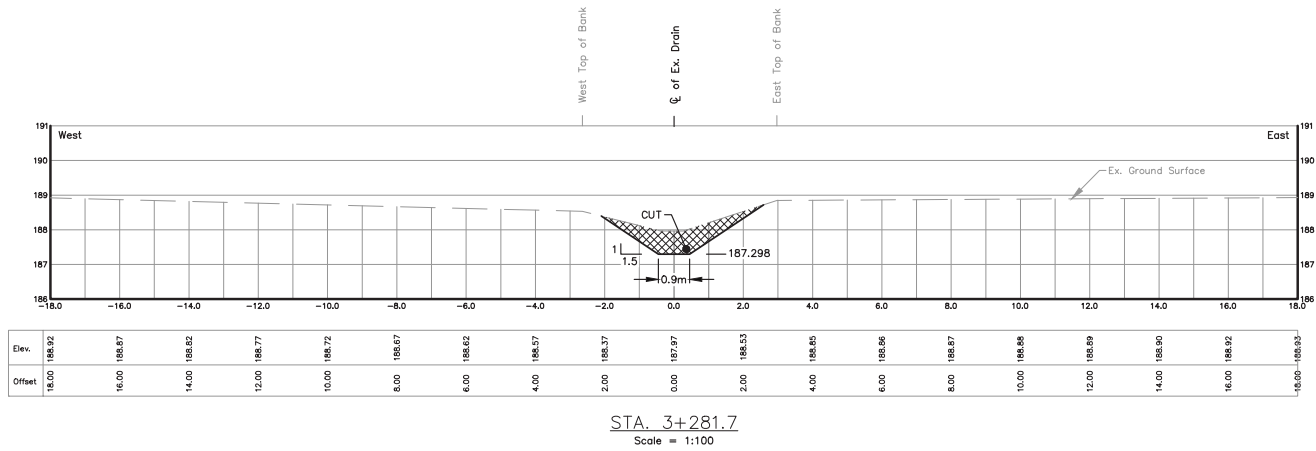
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 17 OF 51



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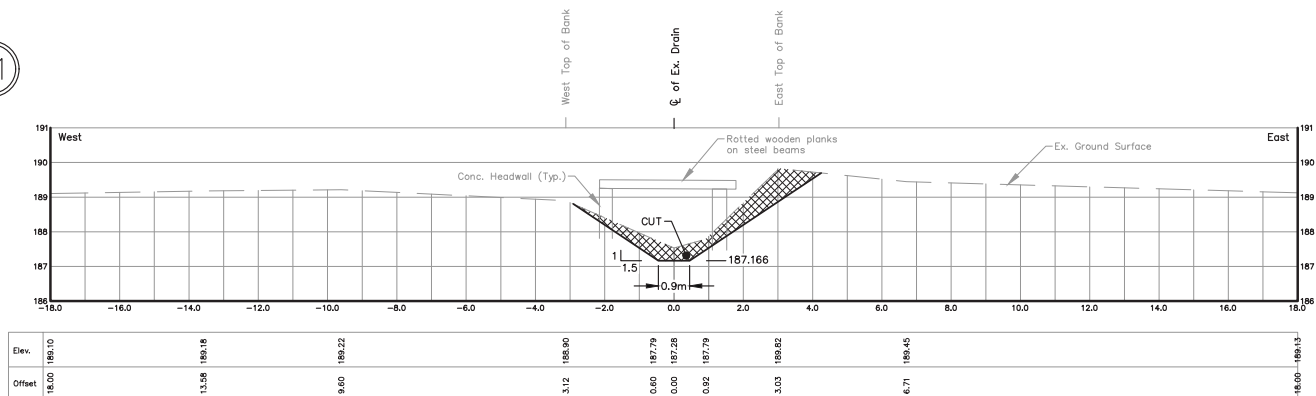
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections A.dwg 2021-05-16



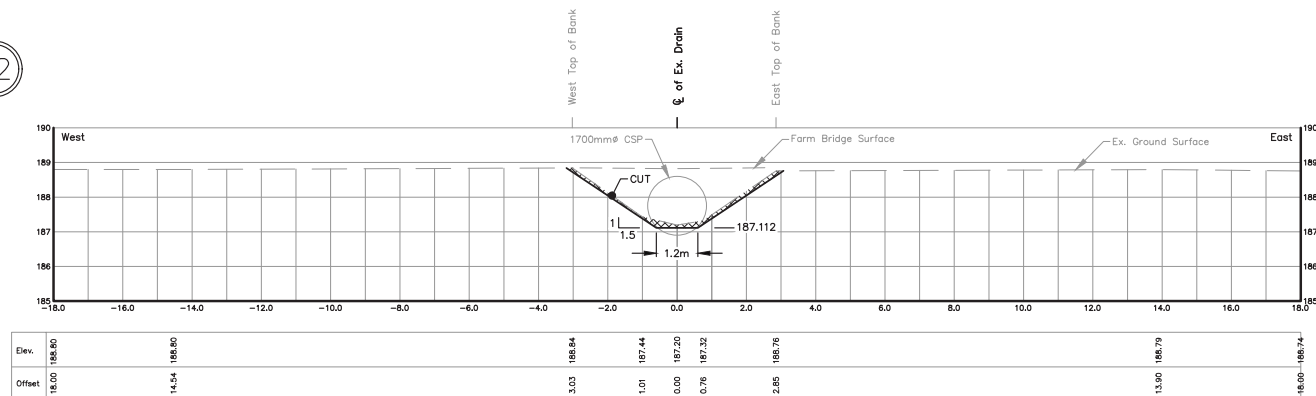
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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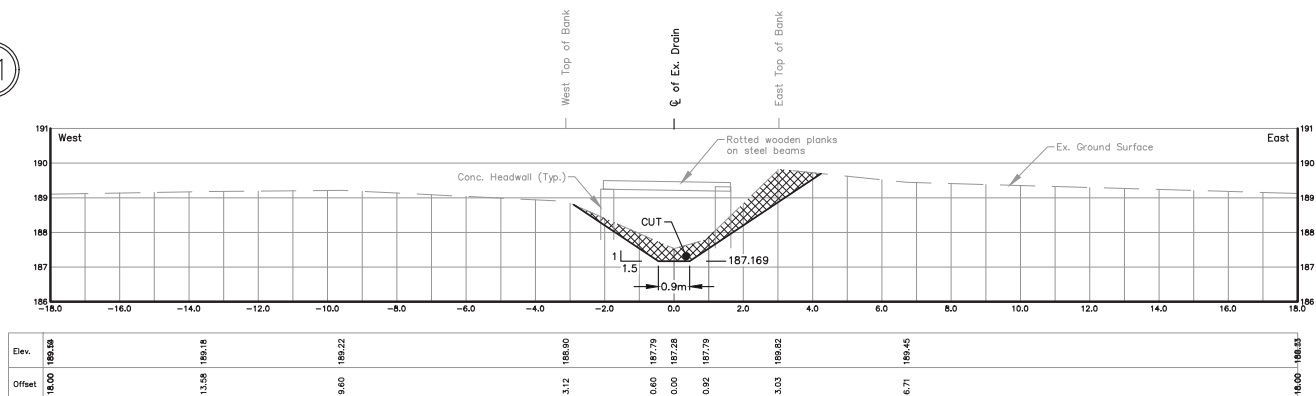
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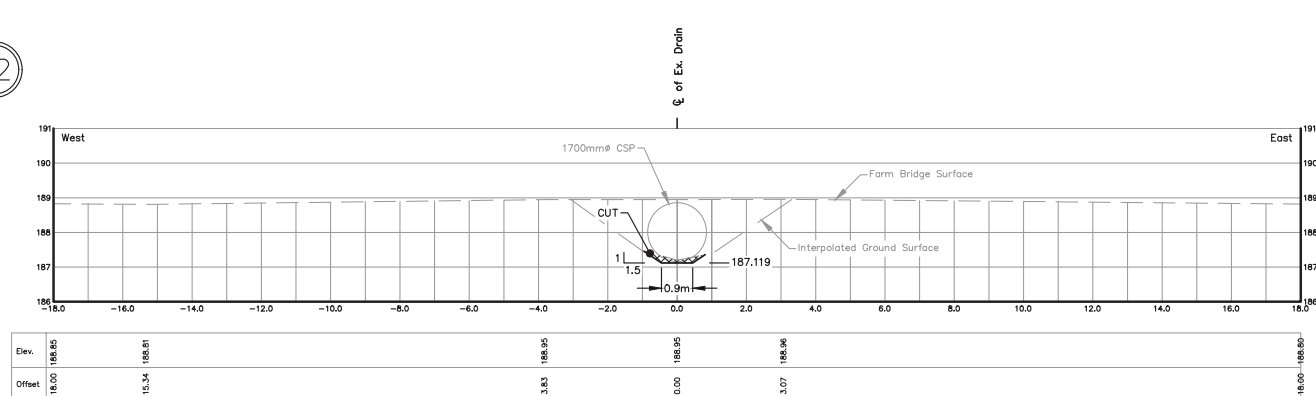
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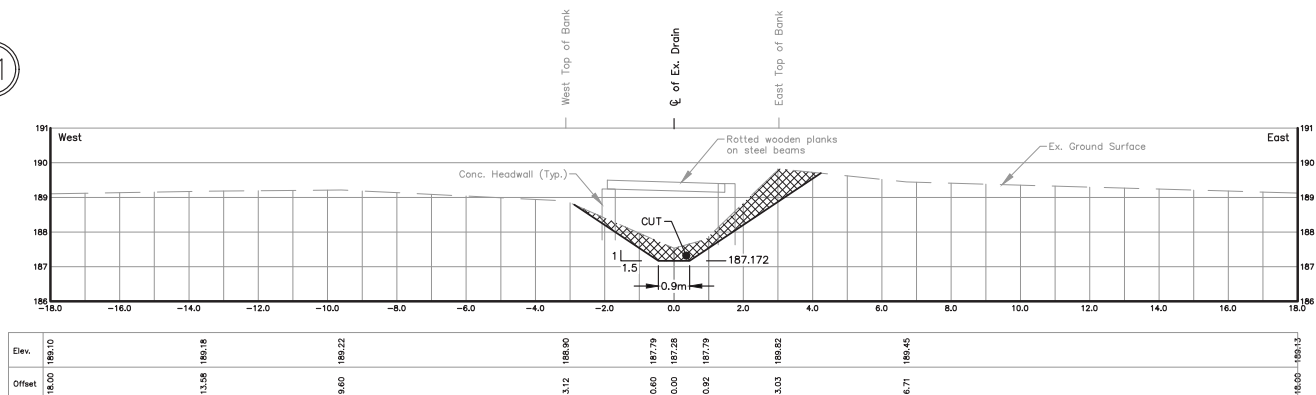
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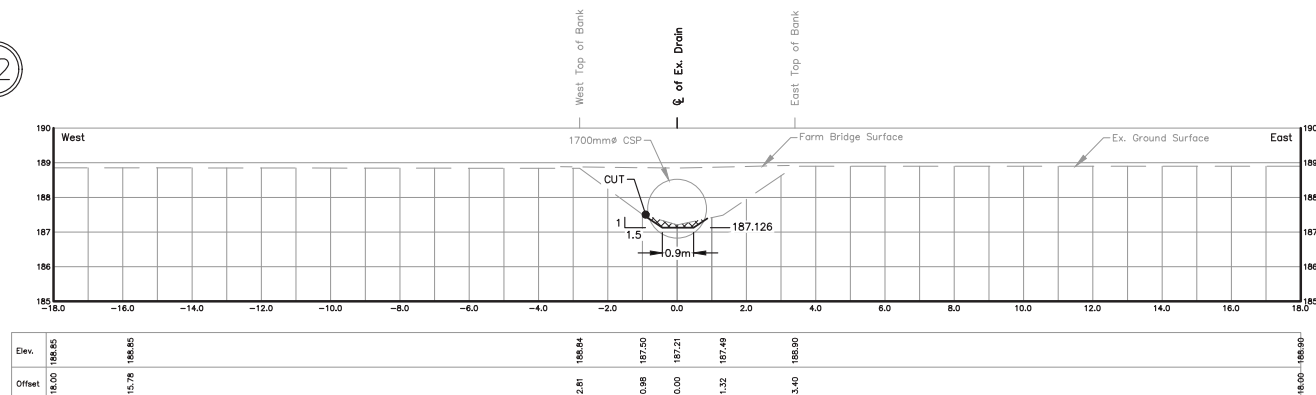
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11



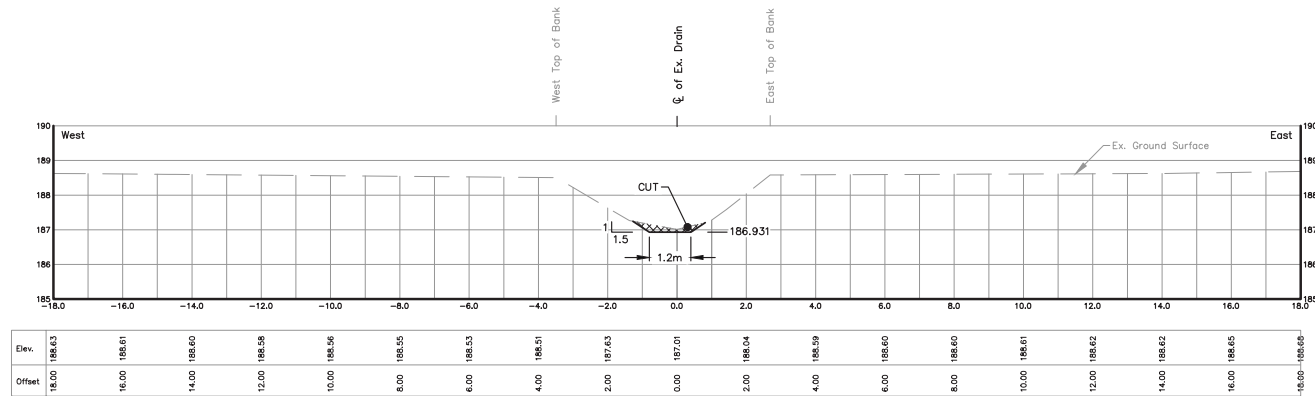
12



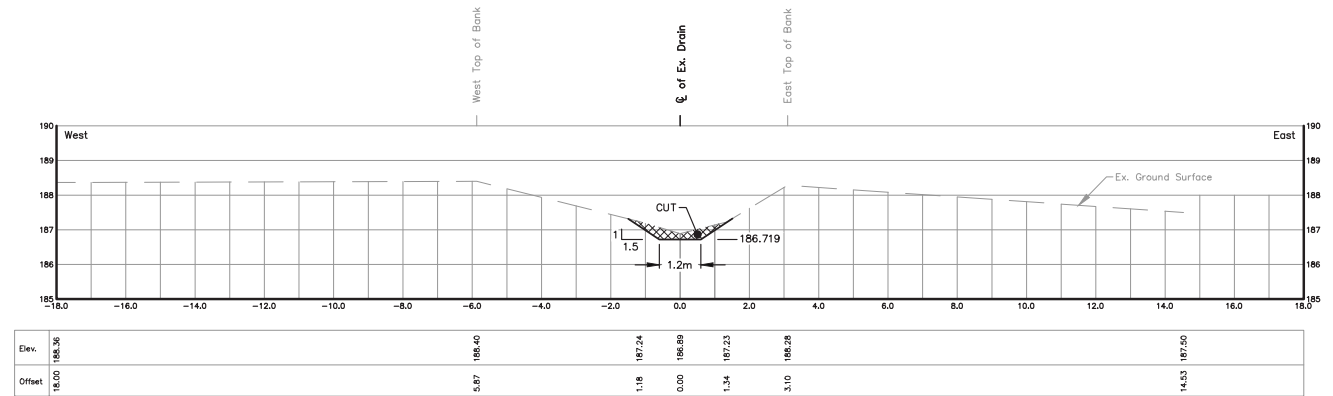
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 20 OF 51

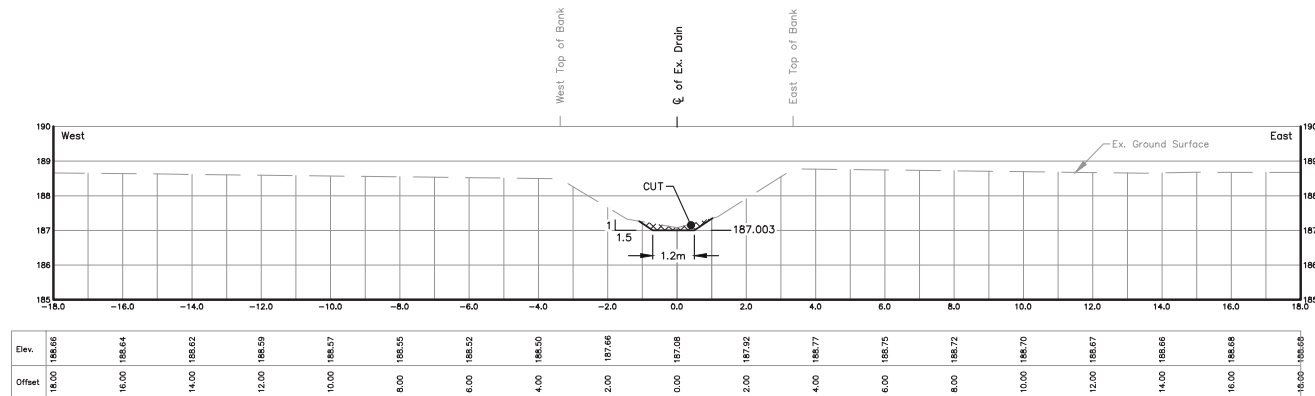
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections.dwg 2021-05-16



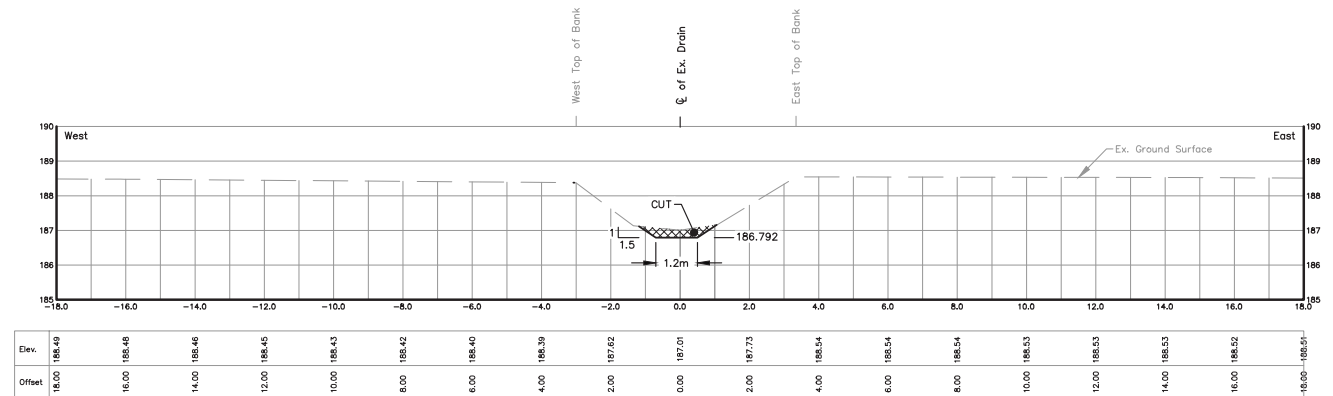
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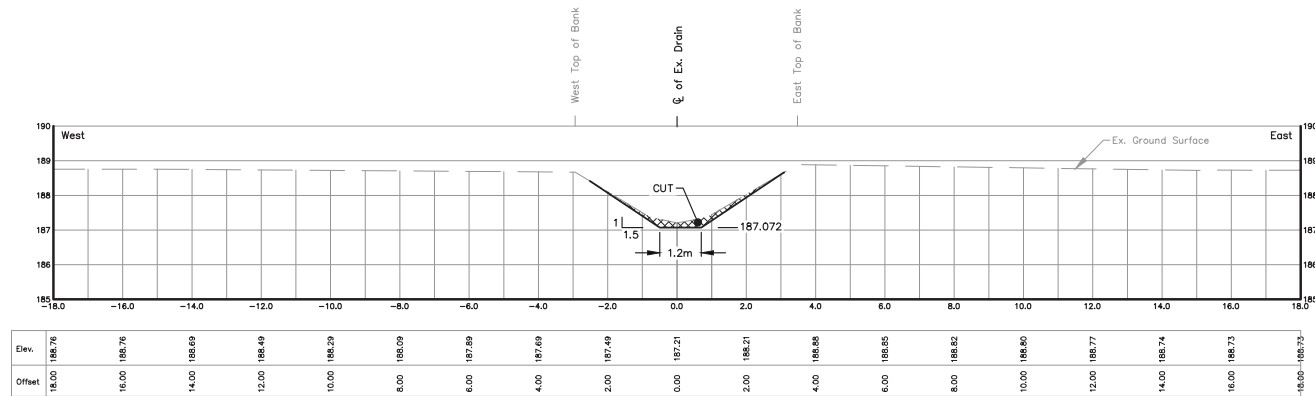
STA. 3+655.6
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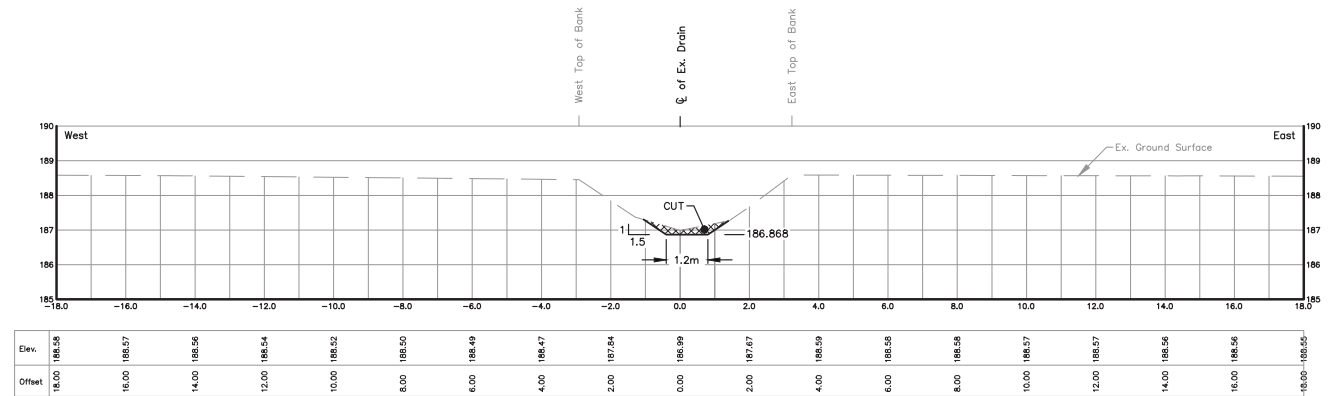
STA. 3+436.9
Scale = 1:100



STA. 3+599.6
Scale = 1:100



STA. 3+384.2
Scale = 1:100

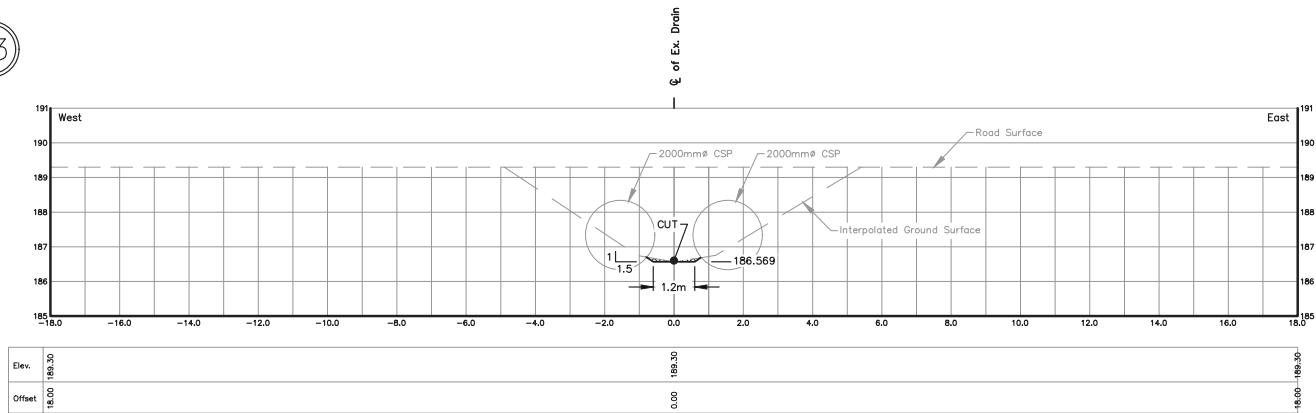


STA. 3+541.3
Scale = 1:100

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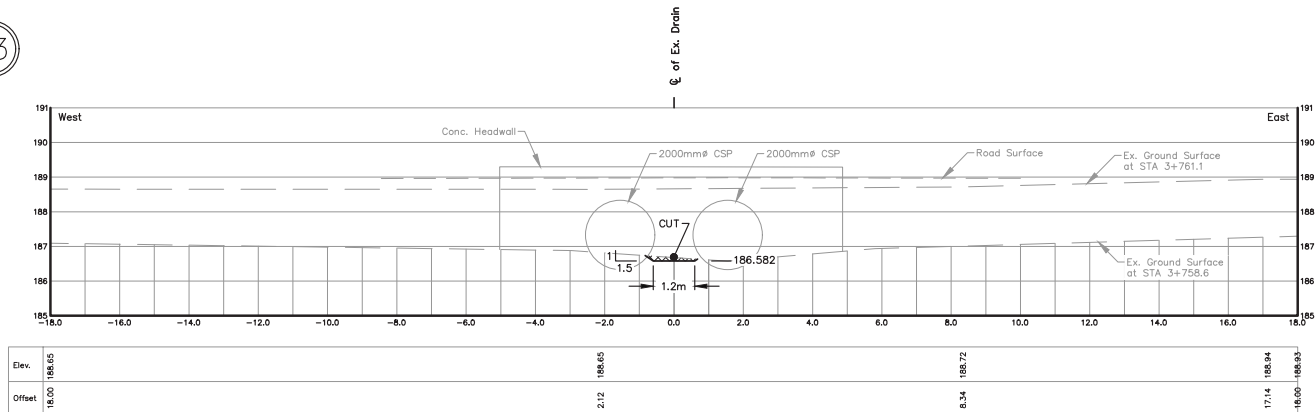
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
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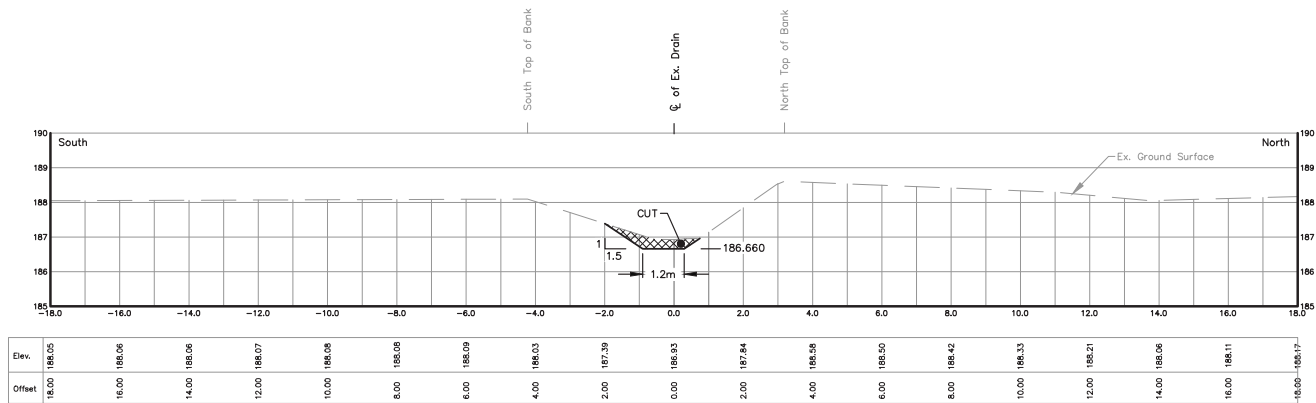


STA. 3+771.1
Scale = 1:100

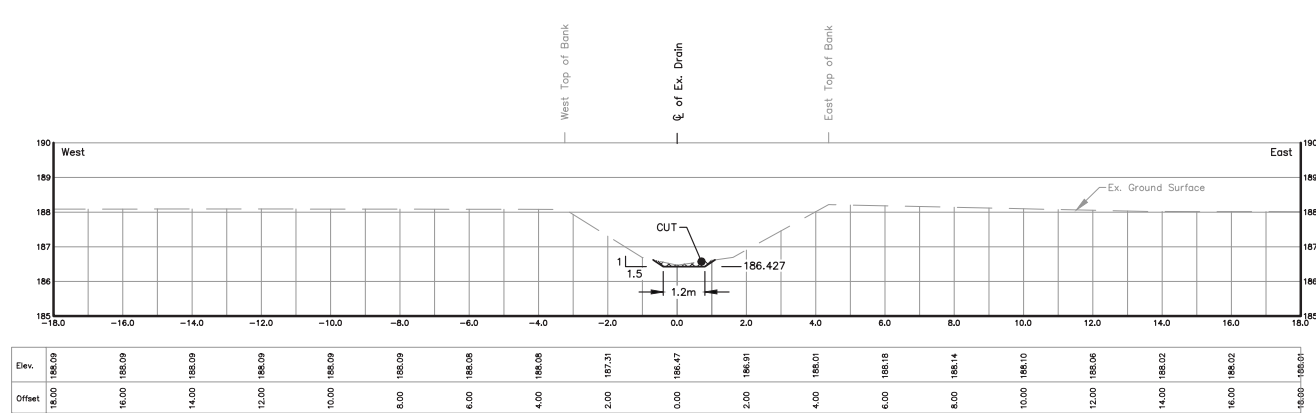
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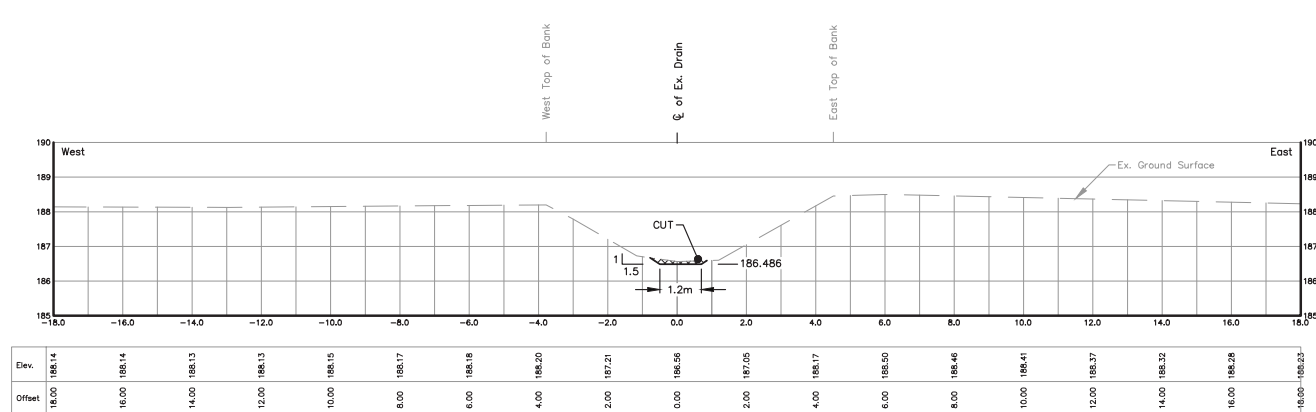
STA. 3+761.1
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STA. 3+700.8
Scale = 1:100

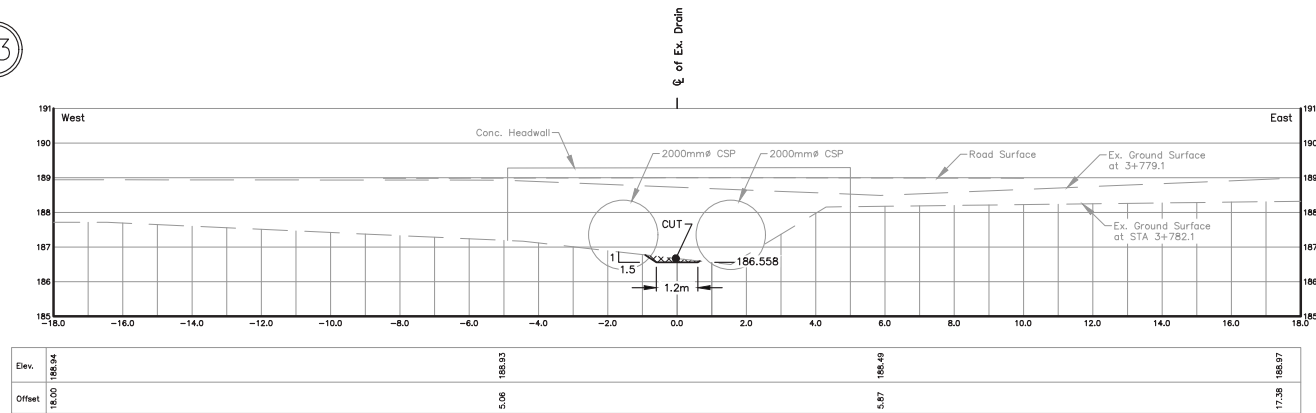


STA. 3+879.9
Scale = 1:100



STA. 3+835.2
Scale = 1:100

13

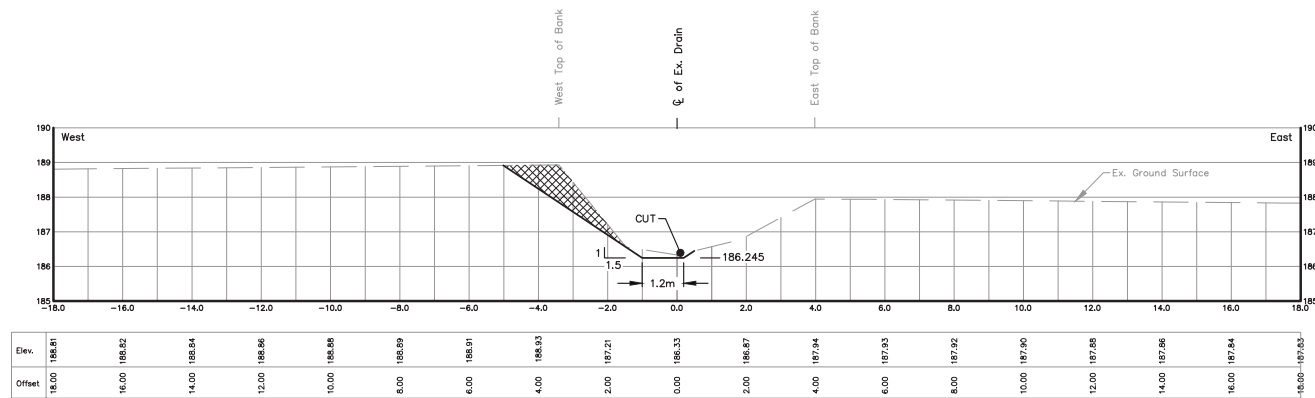


STA. 3+779.1
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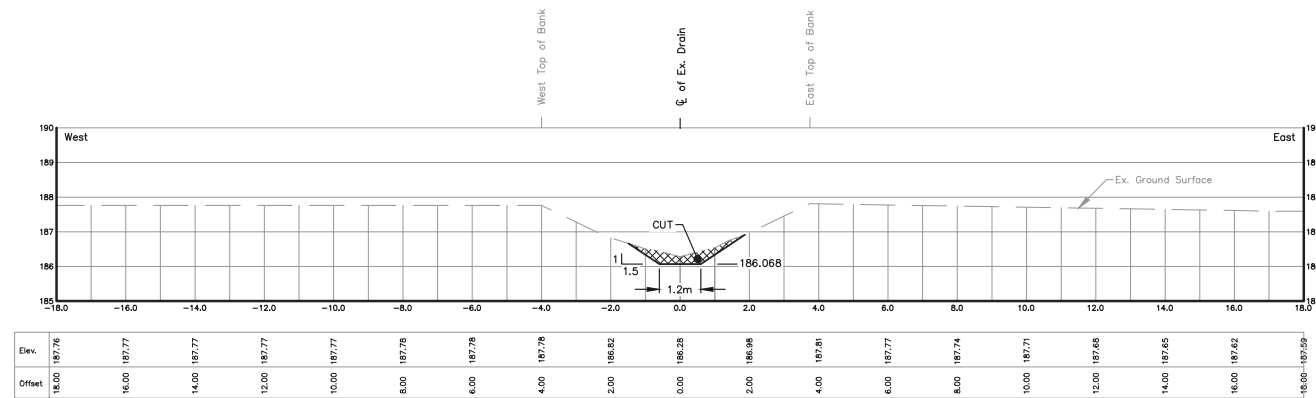
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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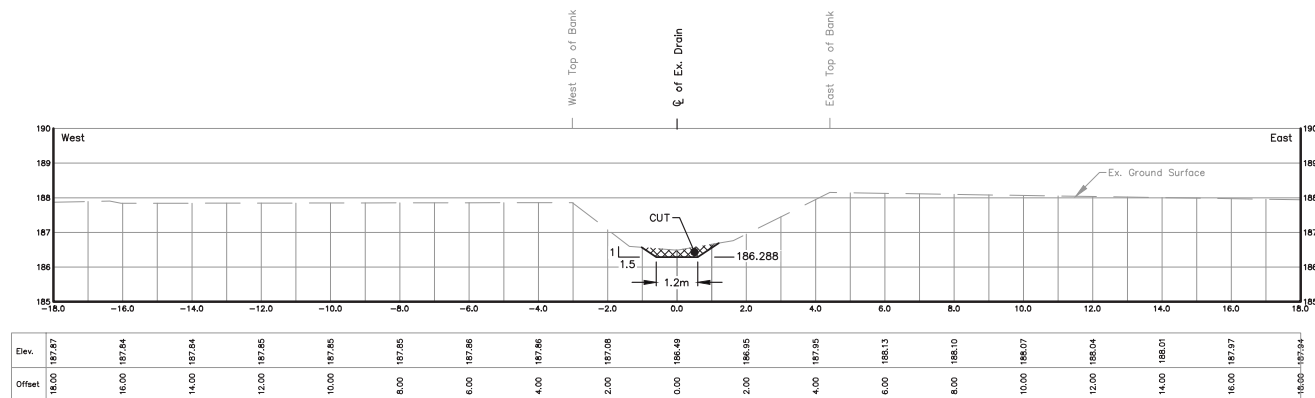
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections Aug 2021-05-16



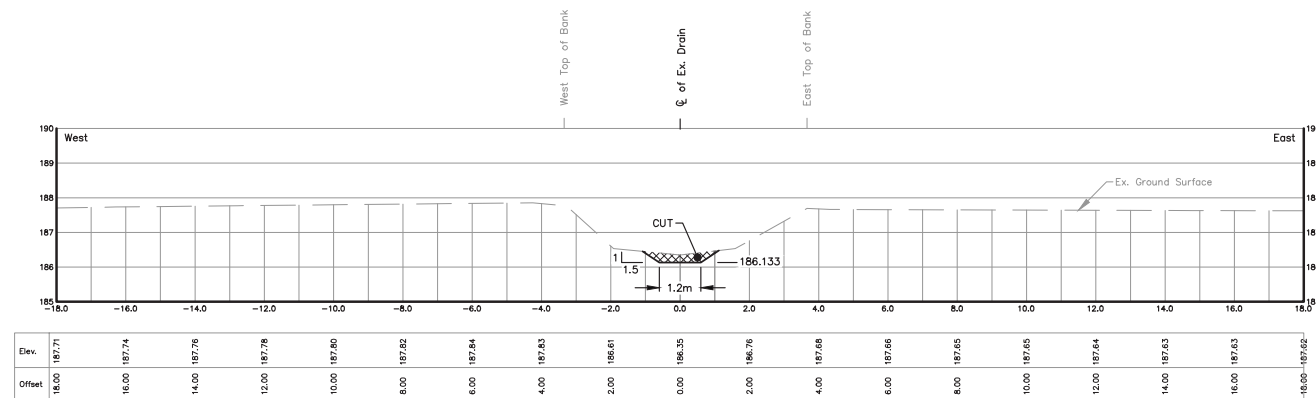
STA. 4+020.2
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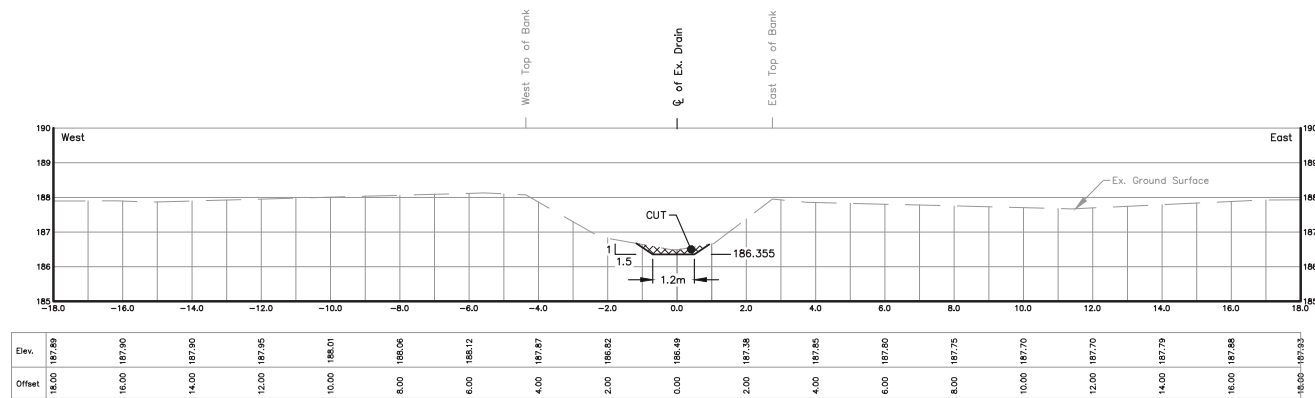
STA. 4+156.3
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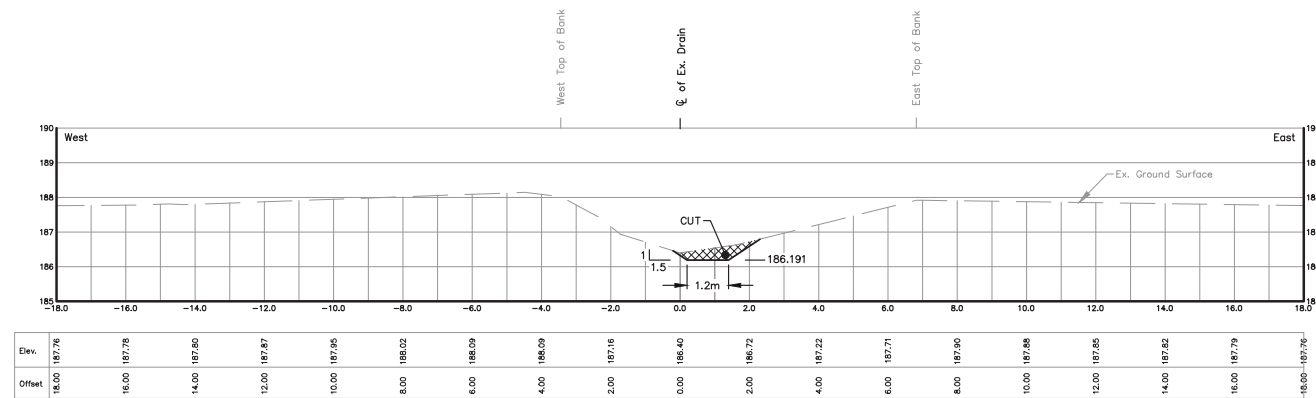
STA. 3+987.4
Scale = 1:100



STA. 4+106.0
Scale = 1:100



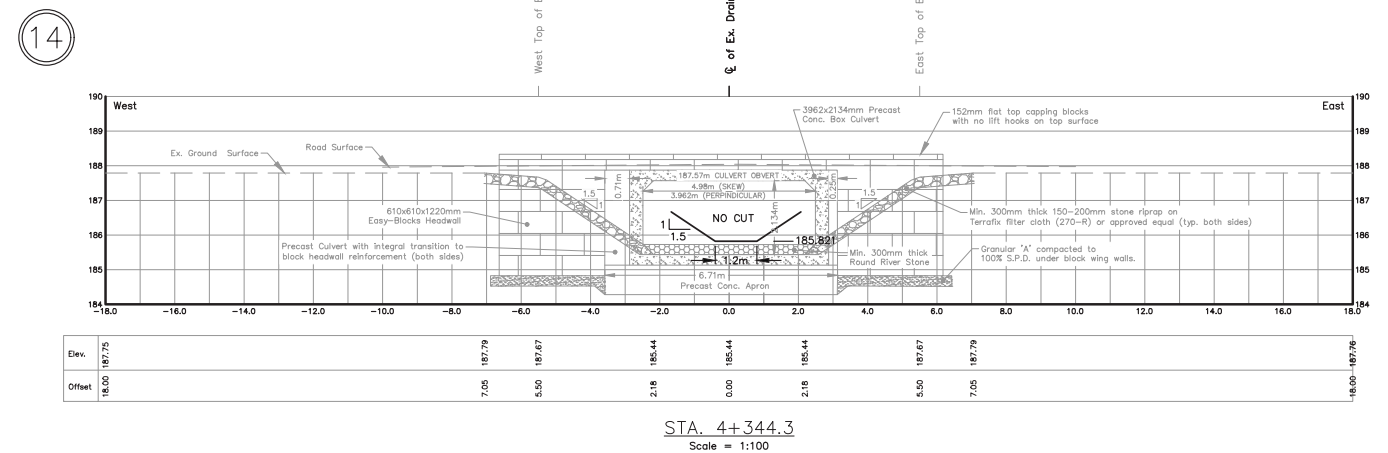
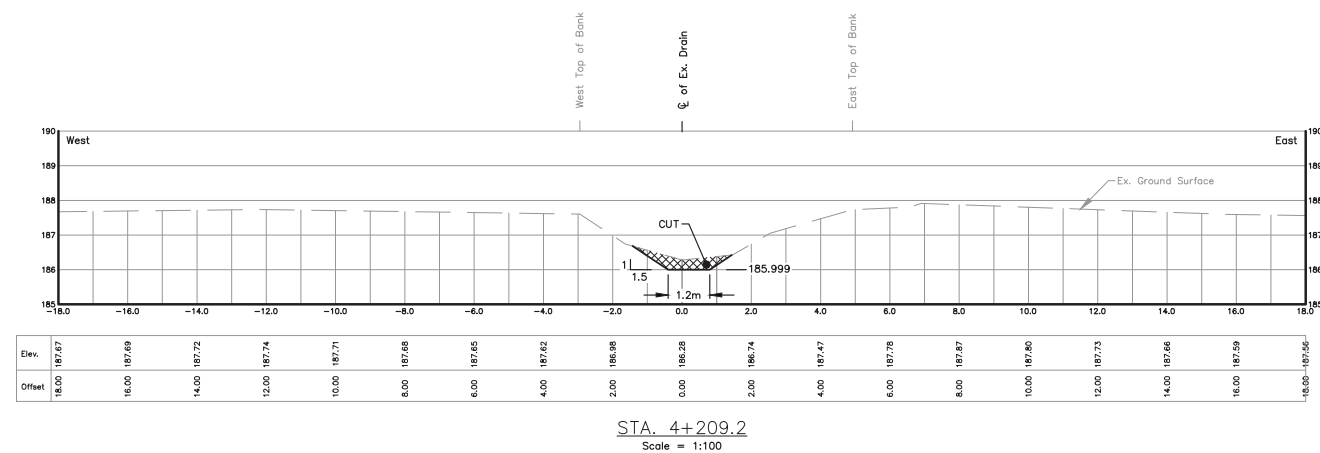
STA. 3+935.9
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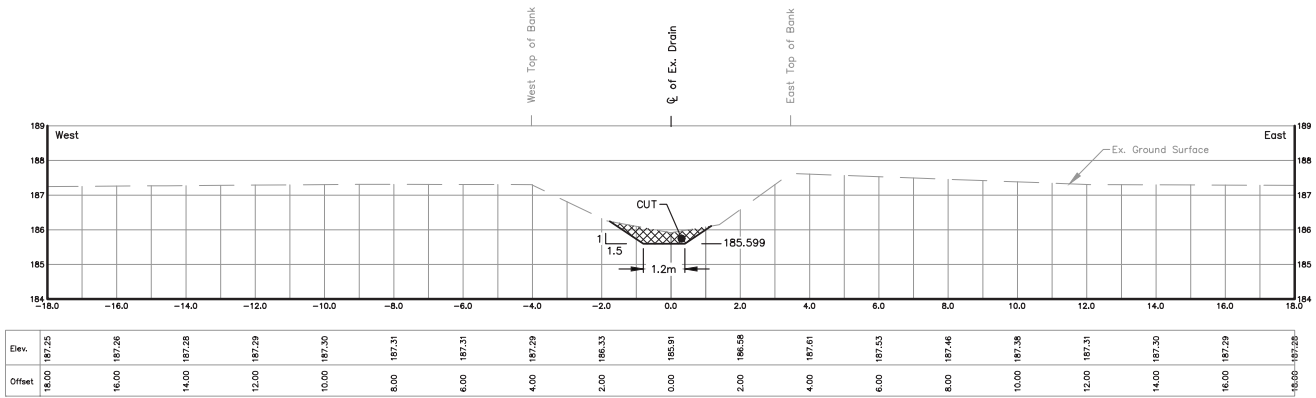
STA. 4+061.5
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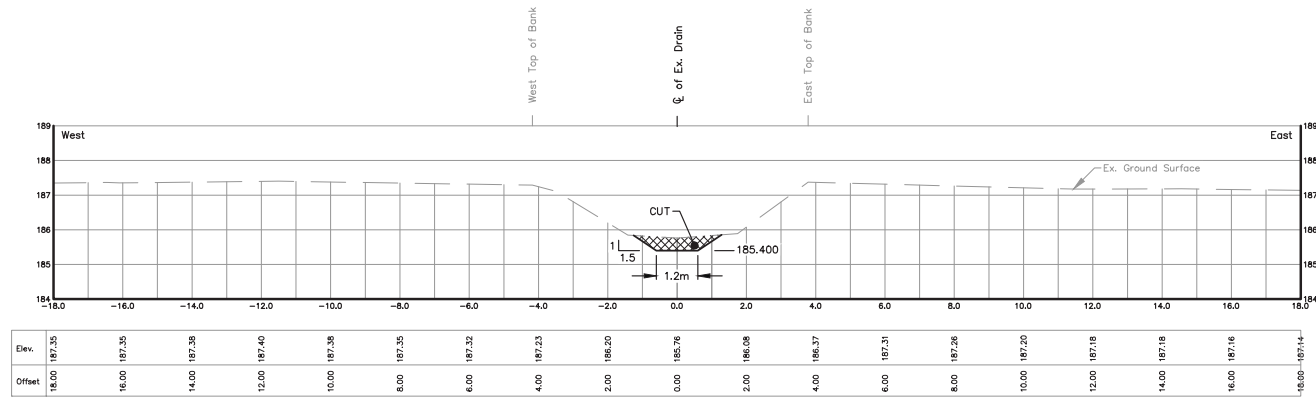
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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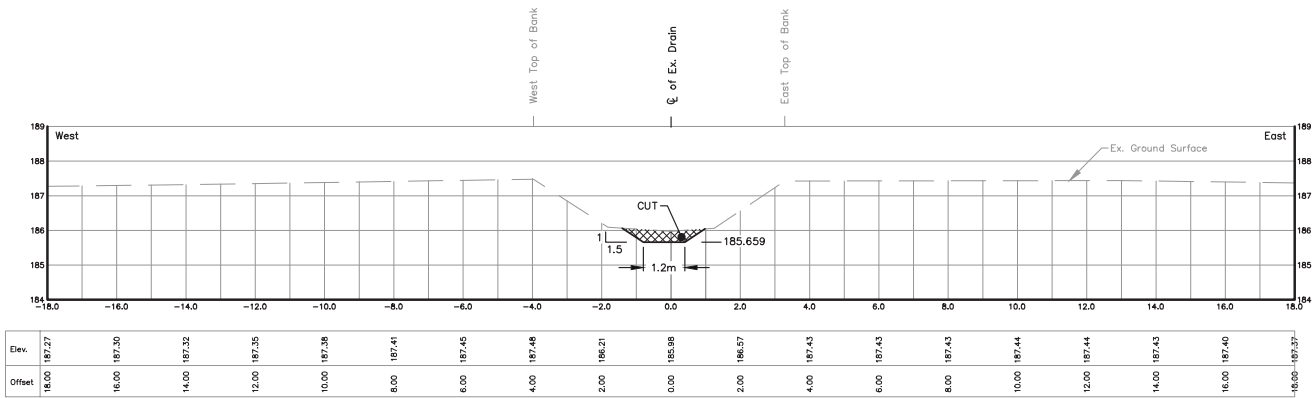
DRAWN BY: G.S. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REI2015D010.DWG	
FILE No.:	SHEET No.:
2015D010	24 OF 51



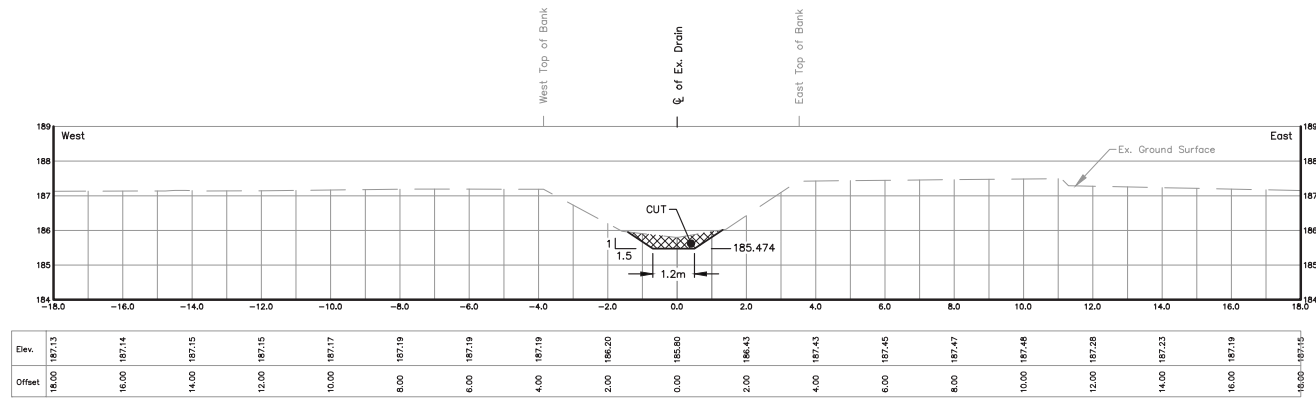
STA. 4+517.0
Scale = 1:100



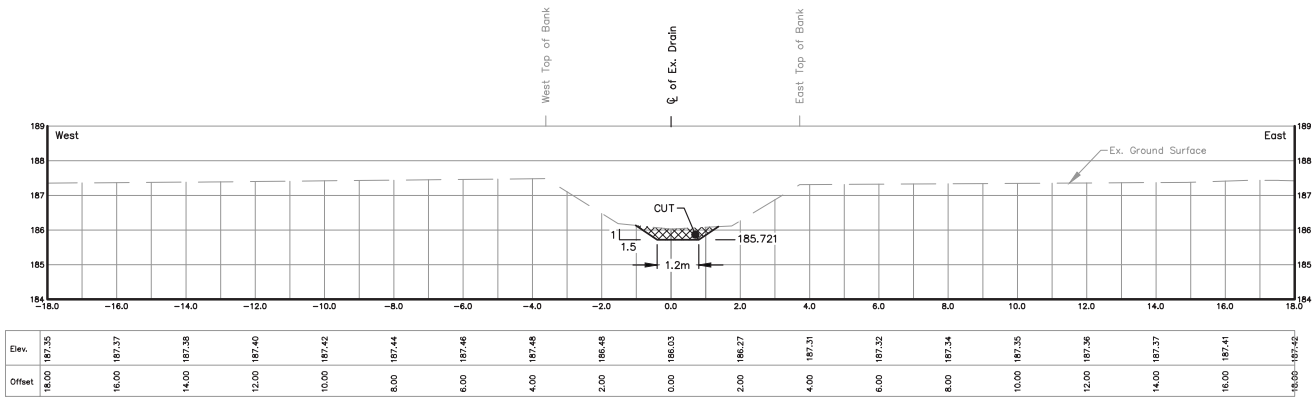
STA. 4+669.7
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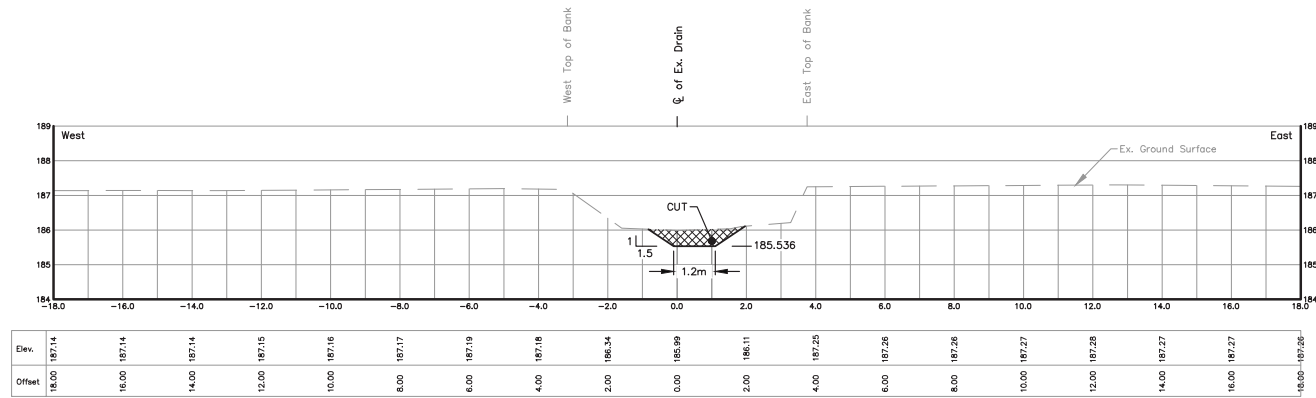
STA. 4+470.8
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STA. 4+612.7
Scale = 1:100



STA. 4+423.0
Scale = 1:100



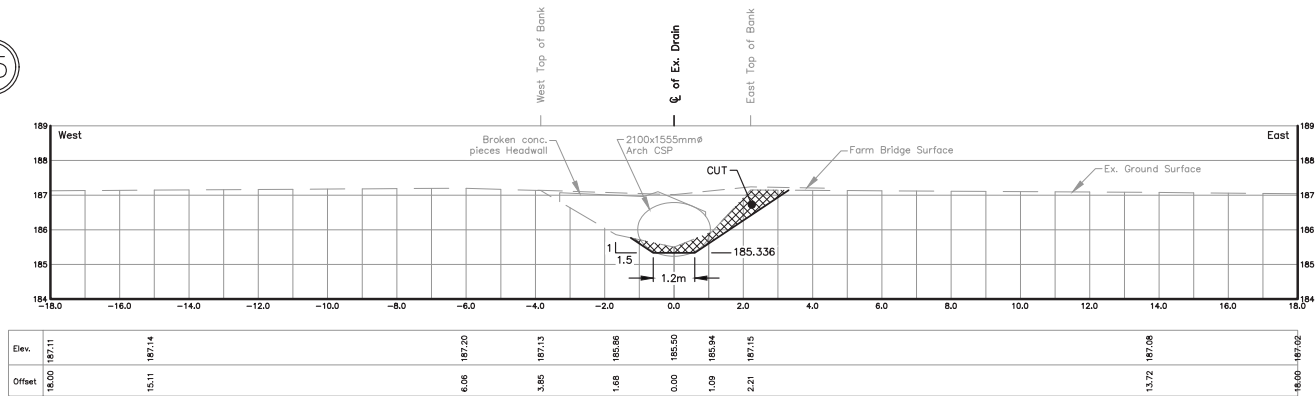
STA. 4+565.3
Scale = 1:100

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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG

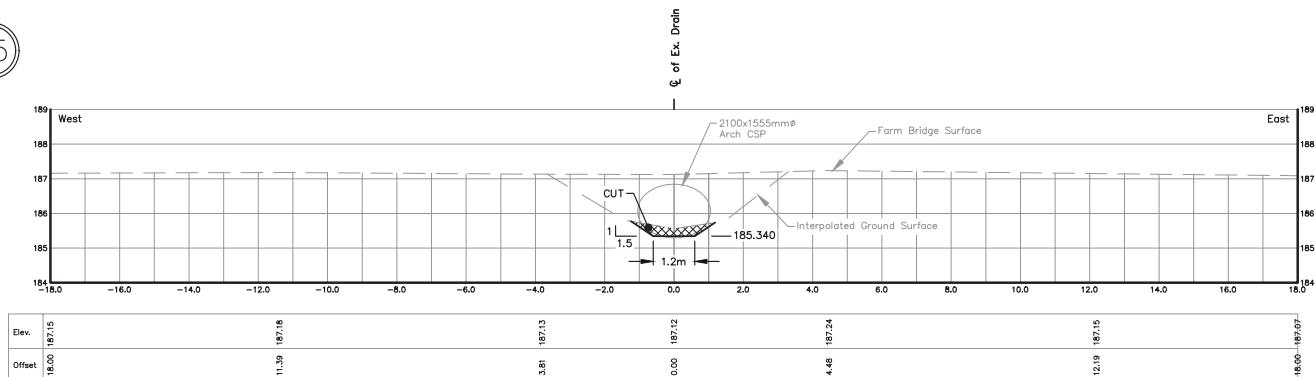
FILE No.: SHEET No.:
2015D010 25 OF 51

15



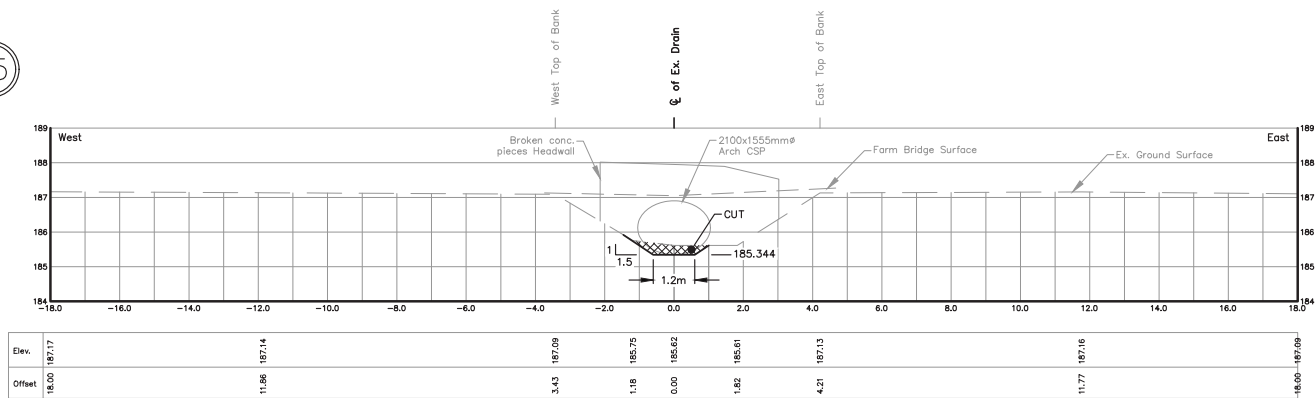
STA. 4+718.9
Scale = 1:100

15

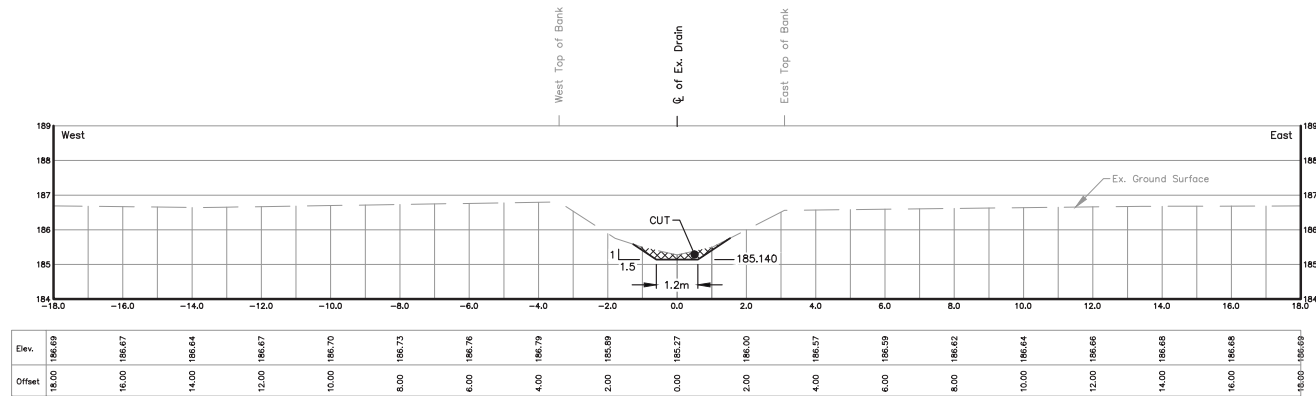


STA. 4+715.9
Scale = 1:100

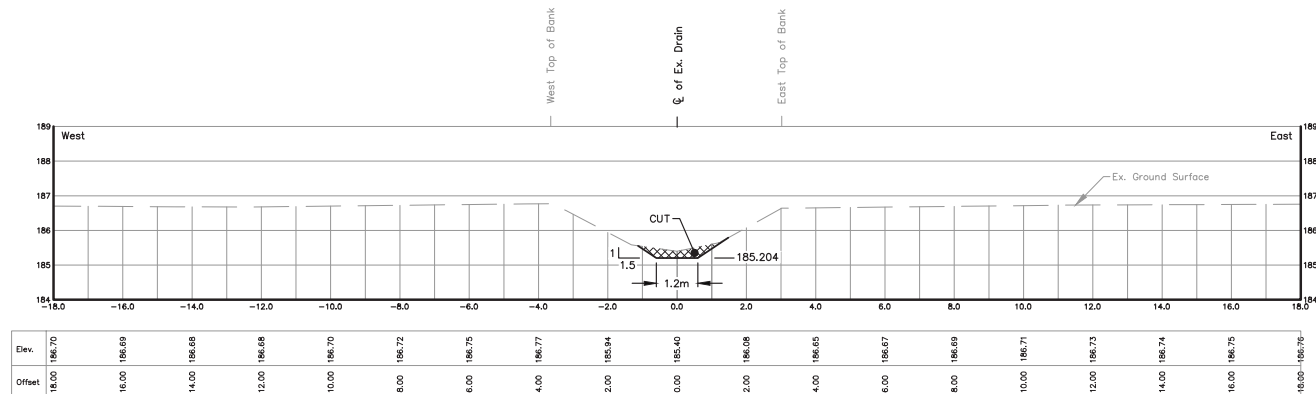
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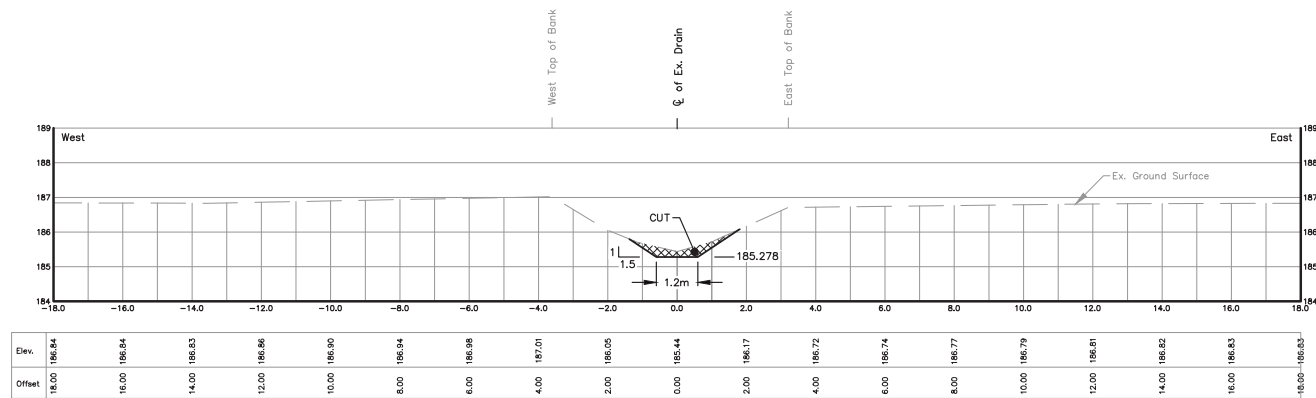
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STA. 4+869.6
Scale = 1:100



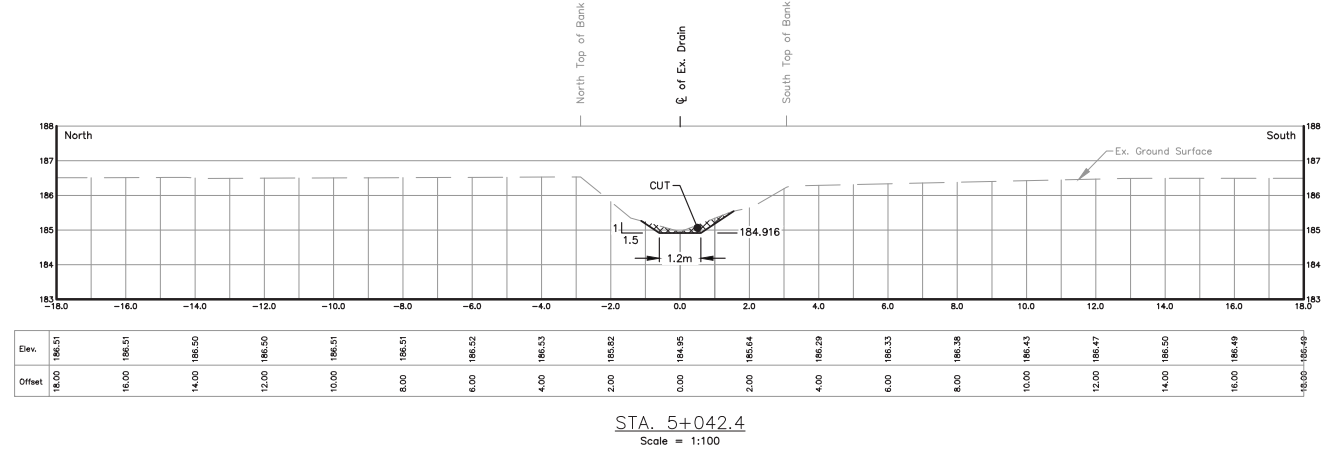
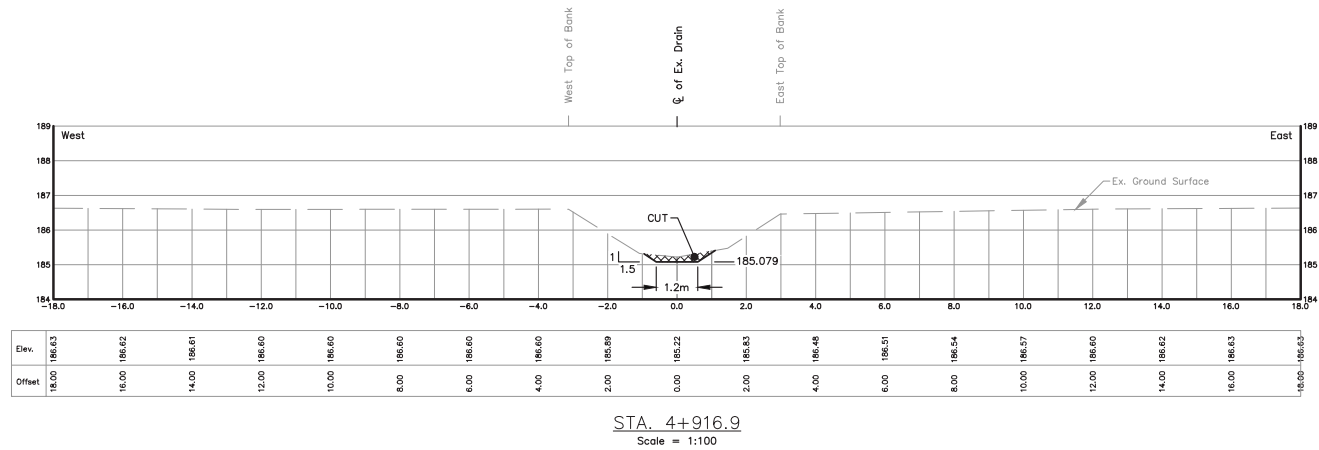
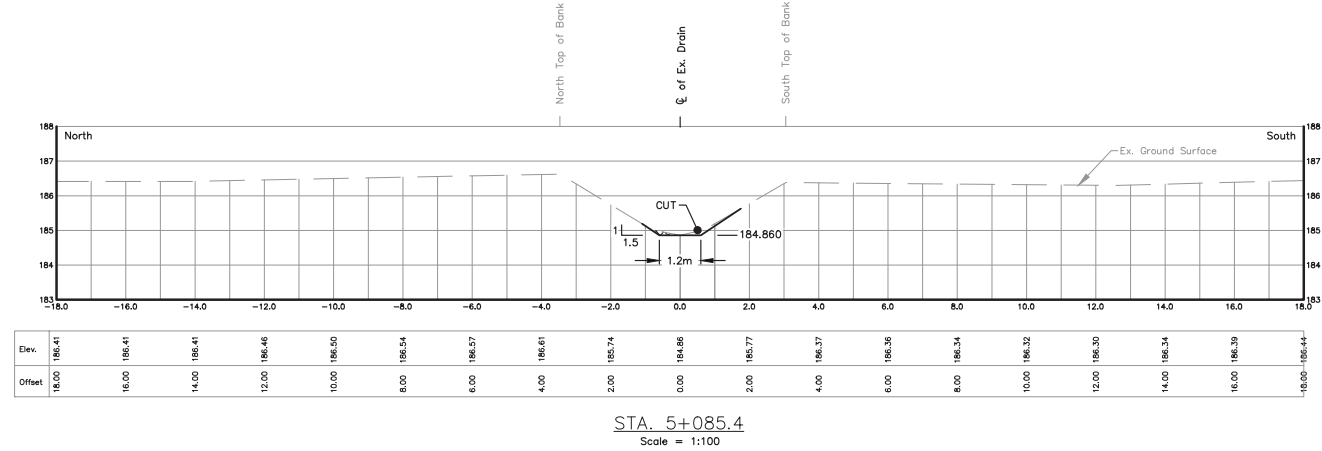
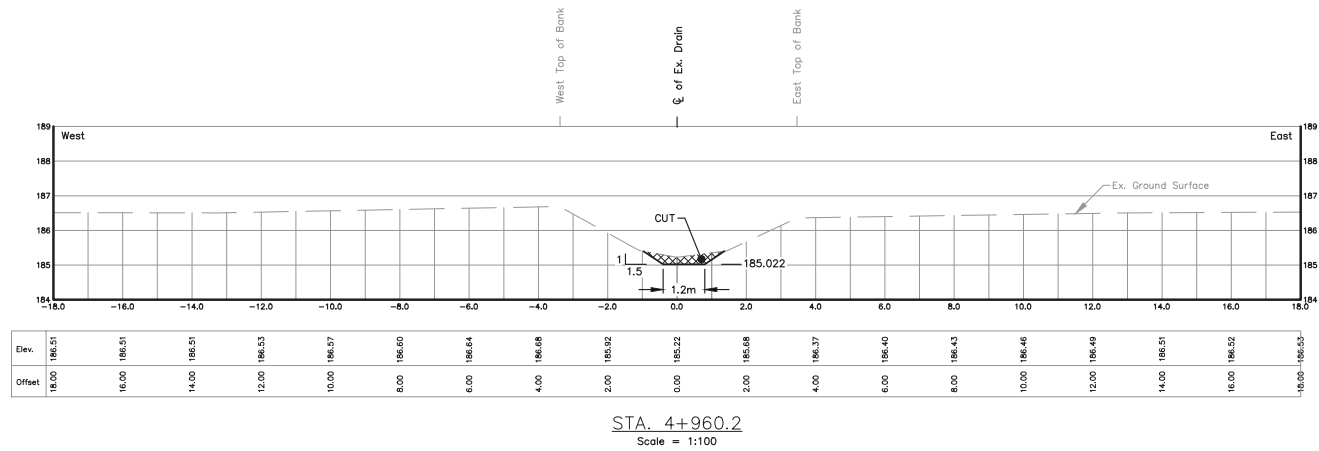
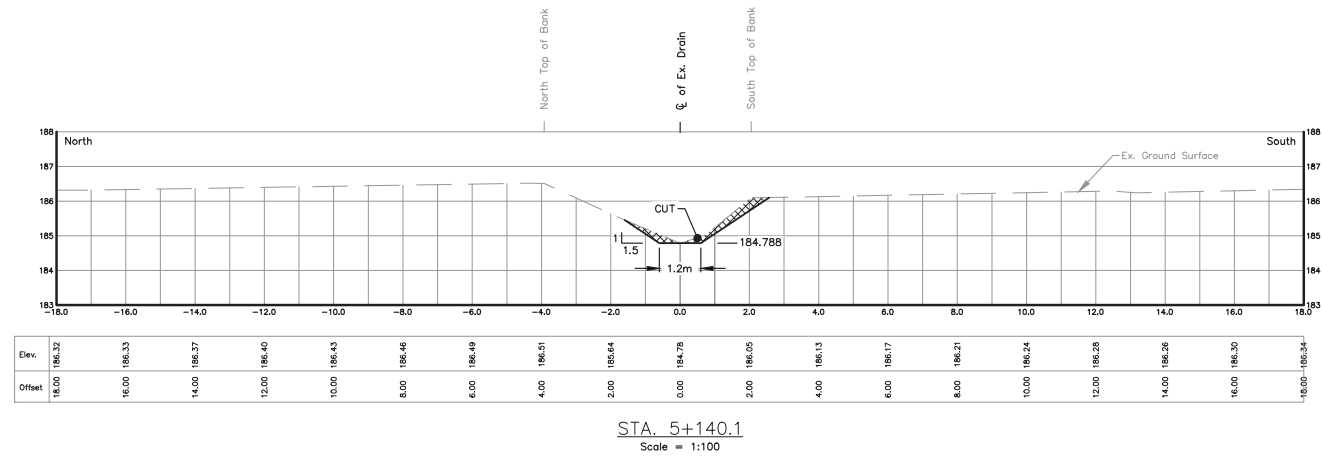
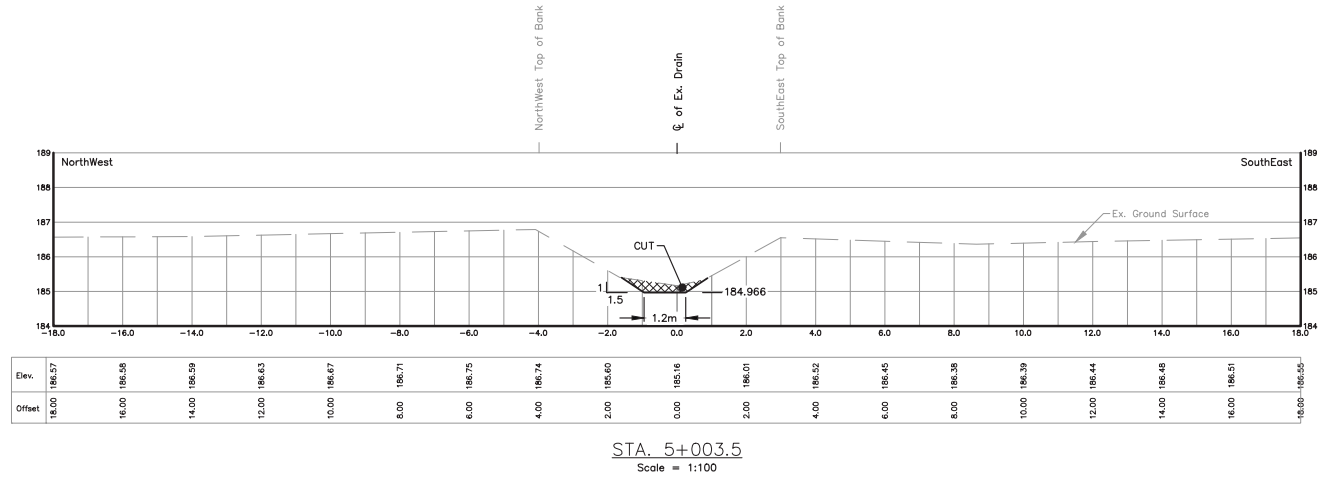
STA. 4+820.3
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STA. 4+763.8
Scale = 1:100

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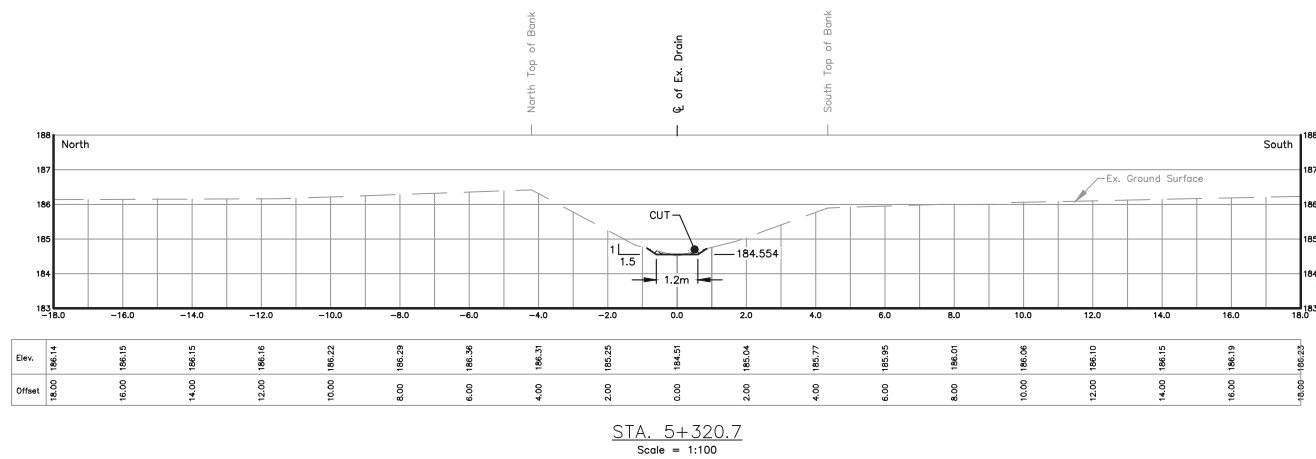
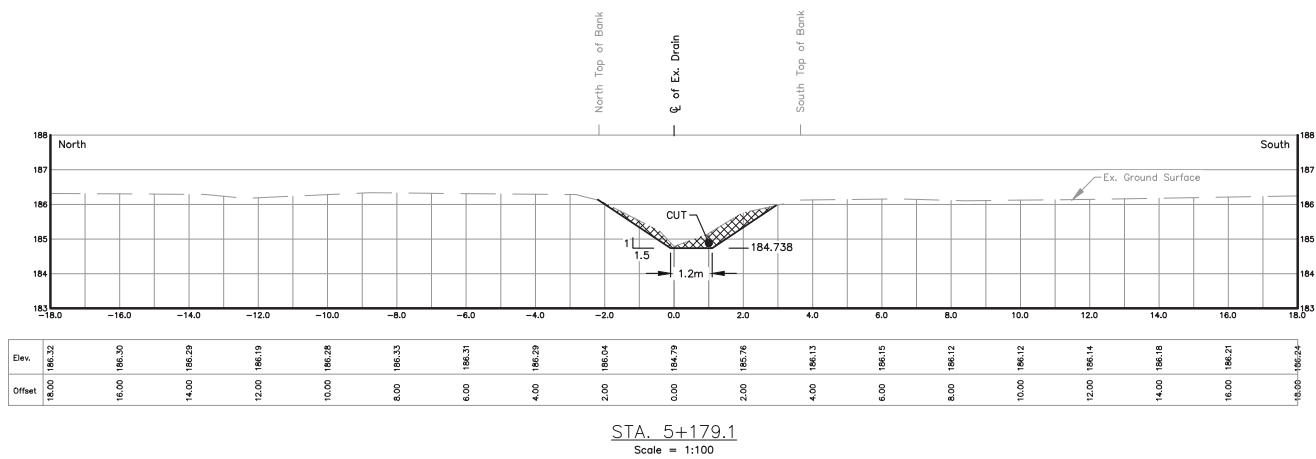
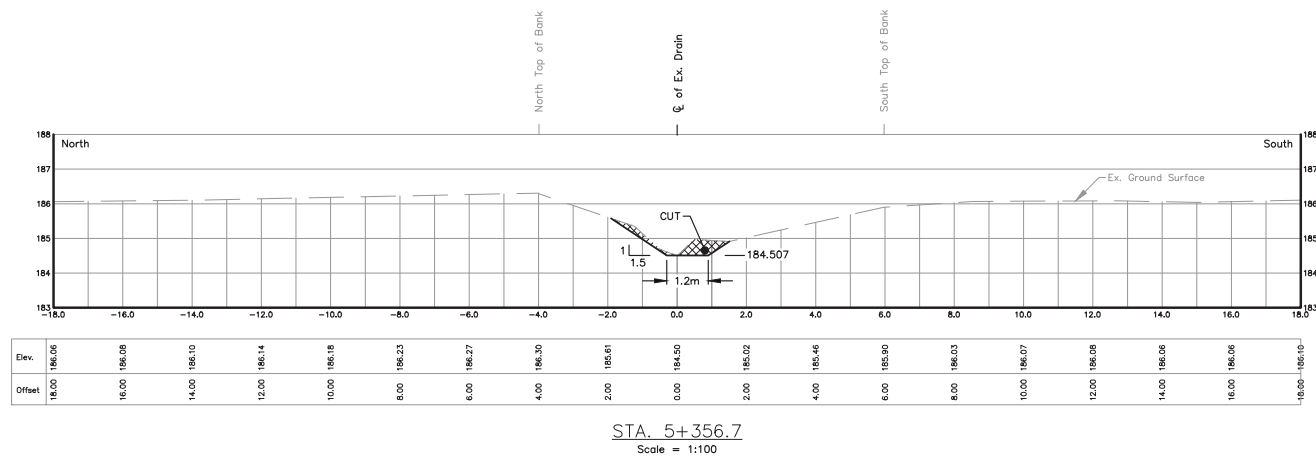
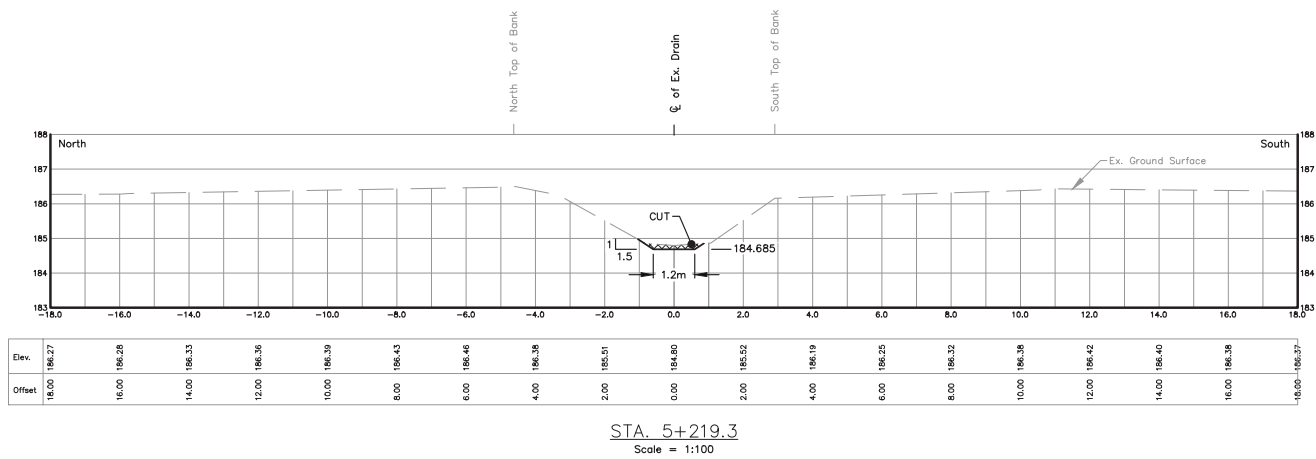
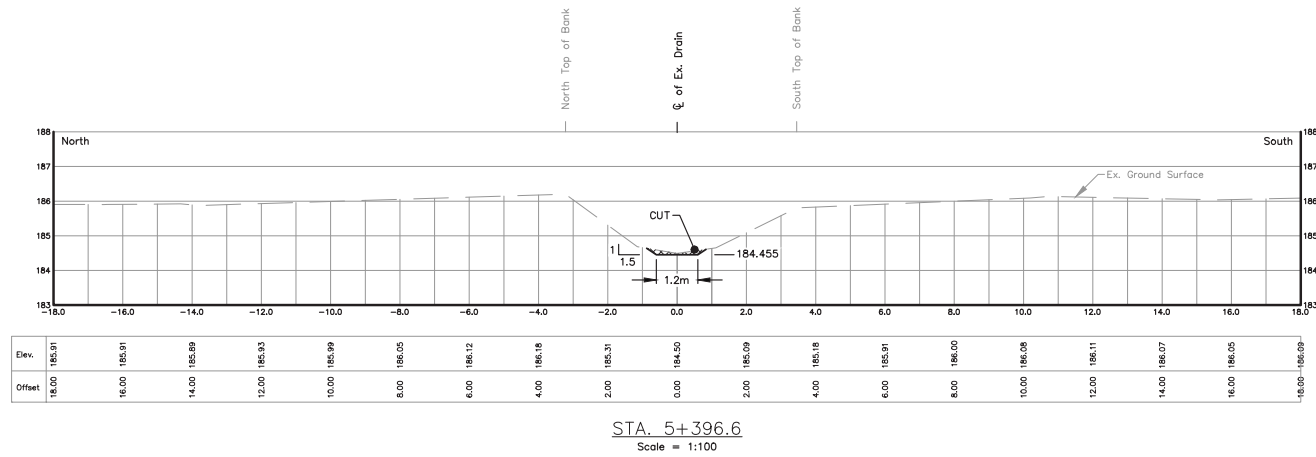
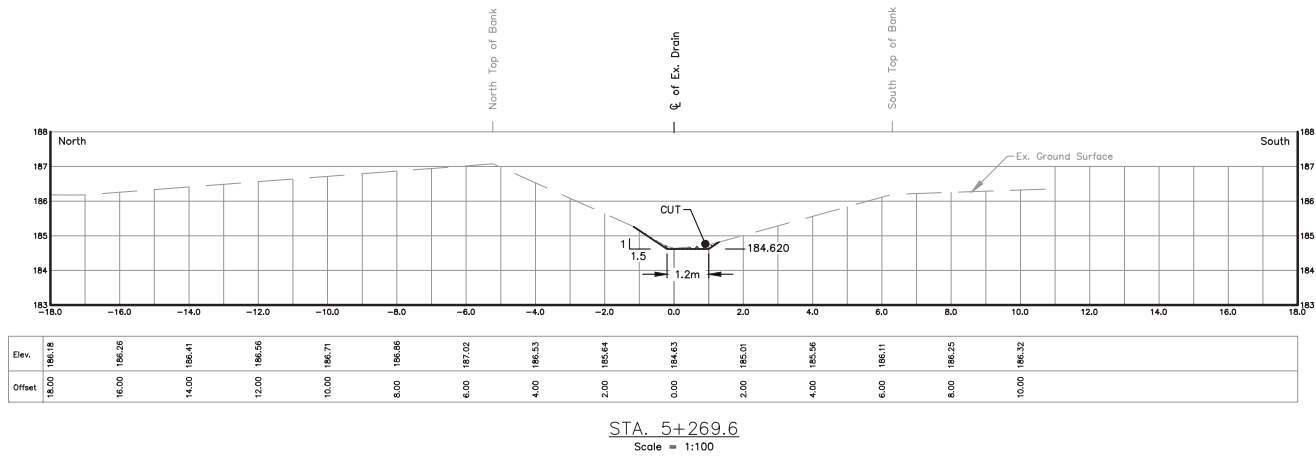
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 26 OF 51



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DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 27 OF 51

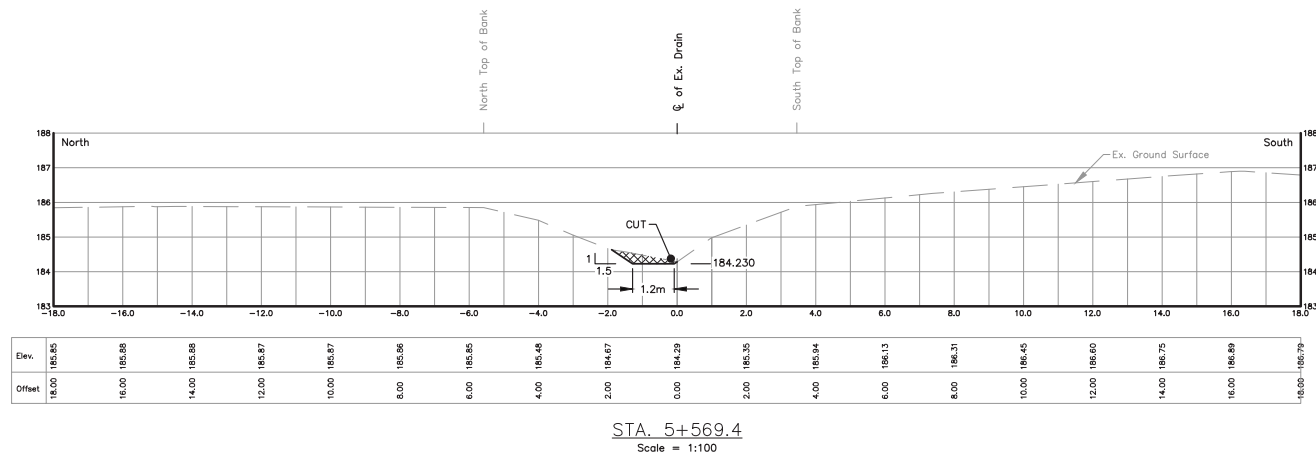
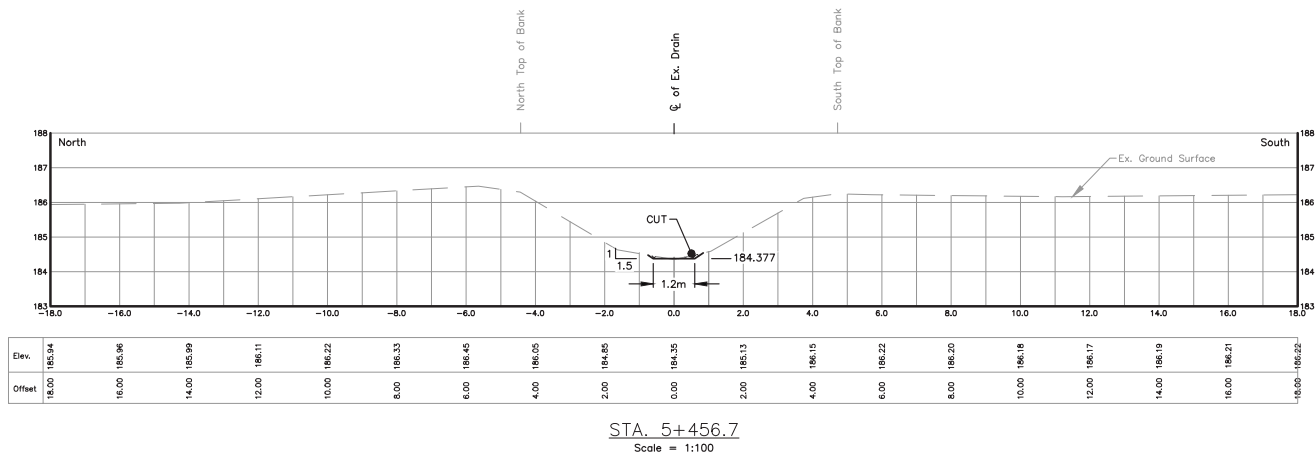
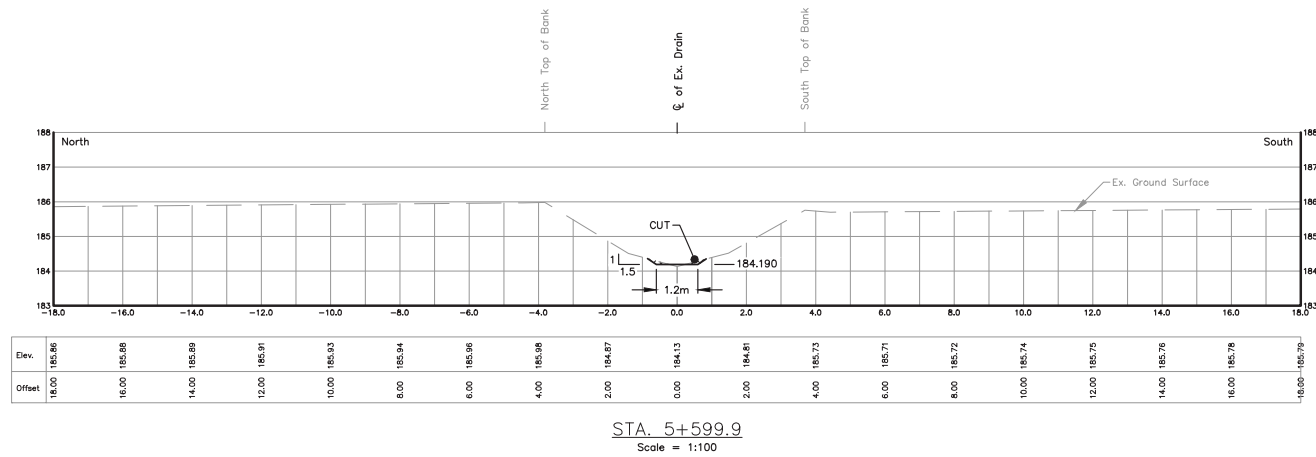
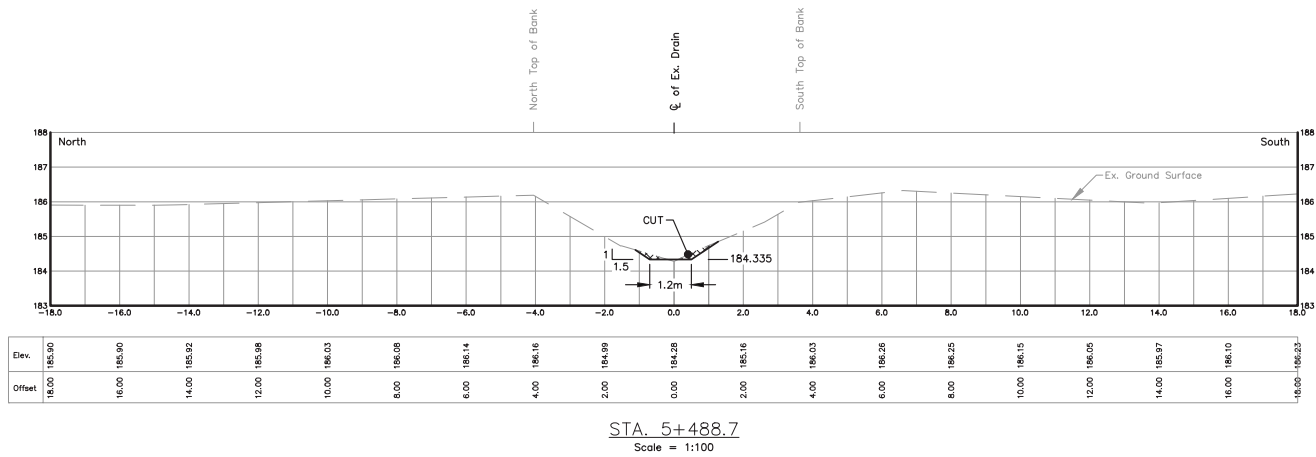
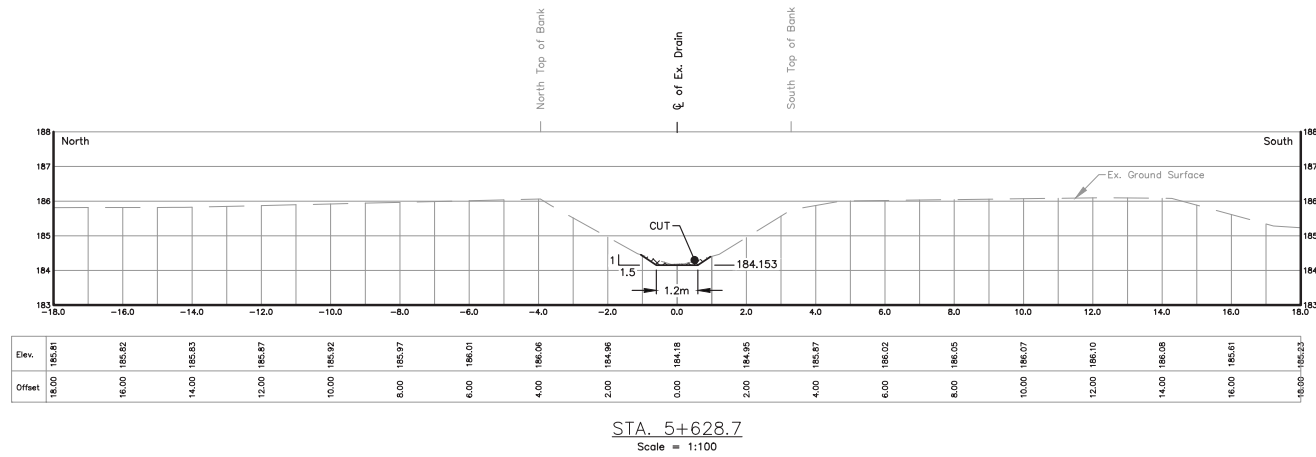
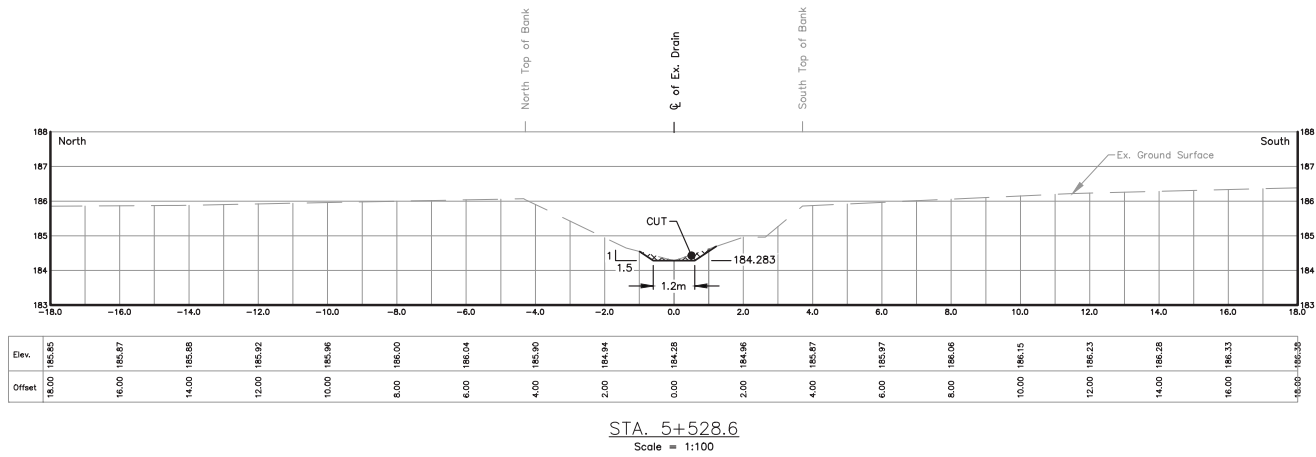
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections Blng 2021-05-16



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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
SHEET No.: 28 OF 51

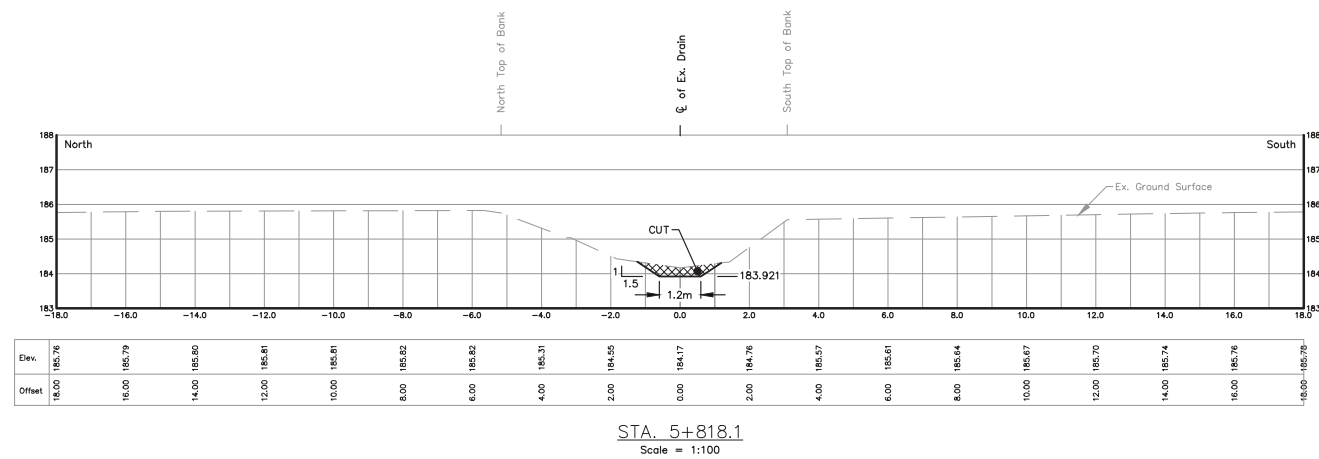
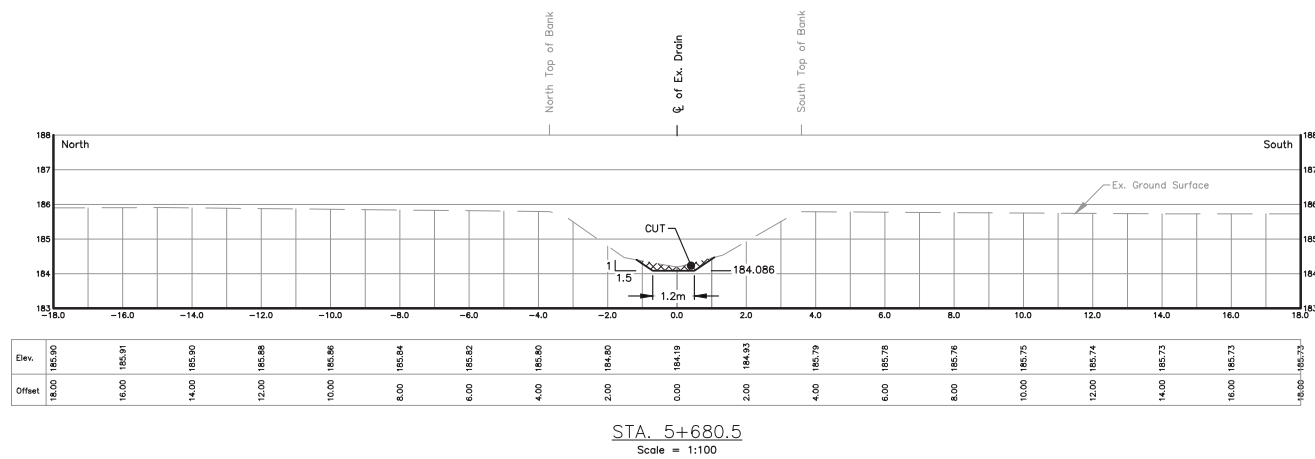
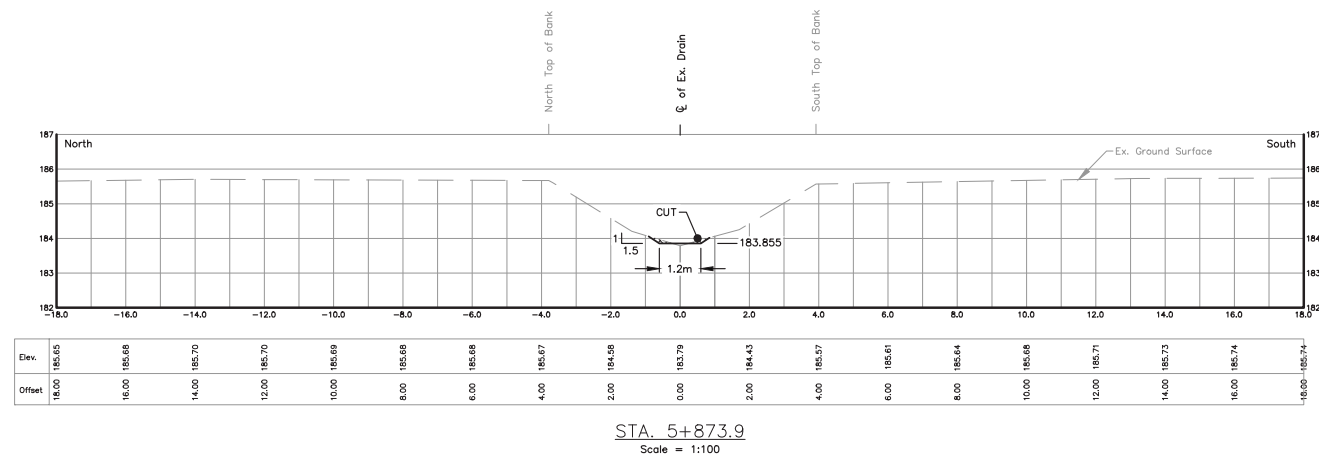
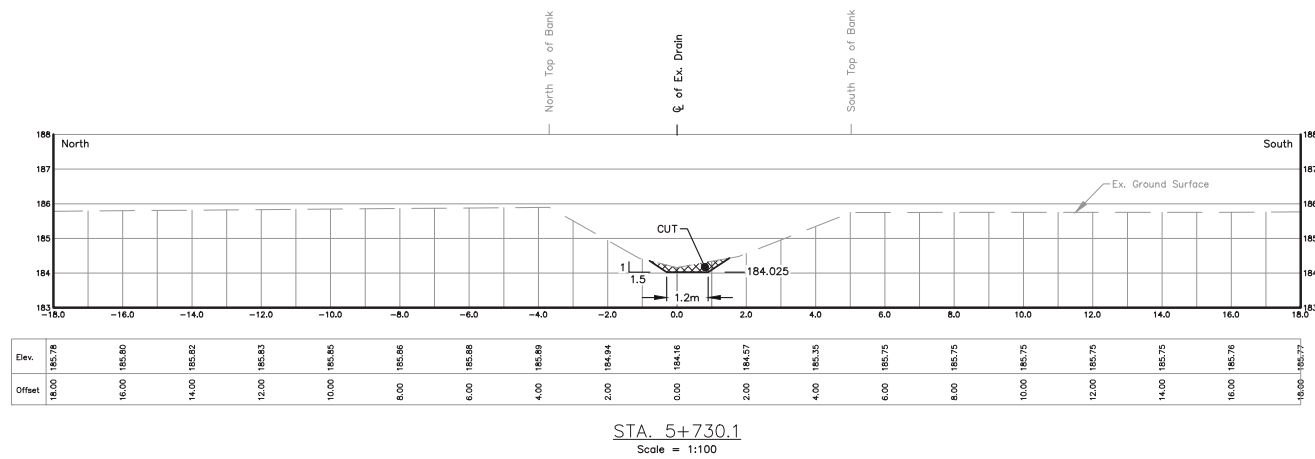
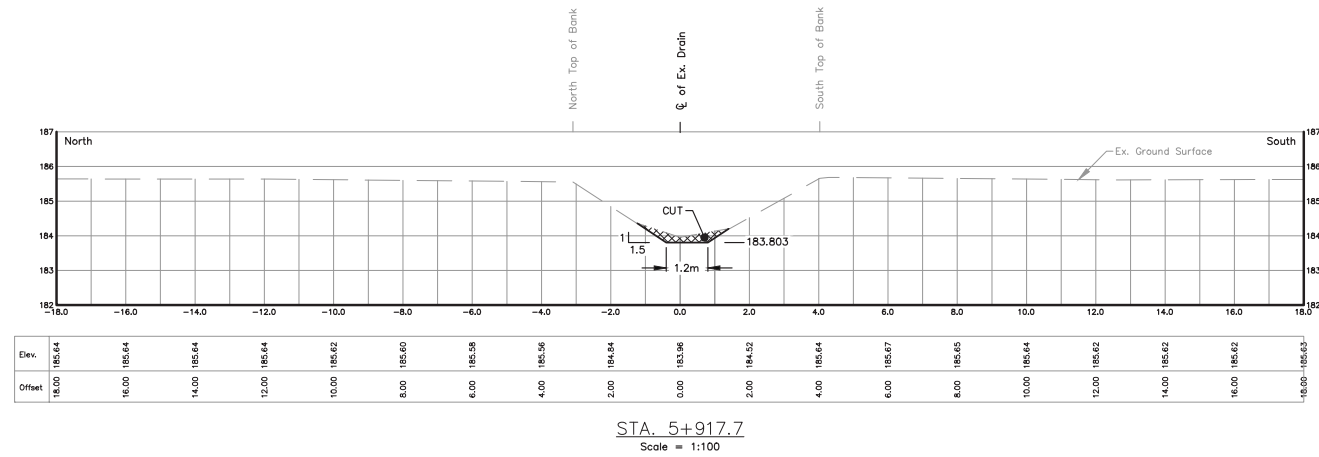
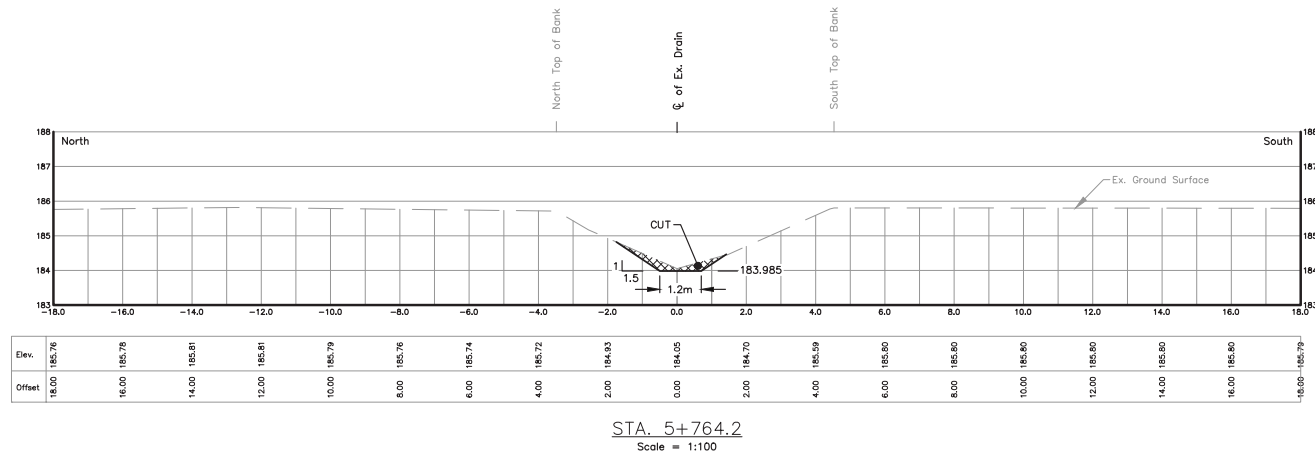
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections B.dwg 2/21/15 1:16



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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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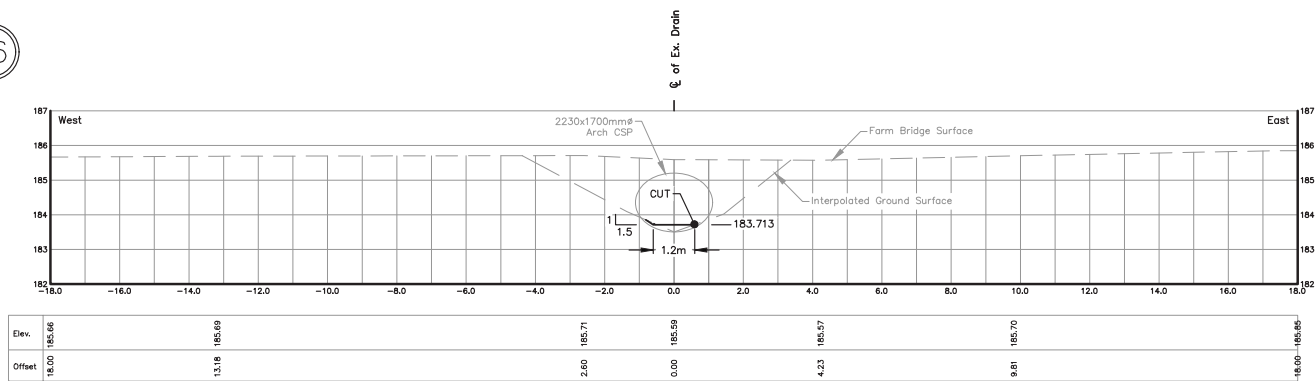
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections\Blang 2021-105-16



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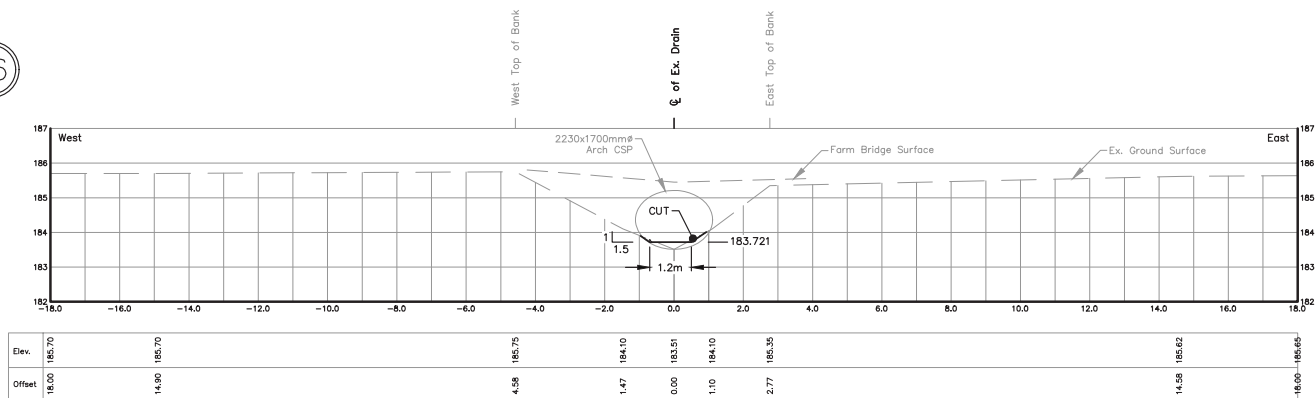
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 30 OF 51

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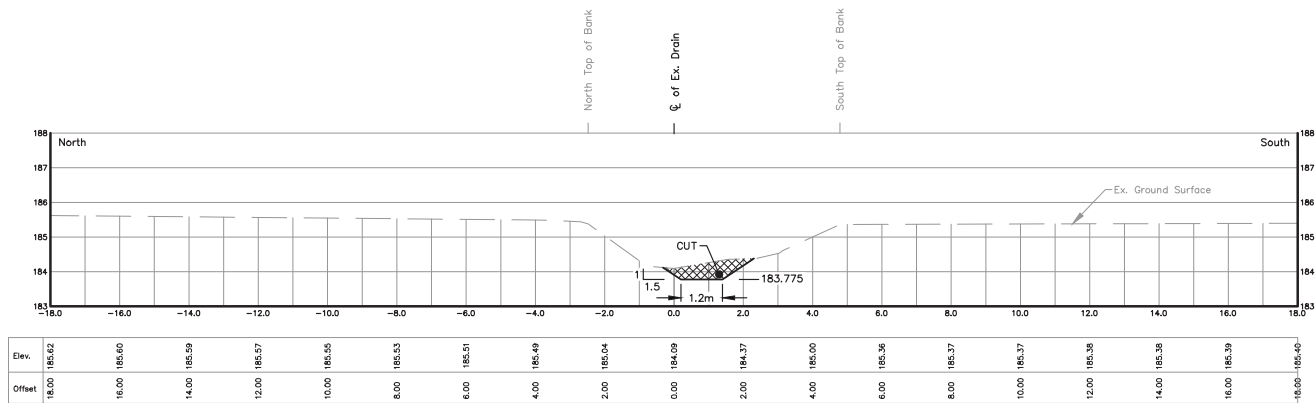


STA. 5+994.0
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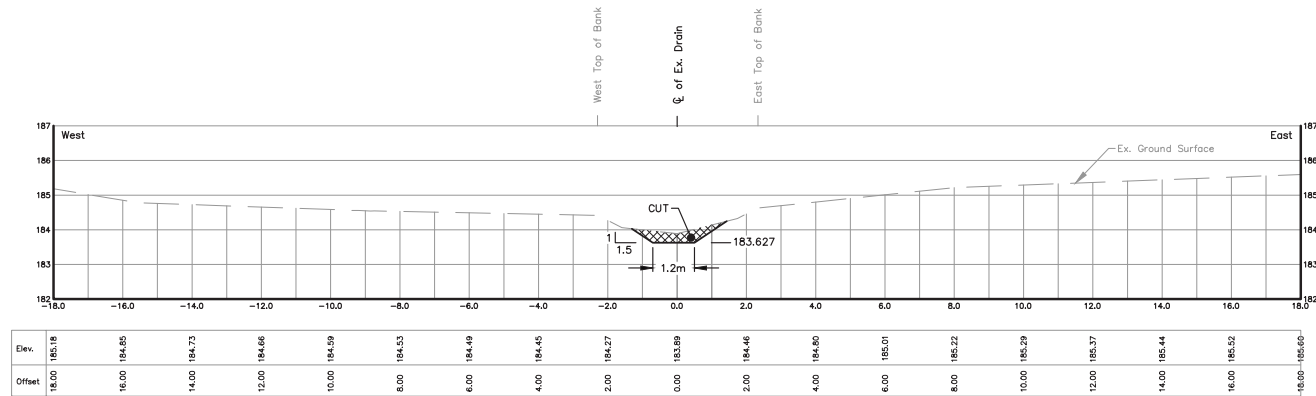
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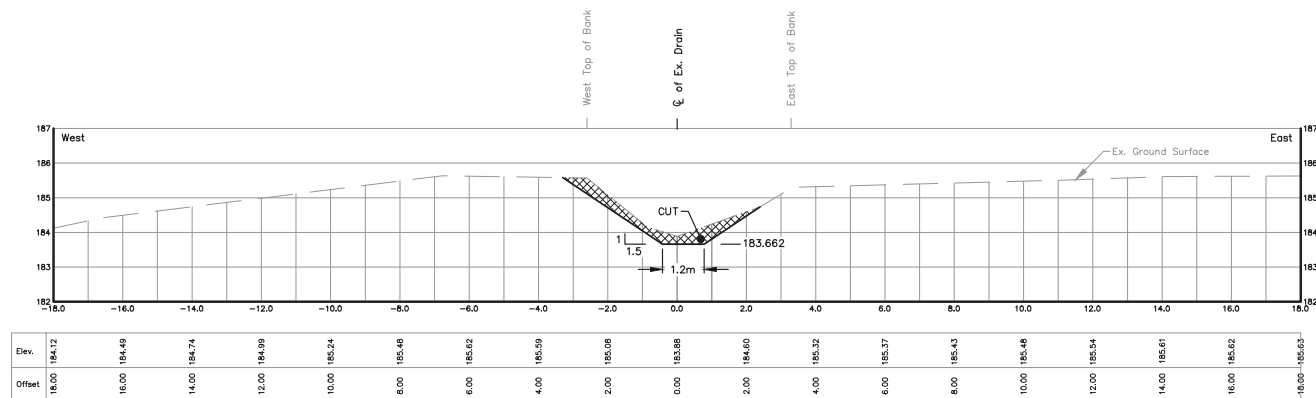
STA. 5+987.4
Scale = 1:100



STA. 5+941.9
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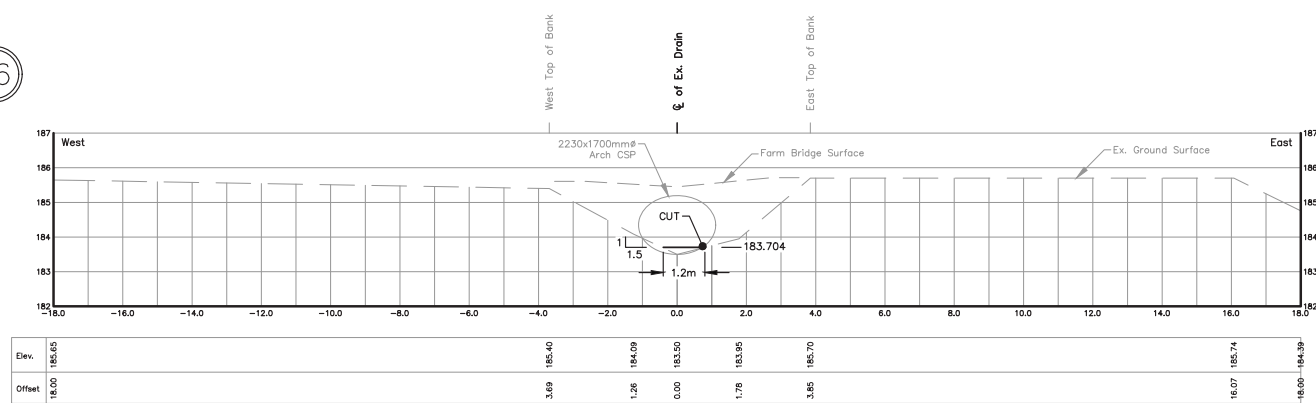


STA. 6+066.6
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STA. 6+037.4
Scale = 1:100

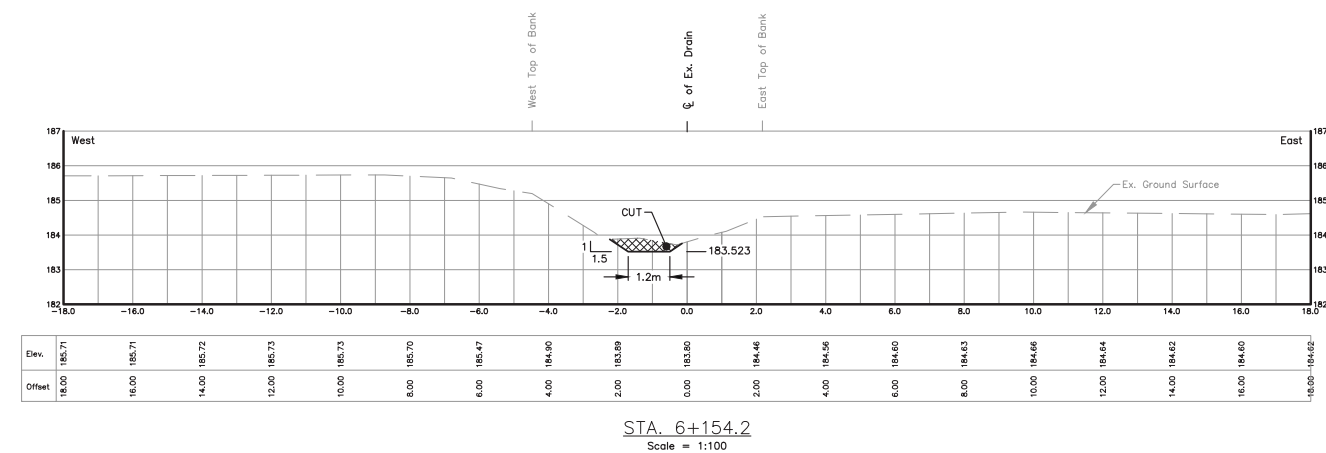
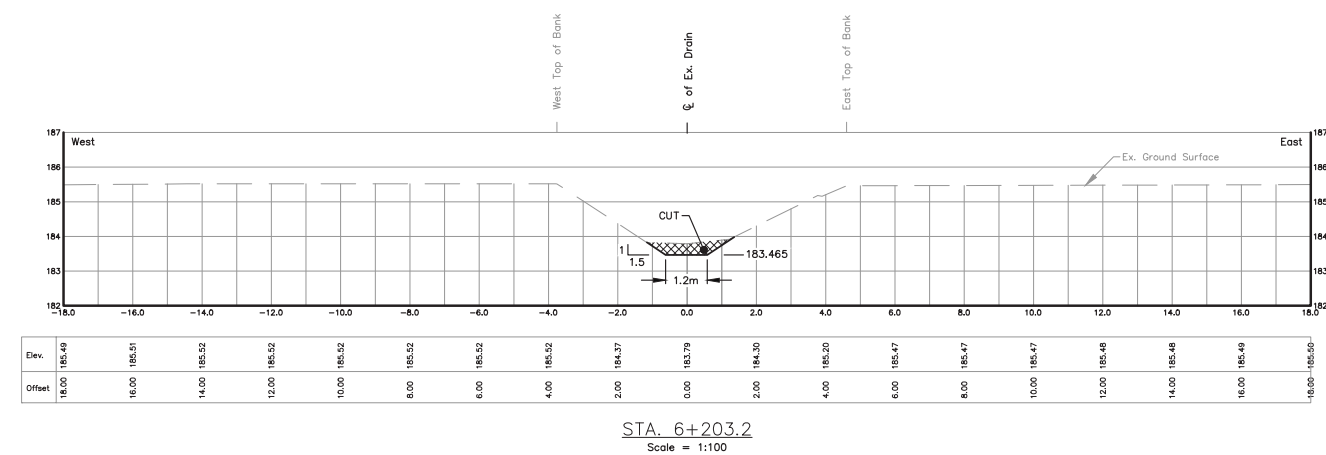
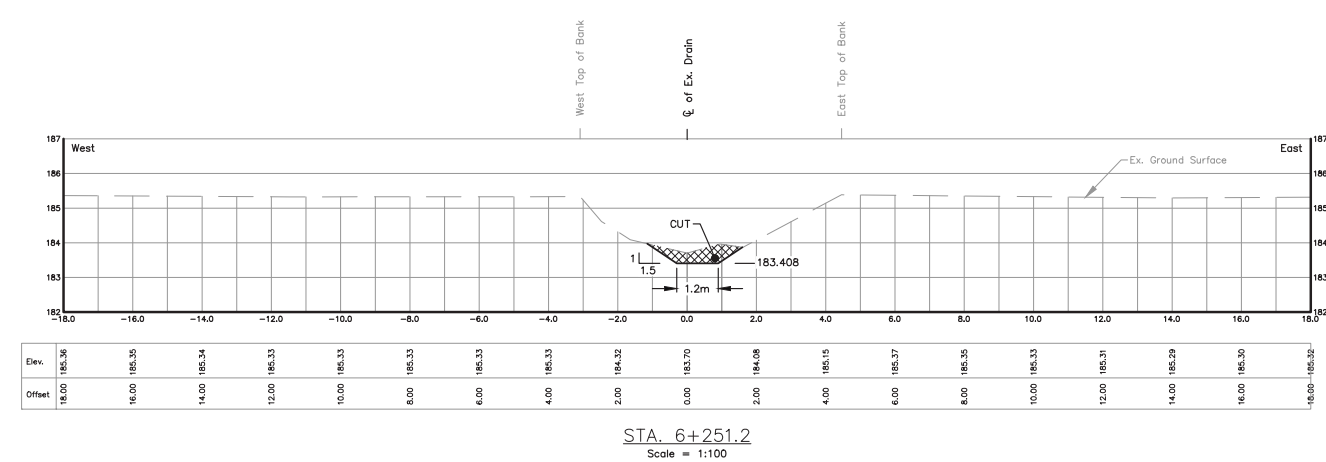
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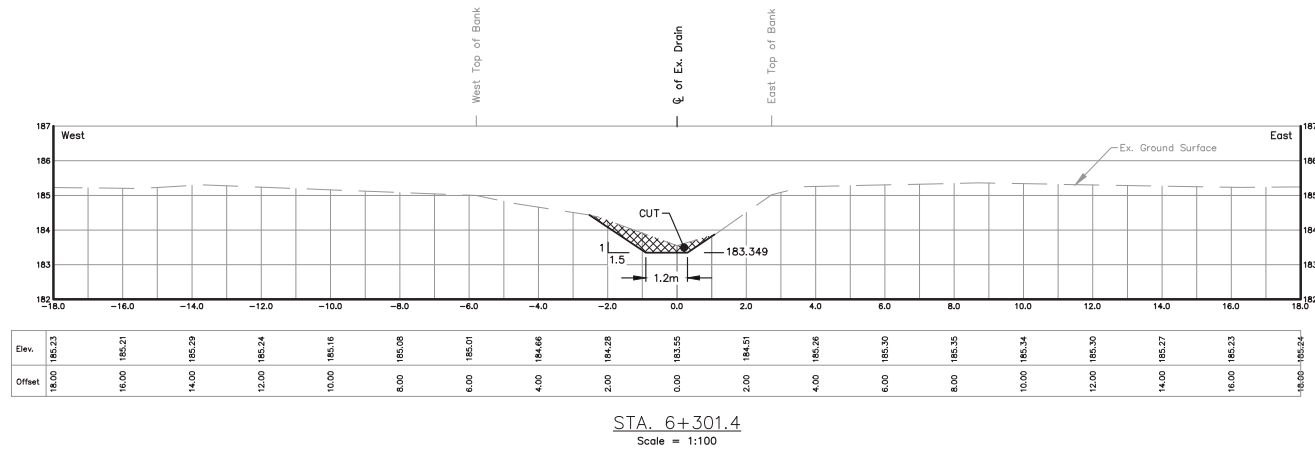
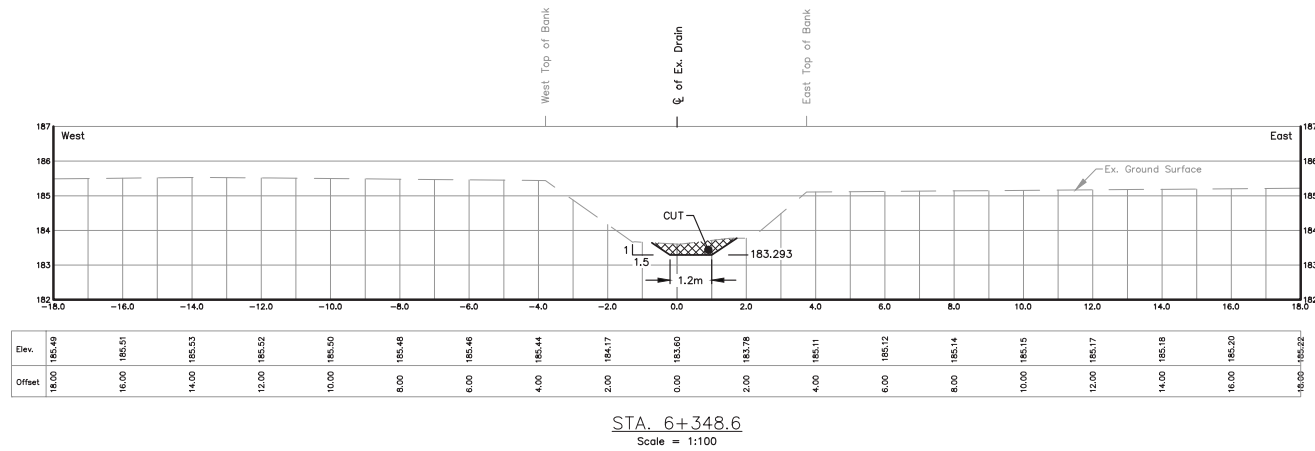
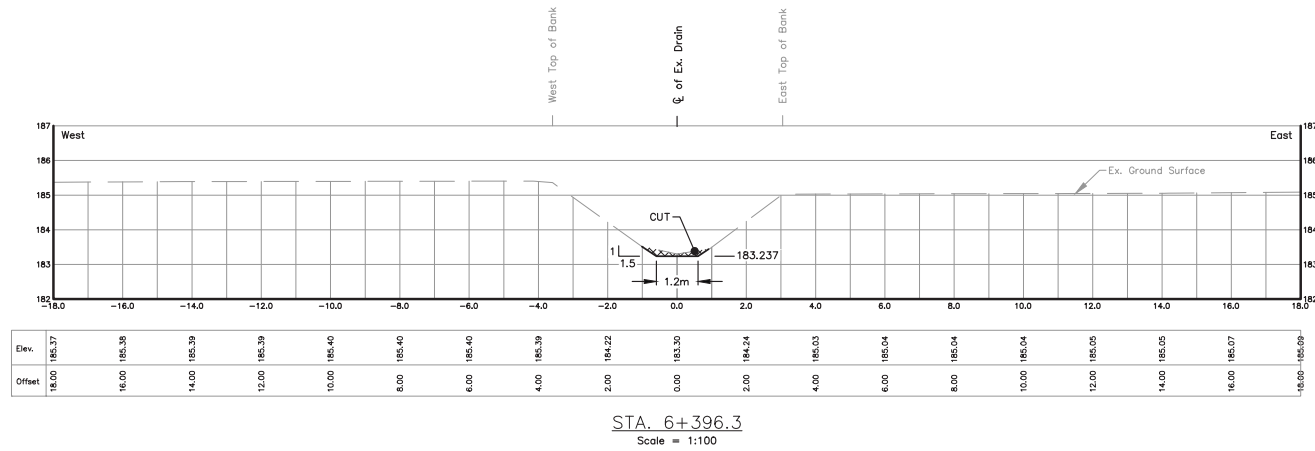
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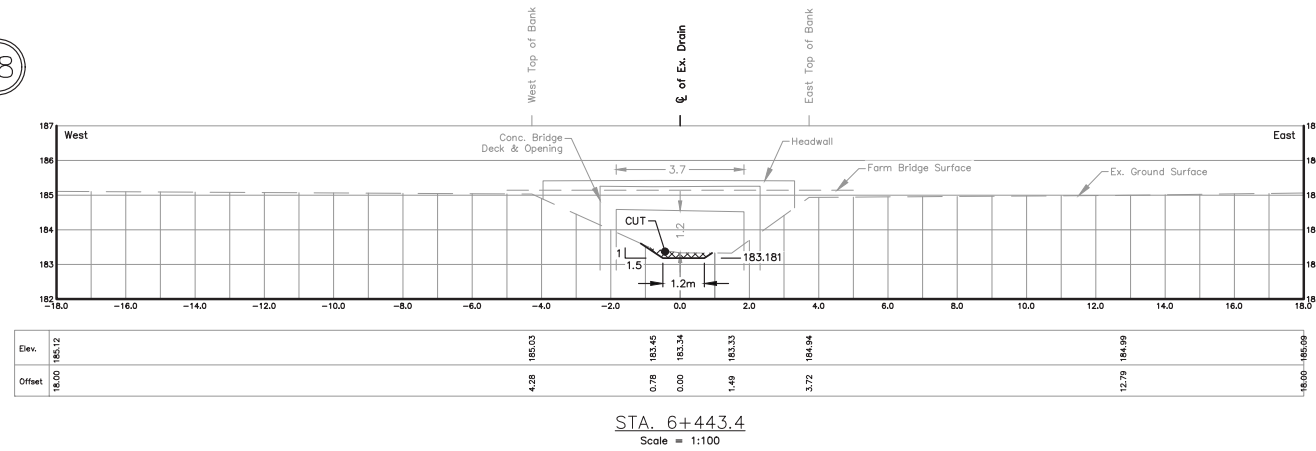
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 31 OF 51



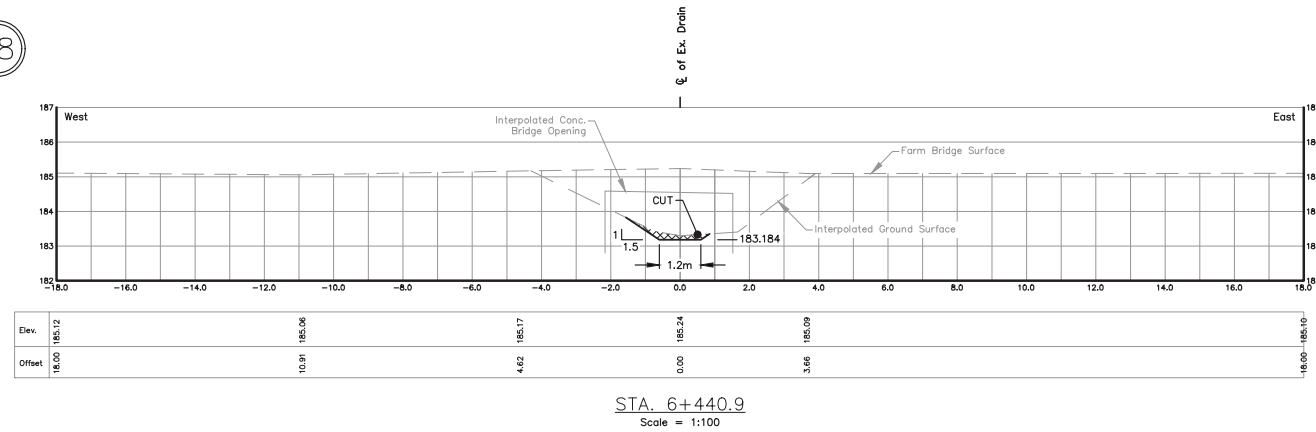
DRAWN BY: G.S. & S.H.	
PLOT CODE: 1:1	
COMPUTER FILE: REJ2015D010.DWG	
FILE No.: 2015D010	SHEET No.: 32 OF 51



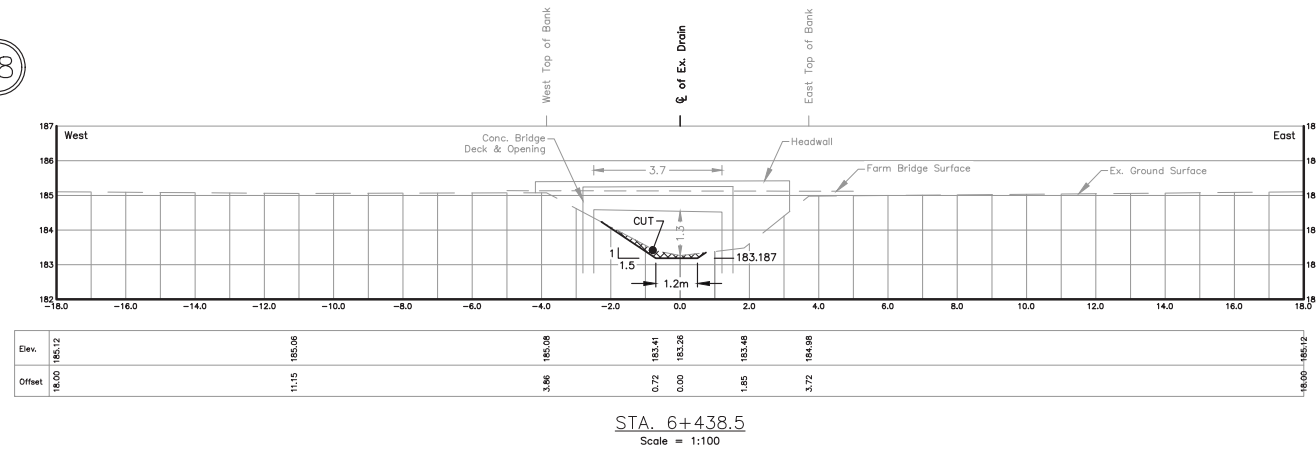
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18



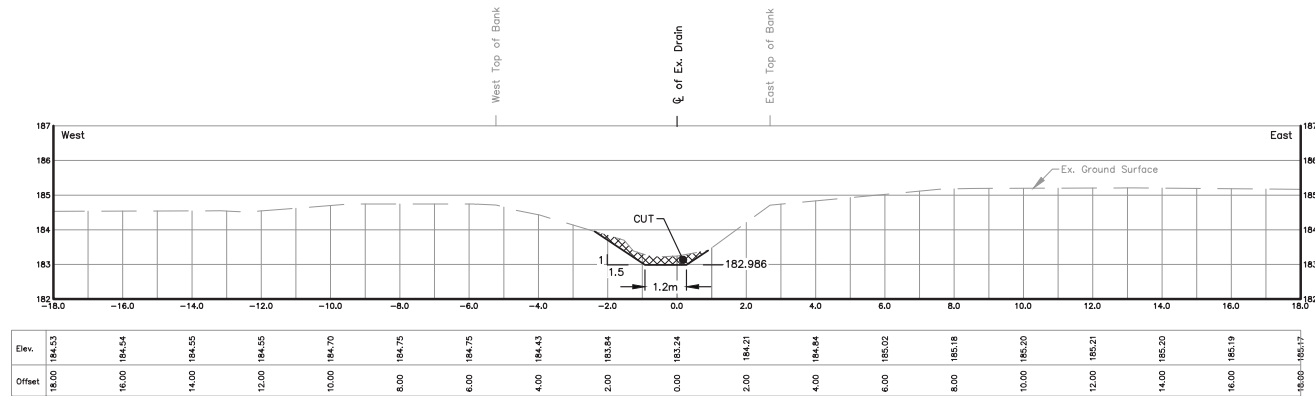
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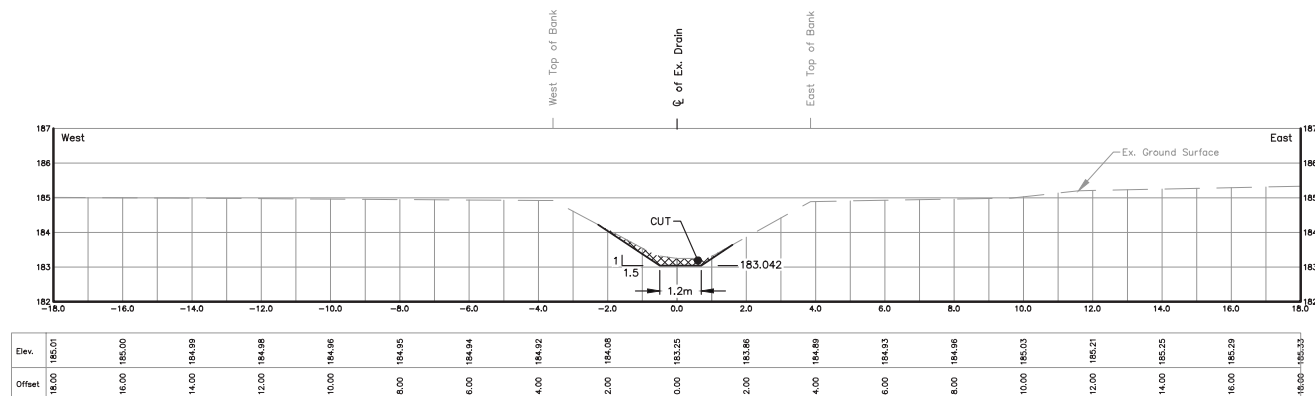
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DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 33 OF 51

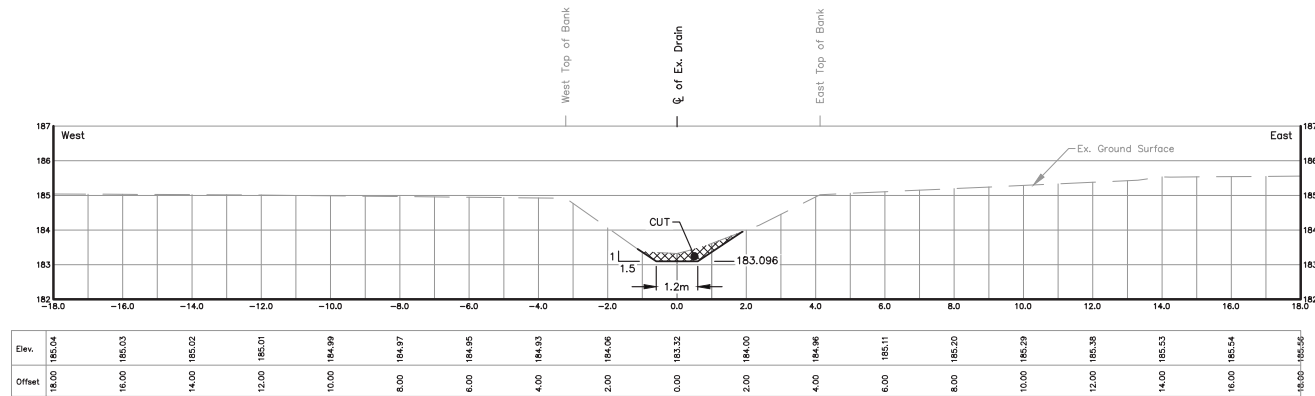
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections\Blang 2021-105-16



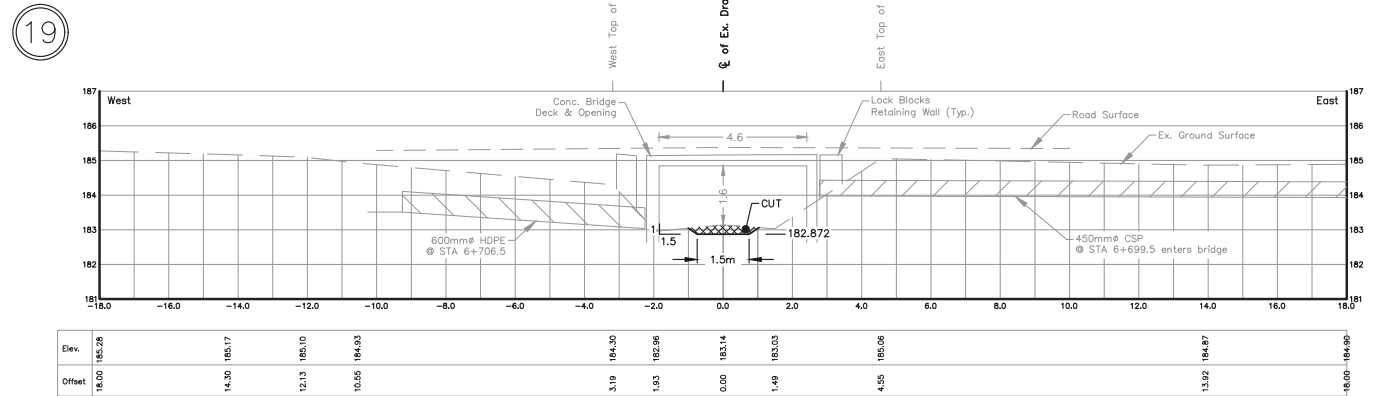
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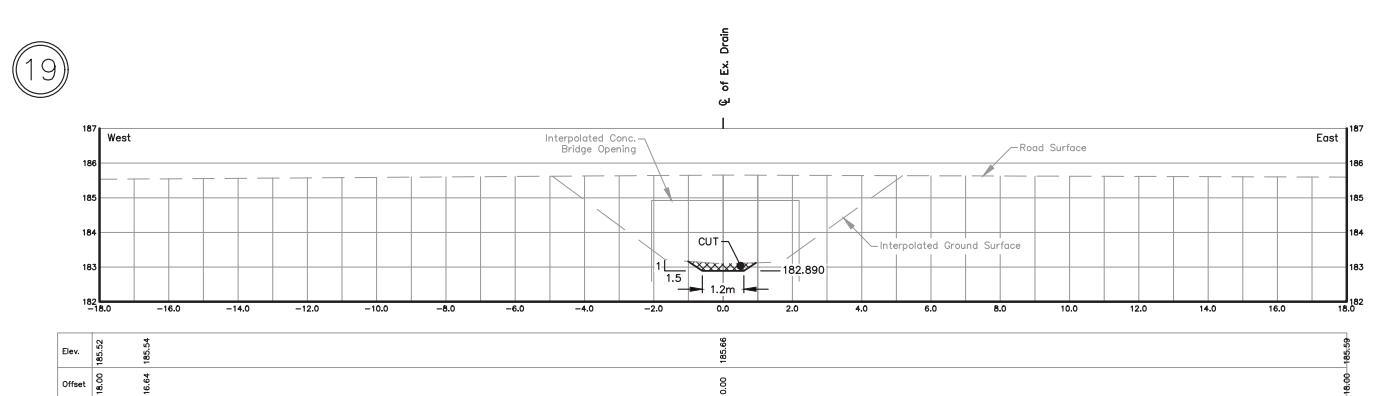
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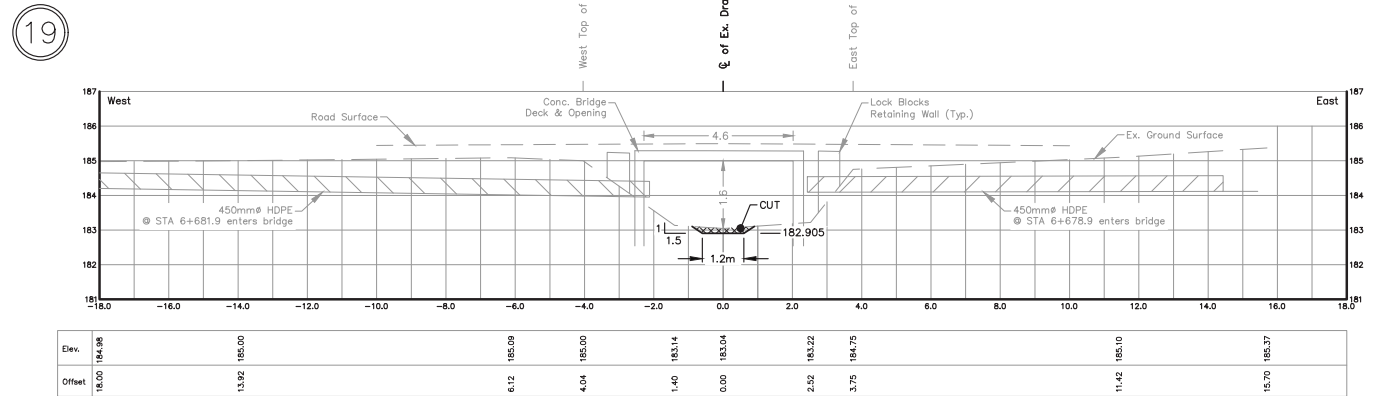
STA. 6+514.9
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STA. 6+709.1
Scale = 1:100



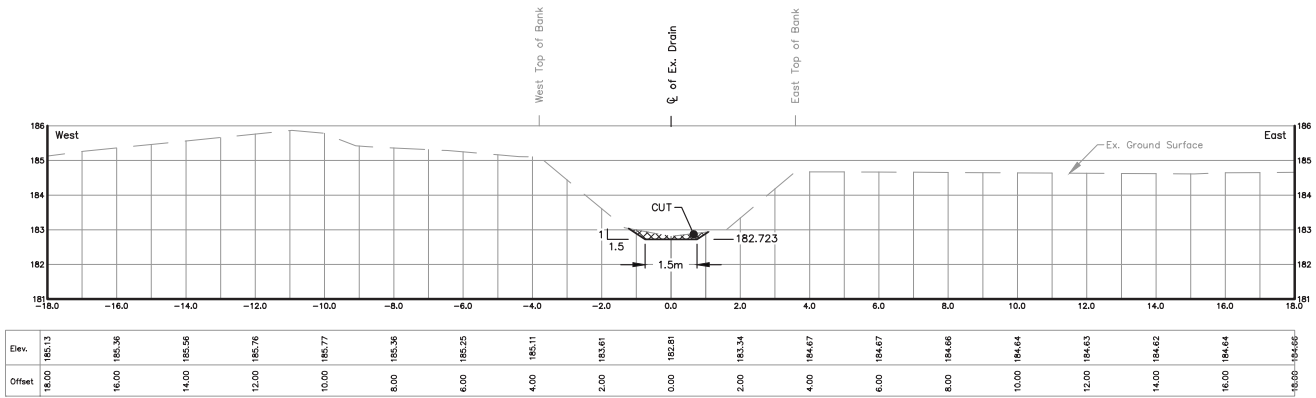
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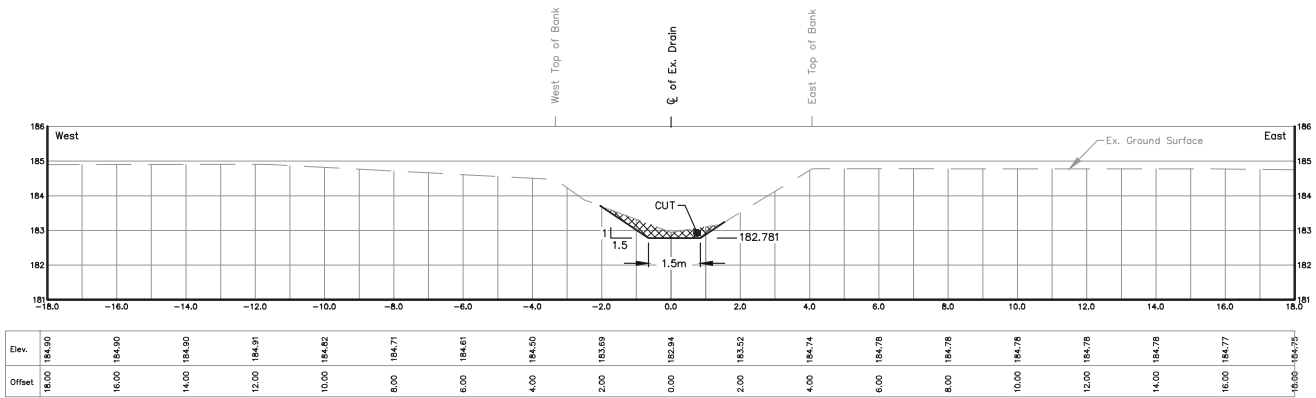
STA. 6+676.3
Scale = 1:100

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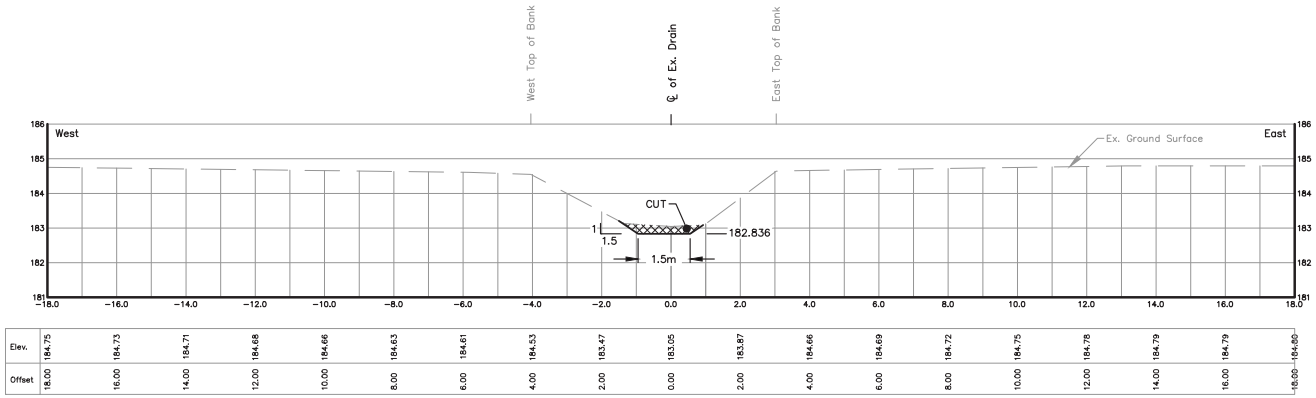
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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STA. 6+830.1
Scale = 1:100

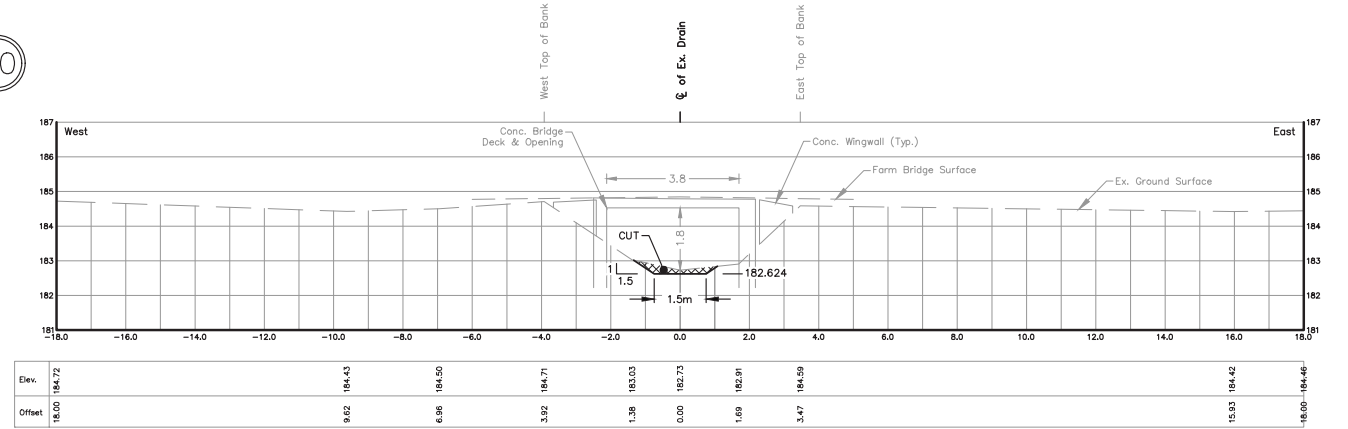


STA. 6+781.0
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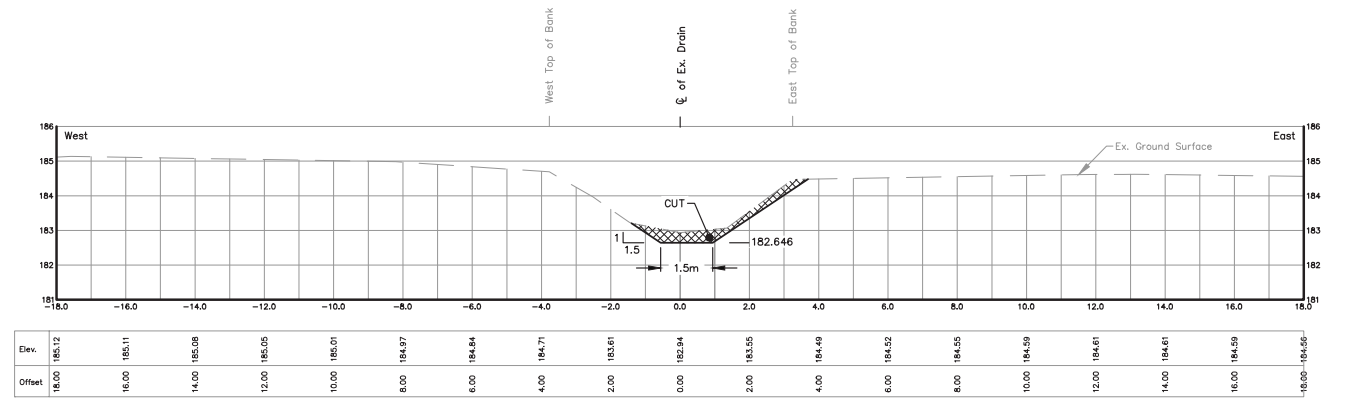


STA. 6+734.1
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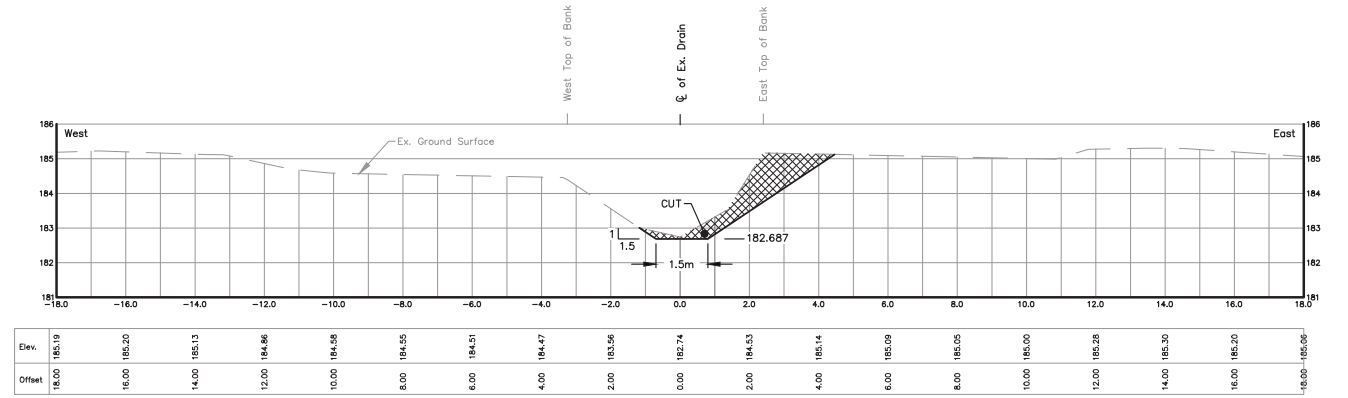
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STA. 6+913.4
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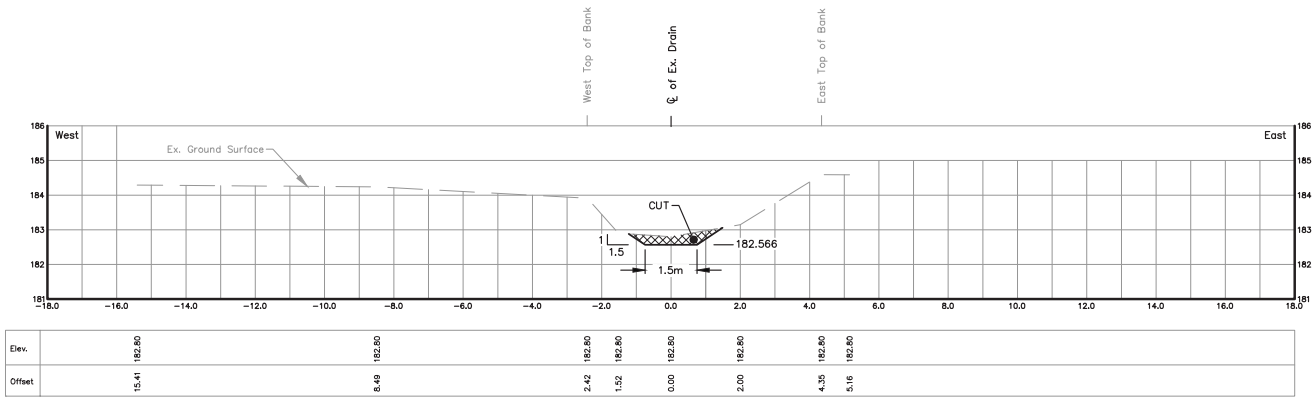
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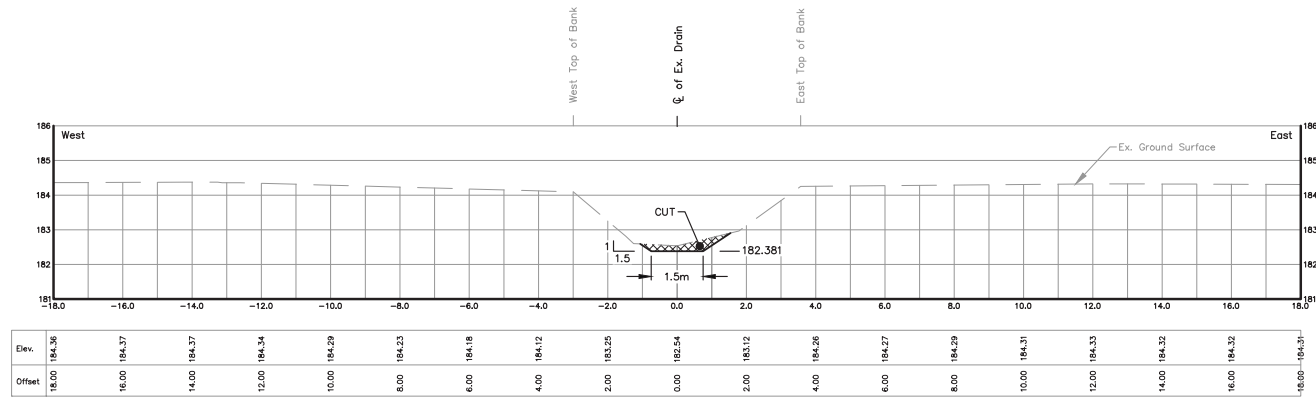
STA. 6+860.0
Scale = 1:100

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COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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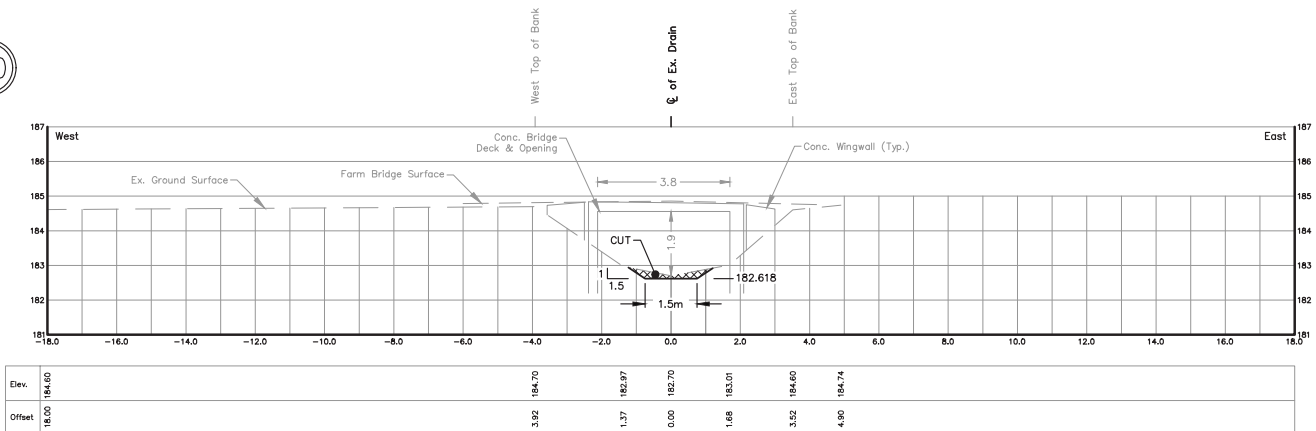


STA. 6+962.9
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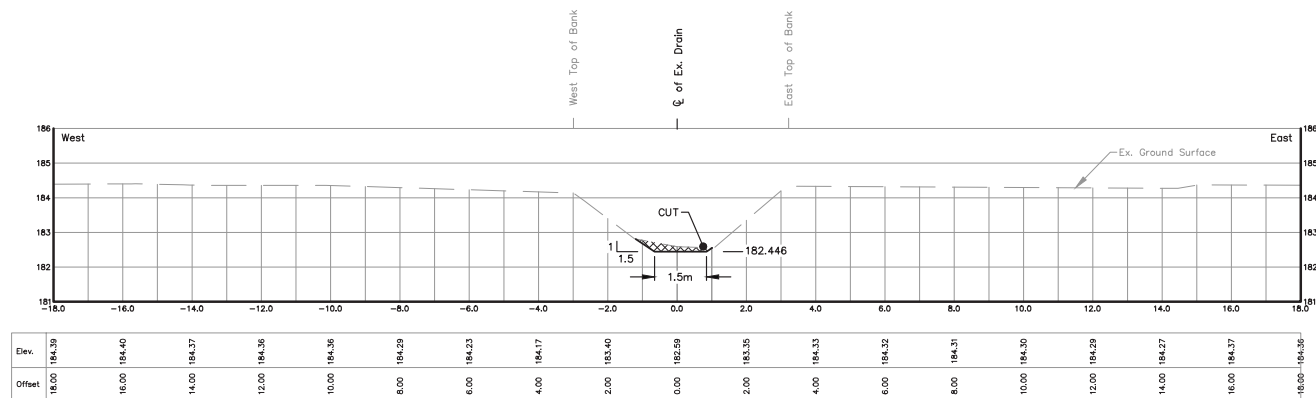


STA. 7+118.4
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20

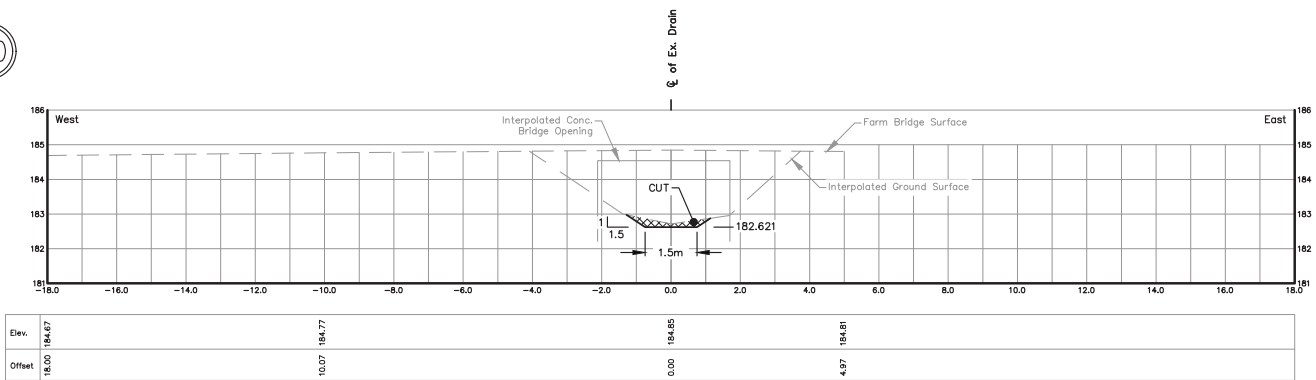


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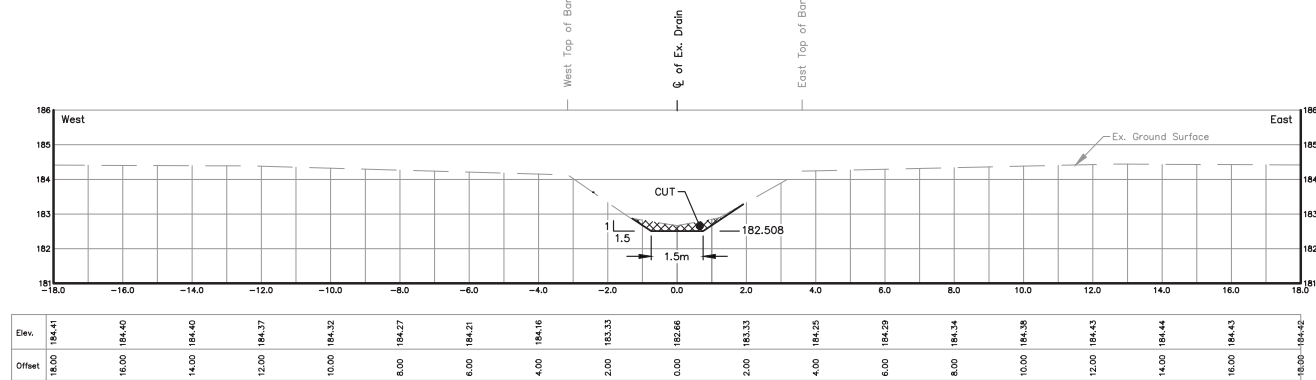


STA. 7+063.9
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20



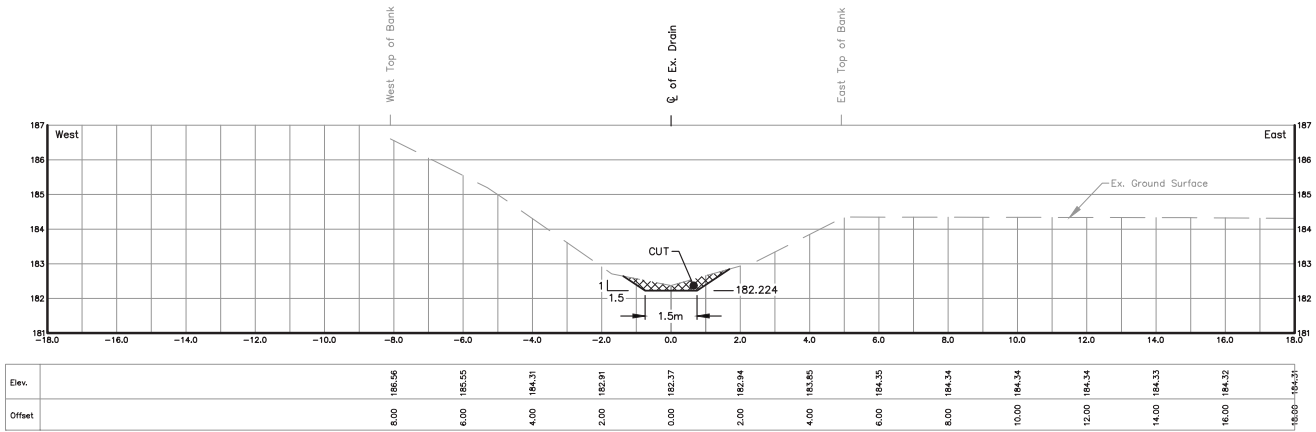
STA. 6+915.8
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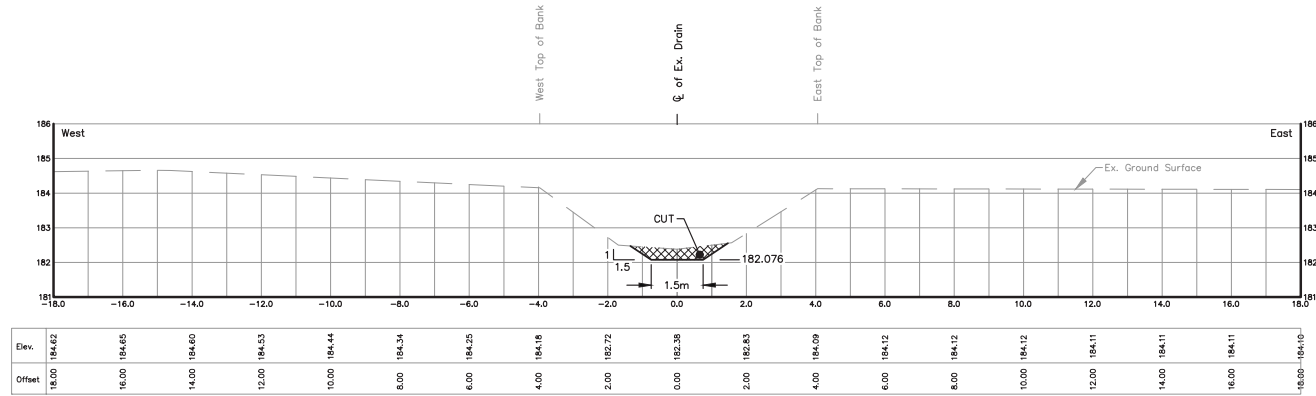
STA. 7+011.5
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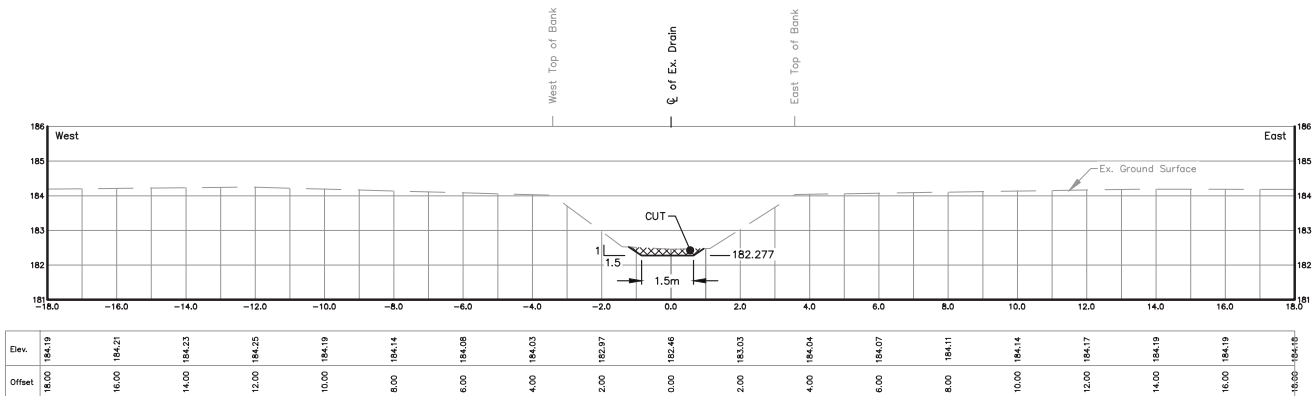
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 36 OF 51



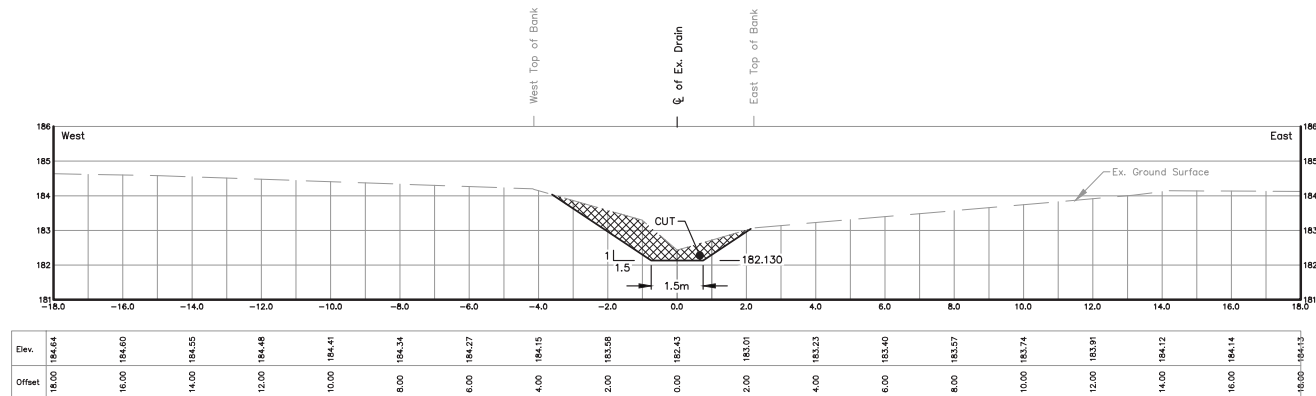
STA. 7+251.6
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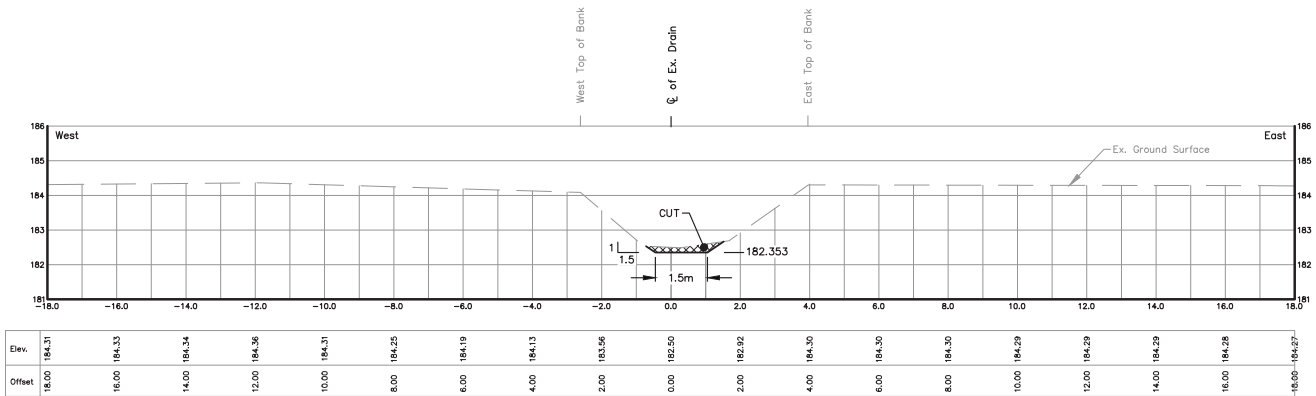
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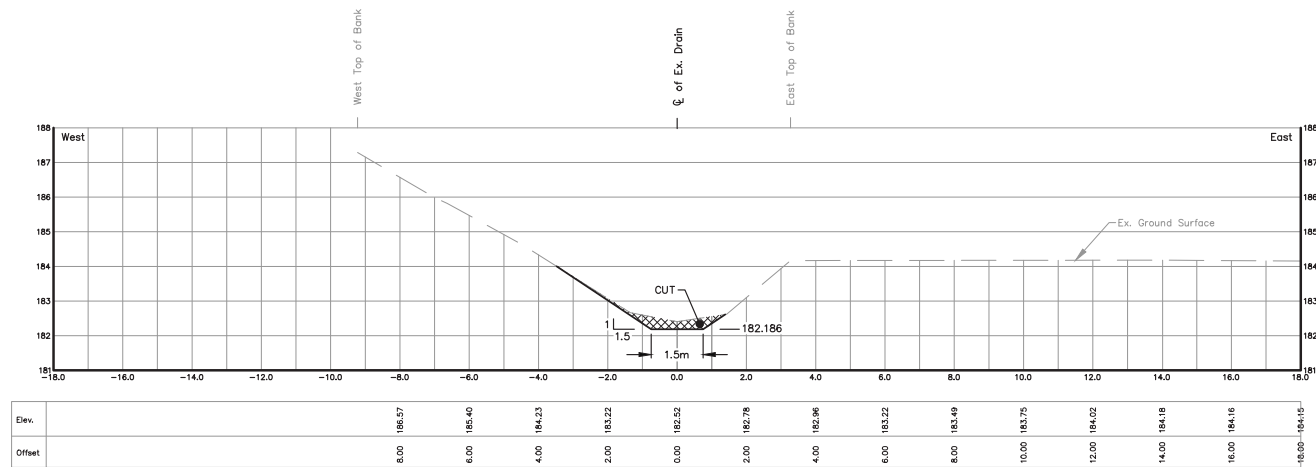
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STA. 7+330.3
Scale = 1:100



STA. 7+142.2
Scale = 1:100

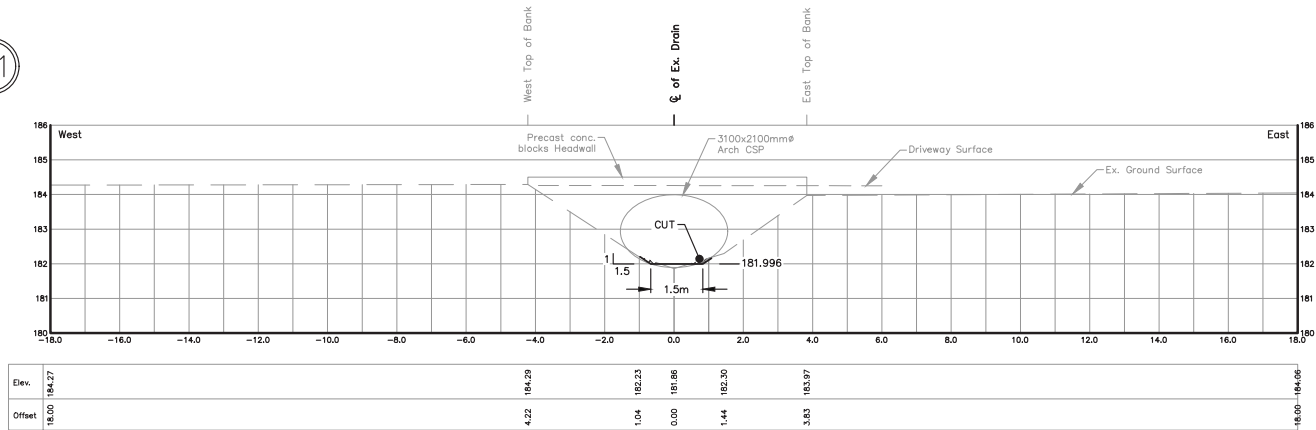


STA. 7+283.2
Scale = 1:100

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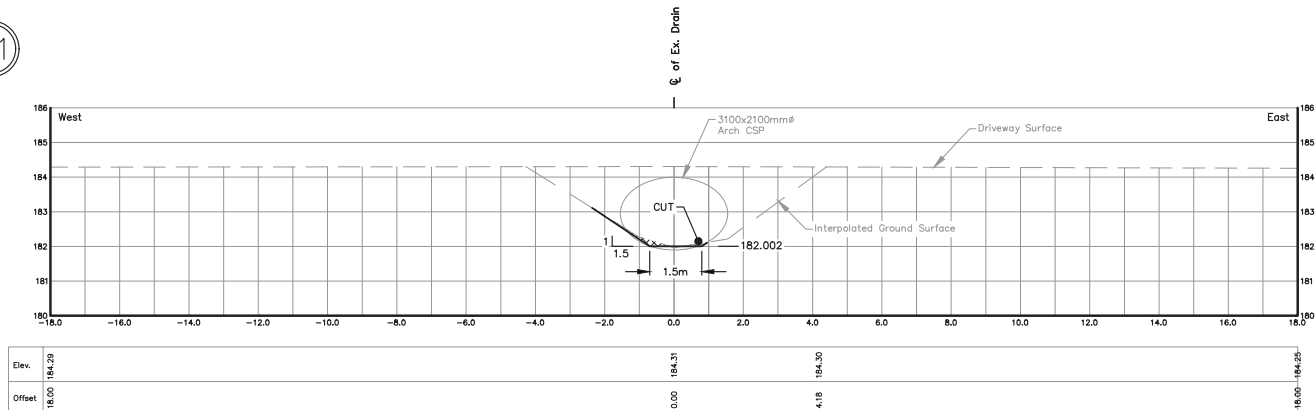
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 37 OF 51

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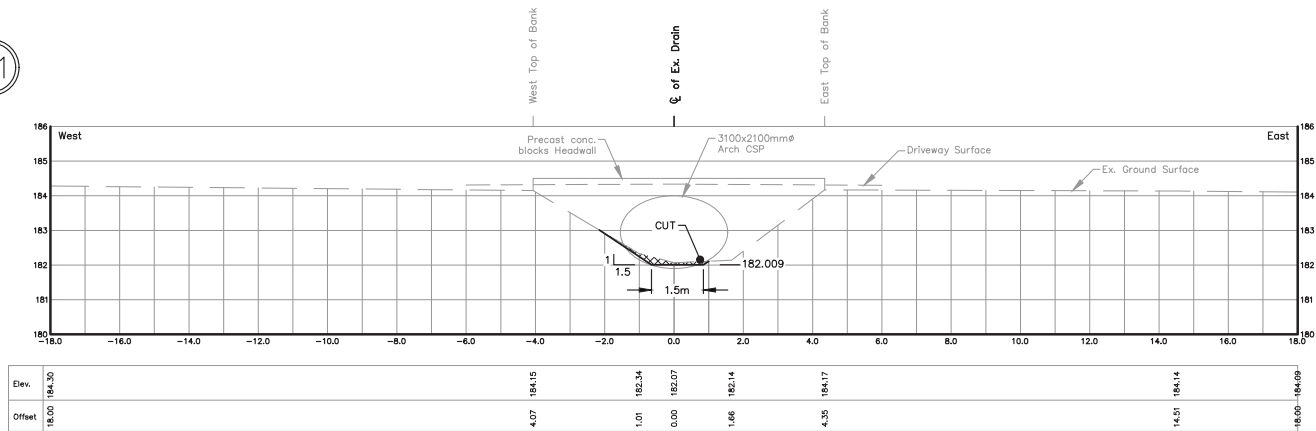
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21

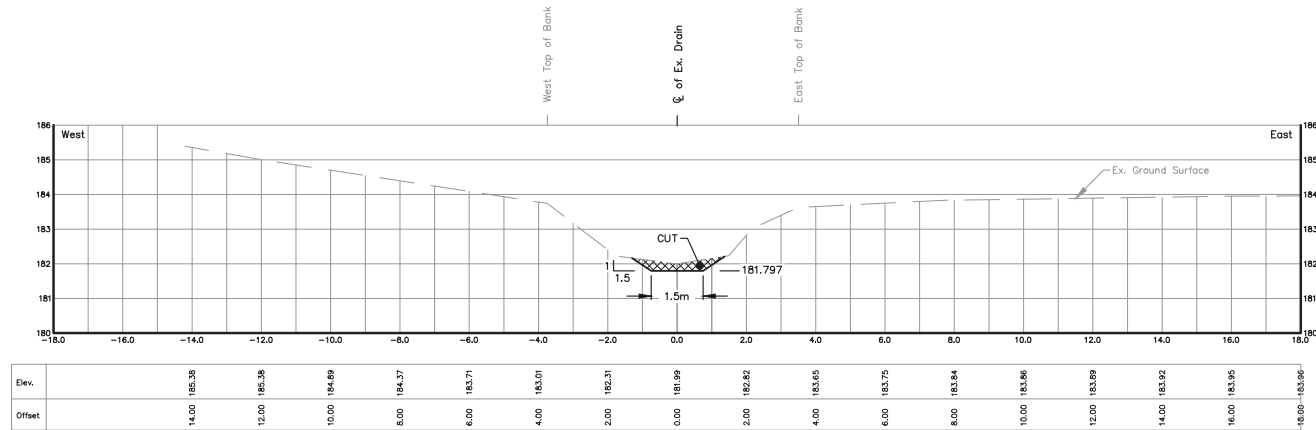


STA. 7+438.5
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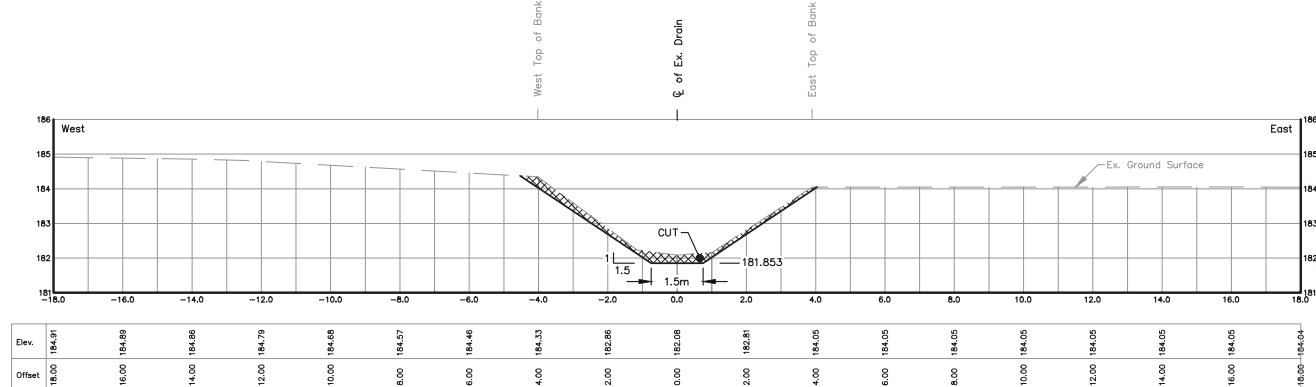
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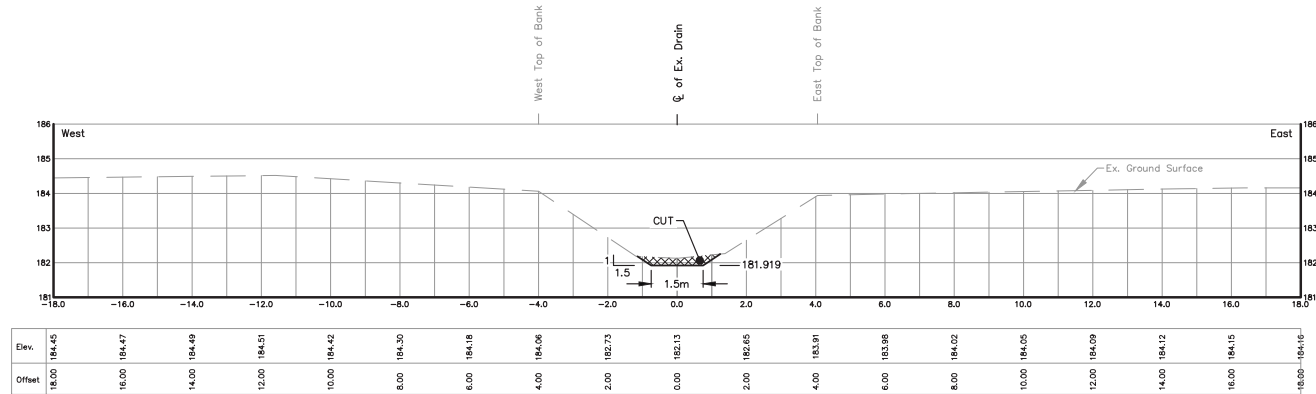
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STA. 7+612.0
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STA. 7+564.8
Scale = 1:100

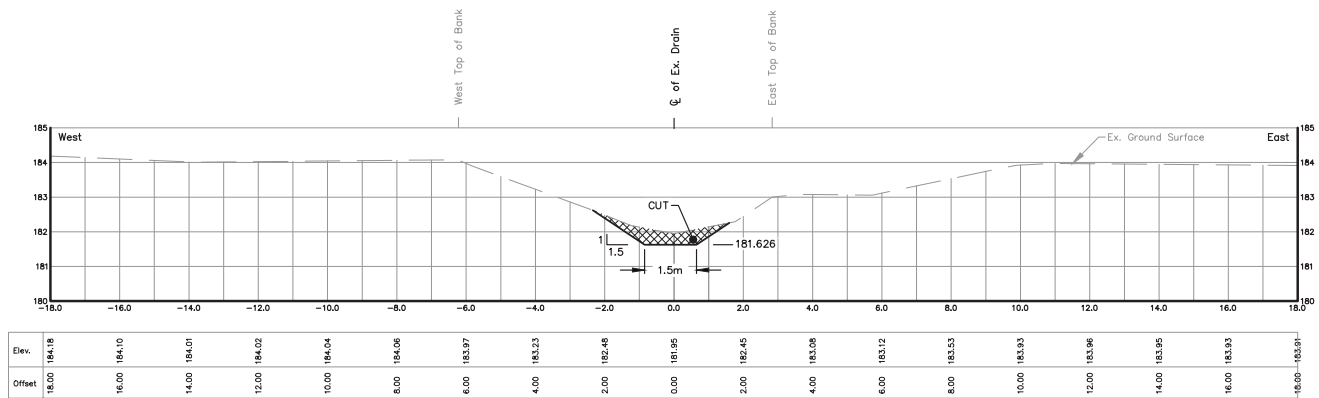


STA. 7+509.2
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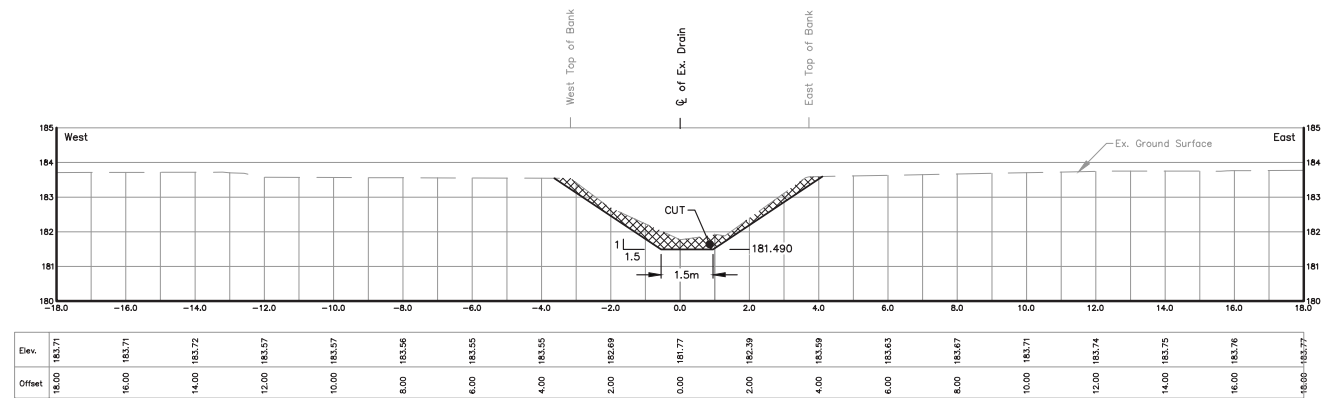
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PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 38 OF 51

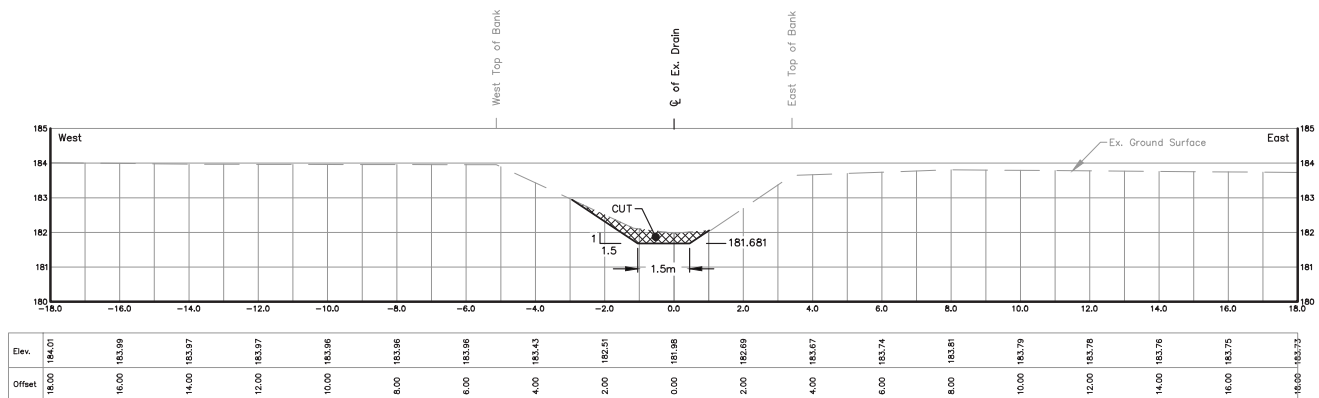
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 Sections B.dwg 2/21/15 1:16



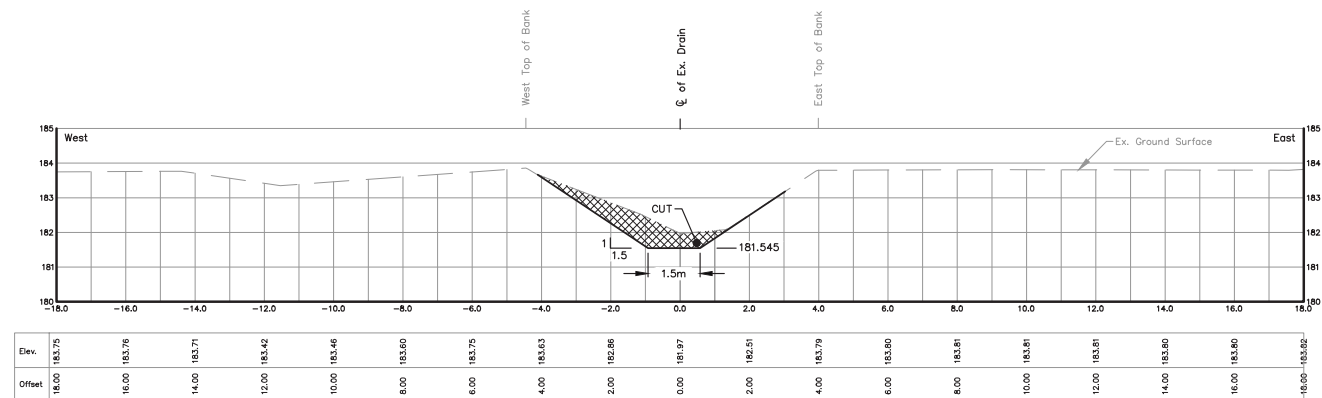
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Scale = 1:100



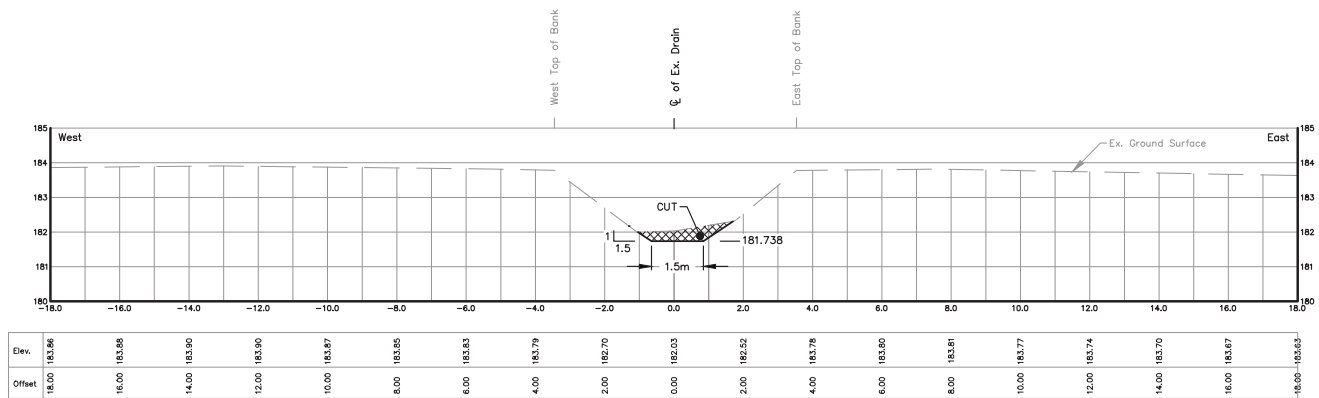
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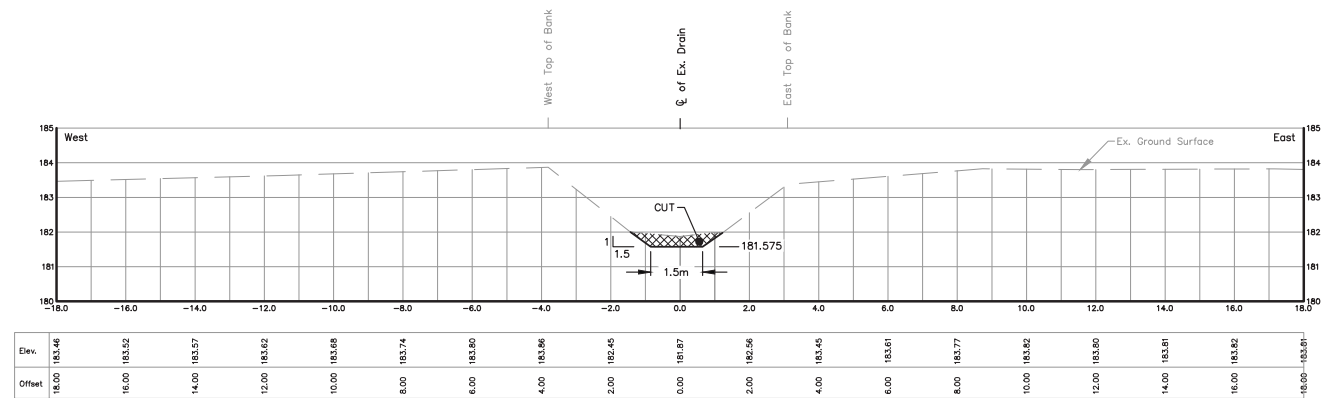
STA. 7+709.9
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STA. 7+824.6
Scale = 1:100



STA. 7+662.0
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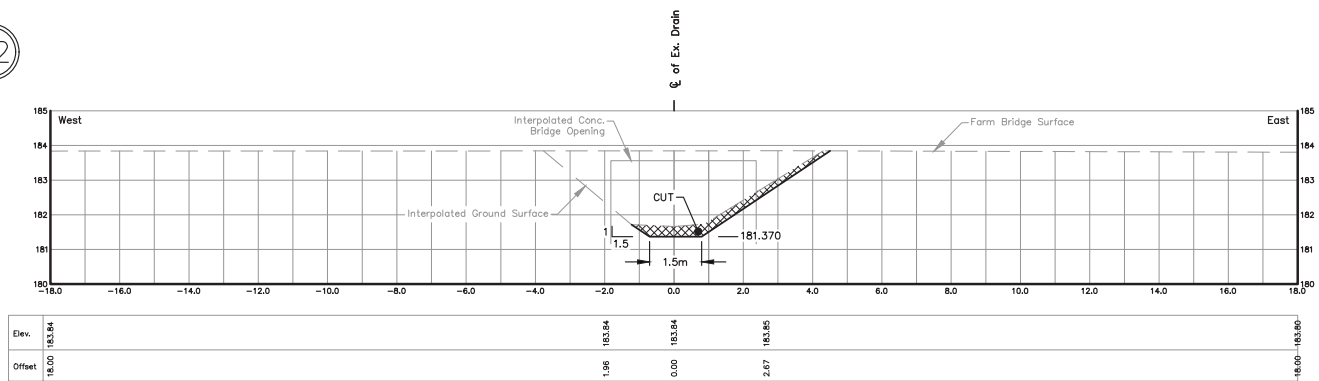


STA. 7+799.7
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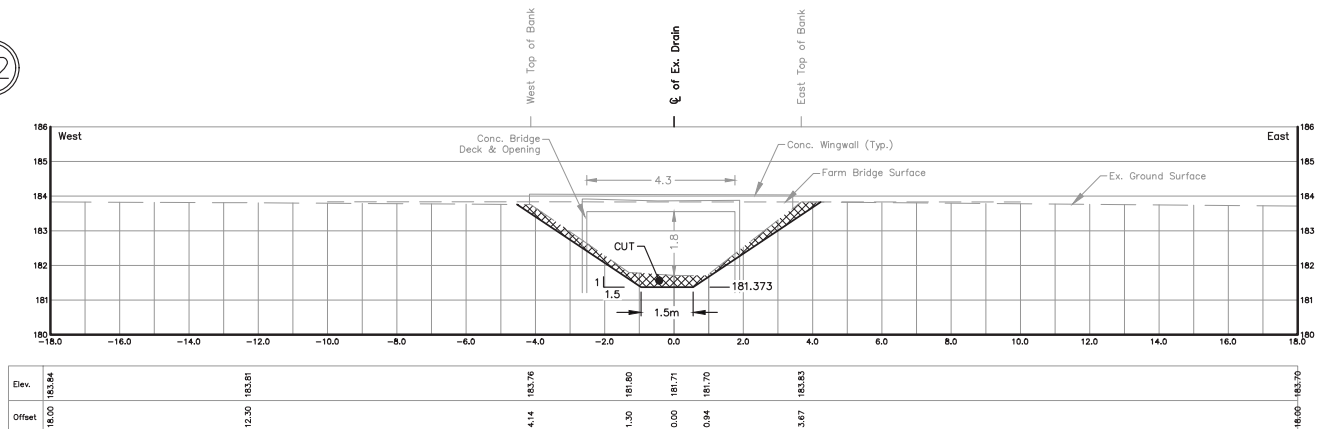
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 39 OF 51

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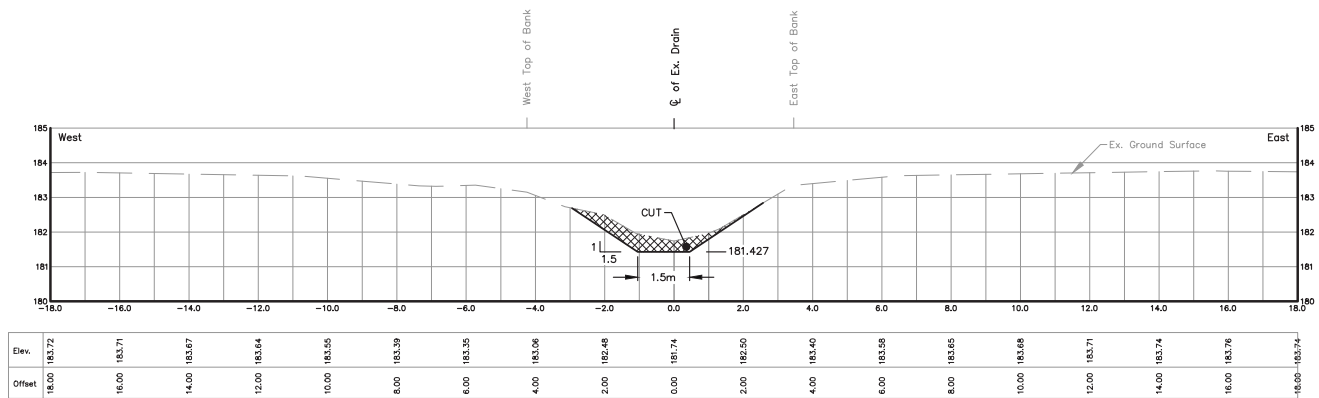


STA. 7+972.7
Scale = 1:100

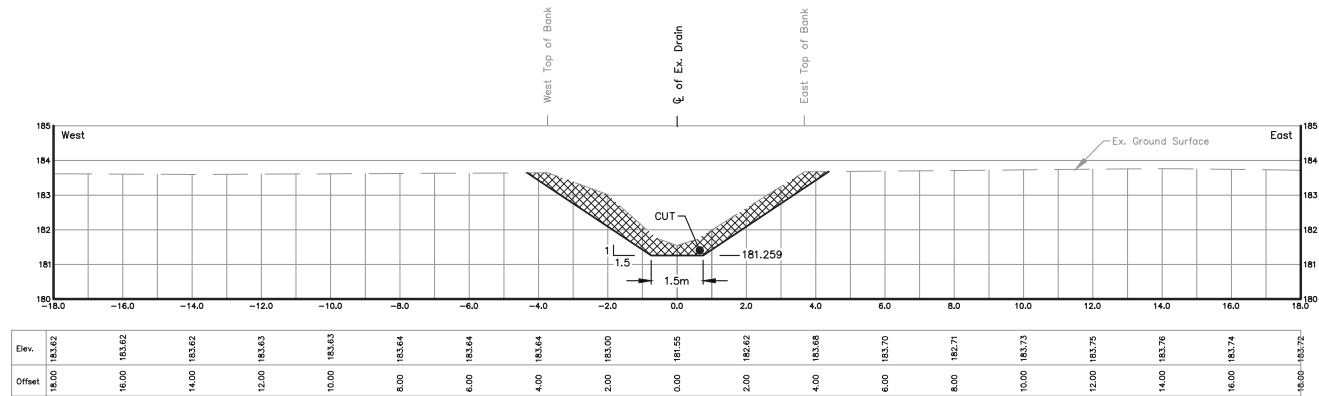
22



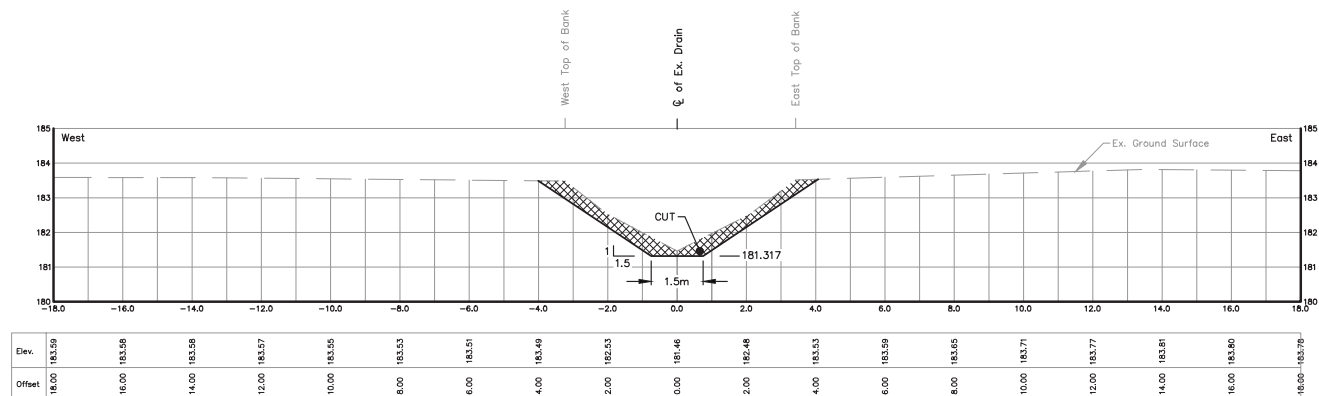
STA. 7+970.2
Scale = 1:100



STA. 7+924.6
Scale = 1:100

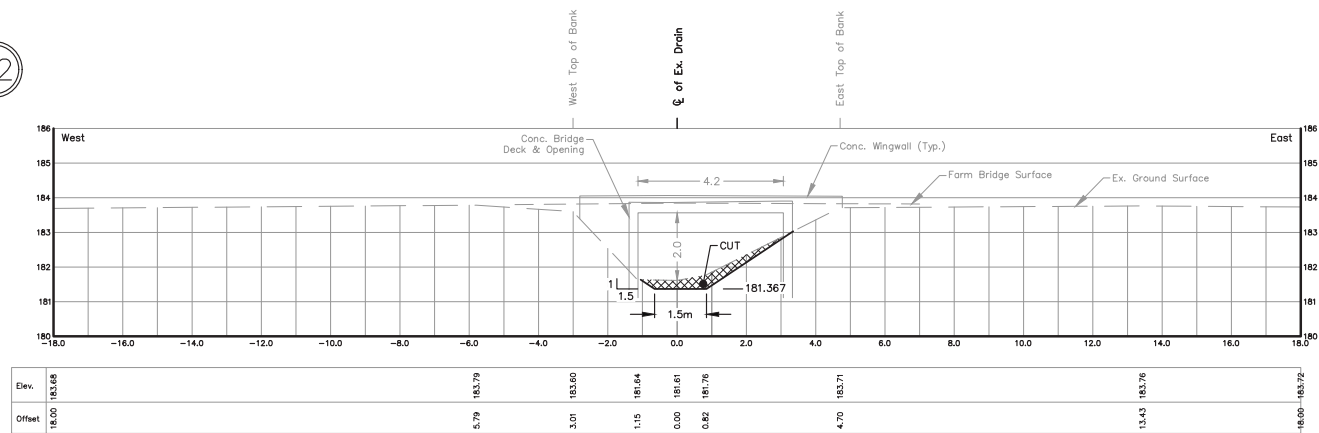


STA. 8+066.5
Scale = 1:100



STA. 8+017.2
Scale = 1:100

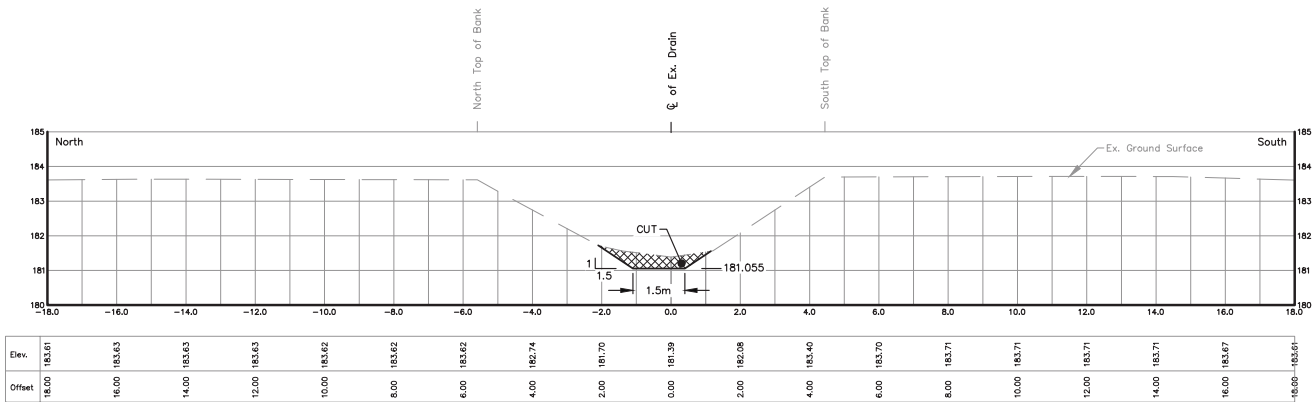
22



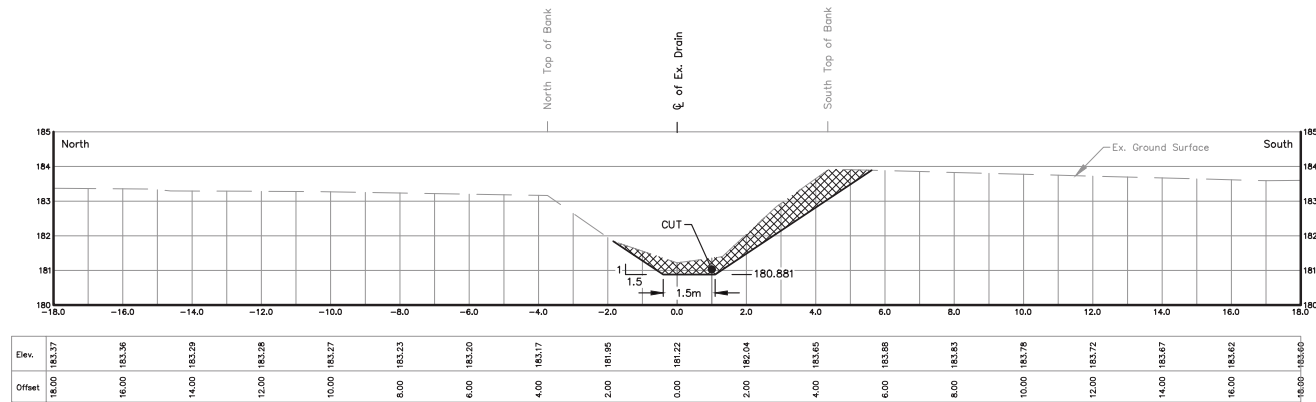
STA. 7+975.1
Scale = 1:100

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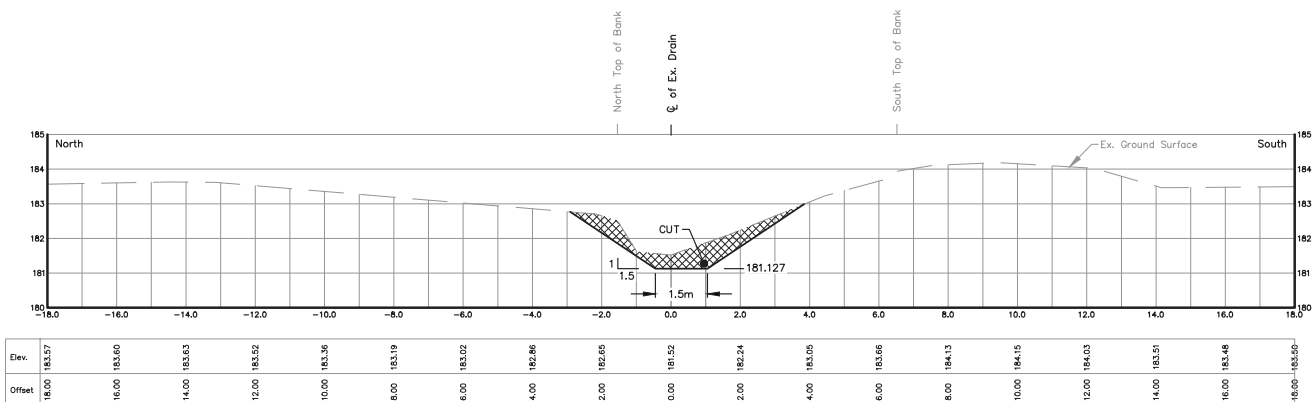
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 40 OF 51



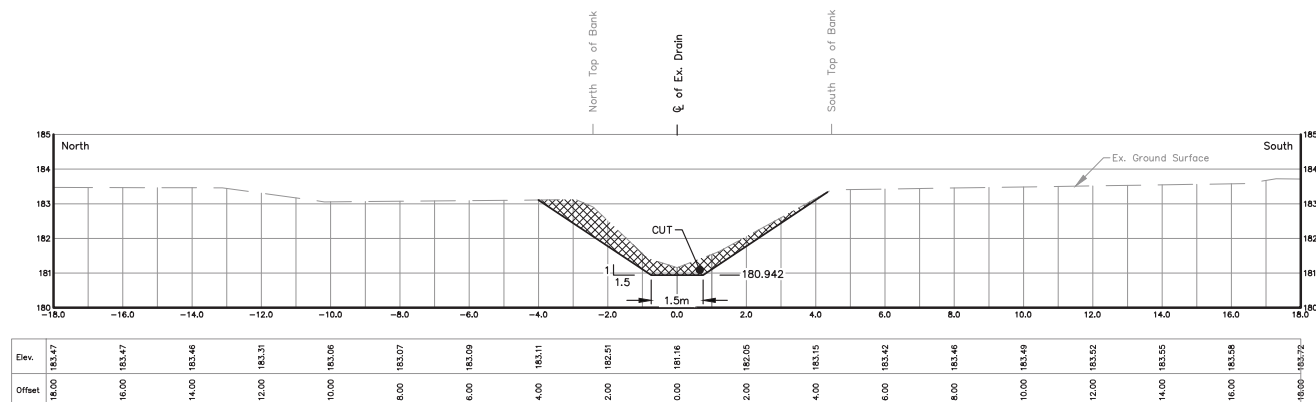
STA. 8+238.2
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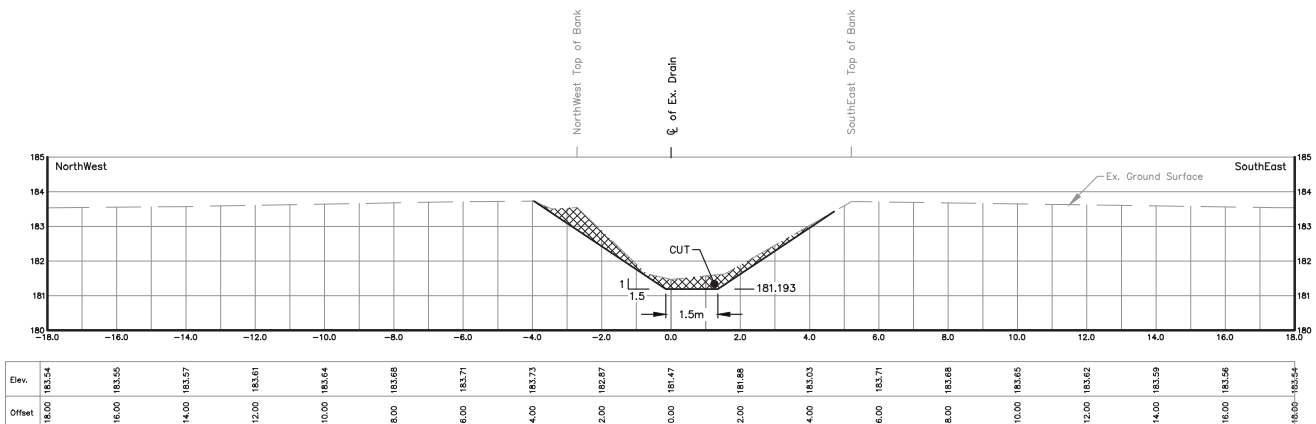
STA. 8+385.0
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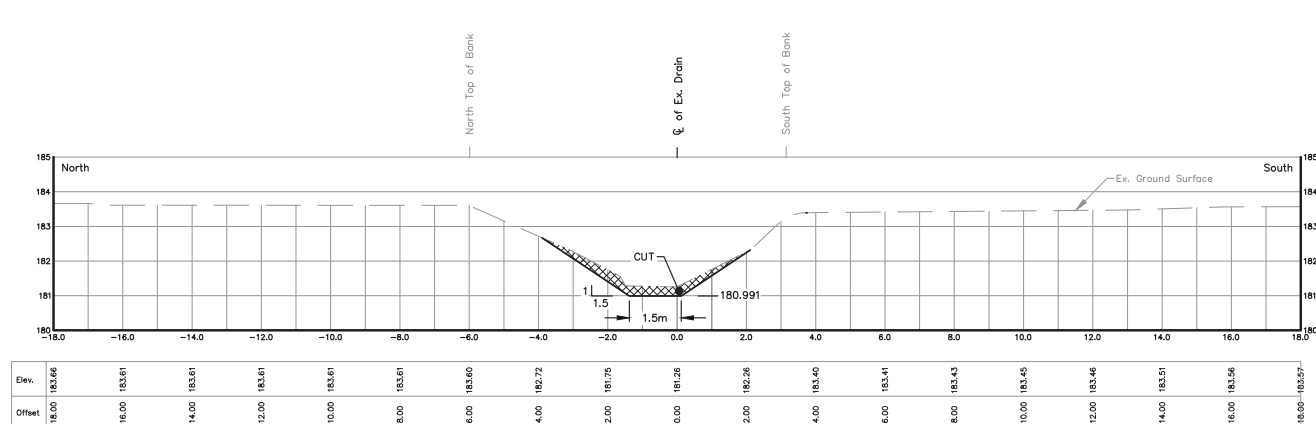
STA. 8+177.7
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STA. 8+333.7
Scale = 1:100



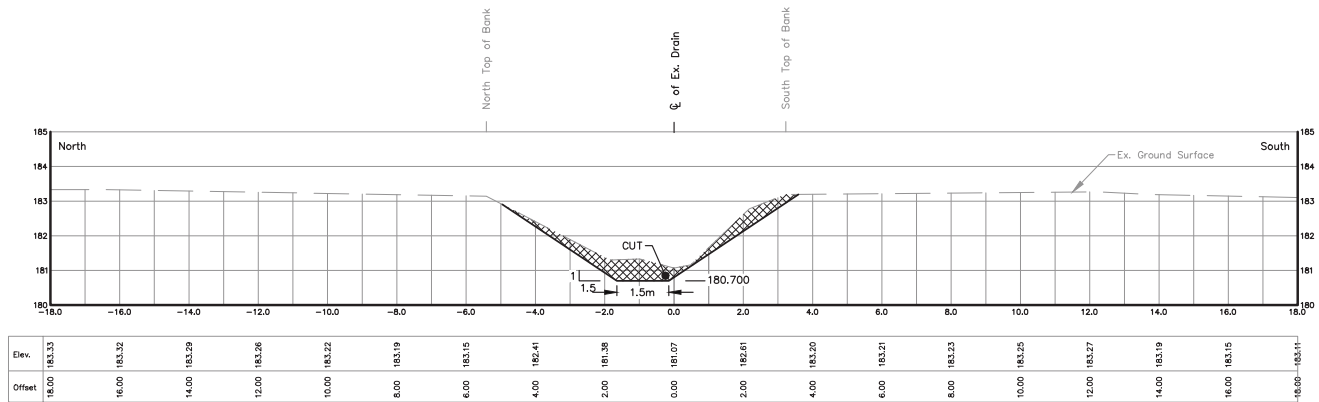
STA. 8+122.1
Scale = 1:100



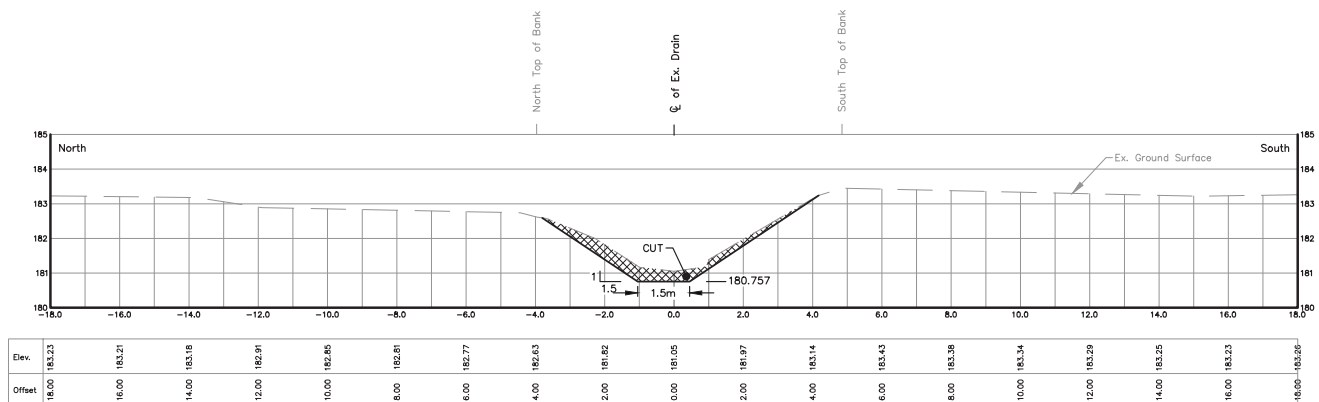
STA. 8+292.3
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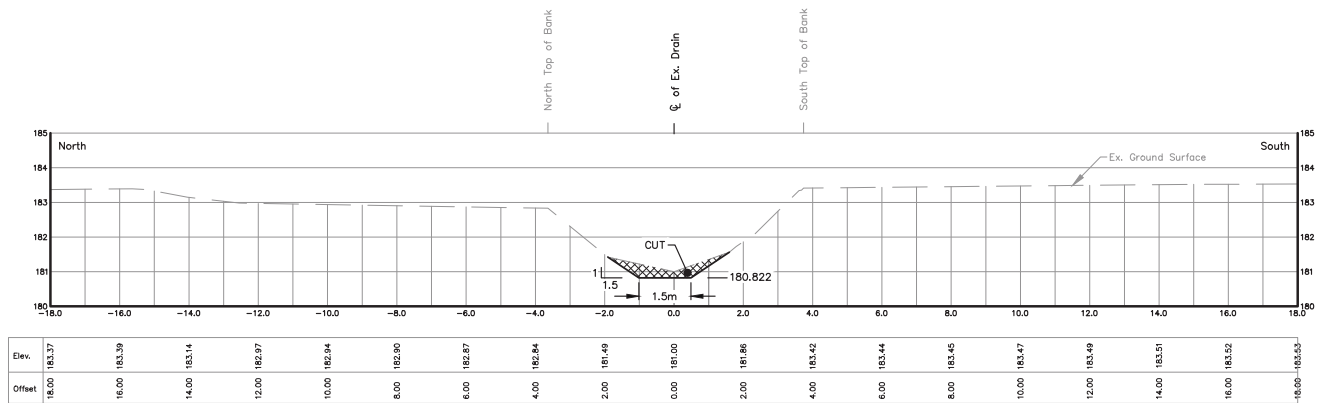
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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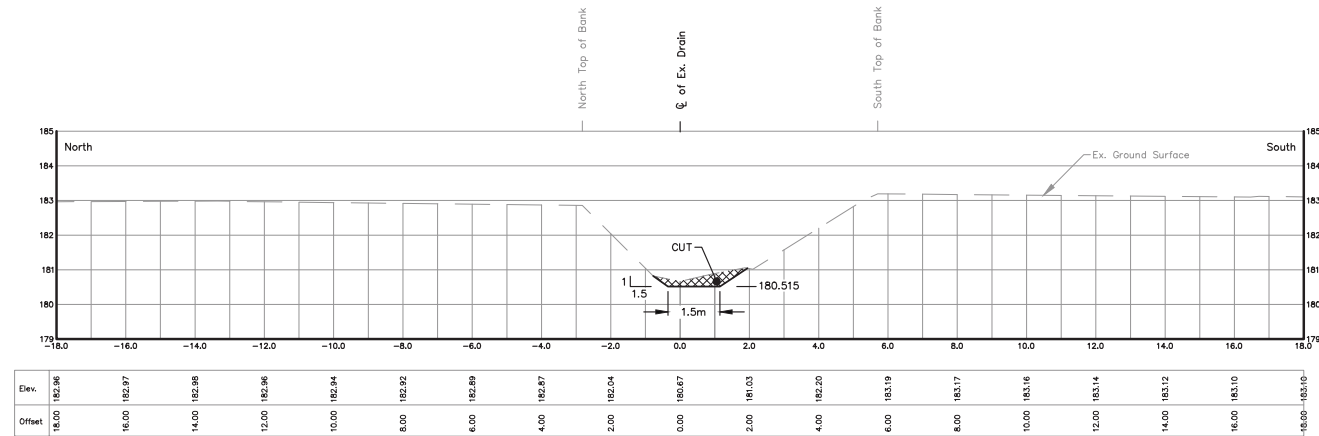
STA. 8+537.7
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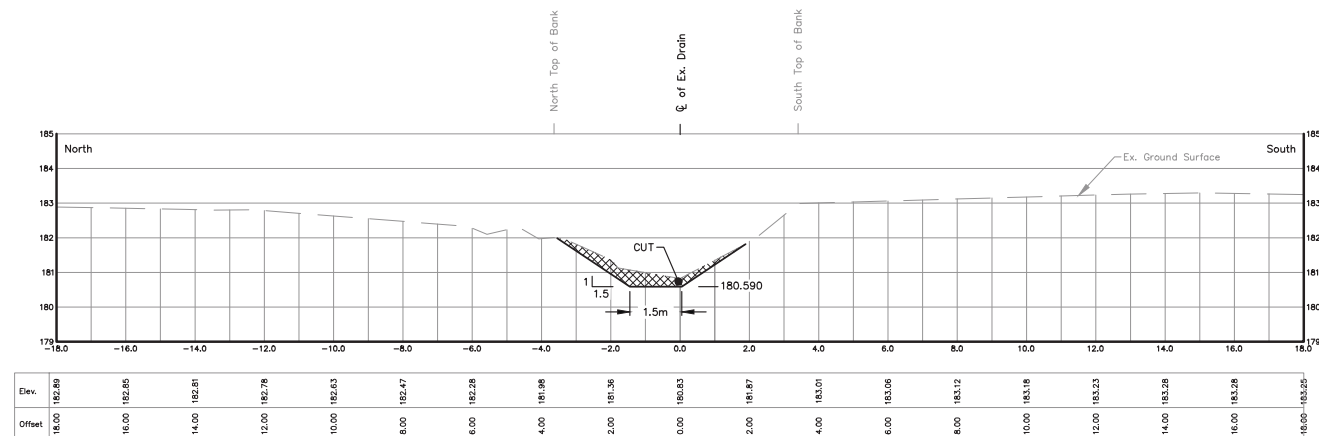
STA. 8+490.0
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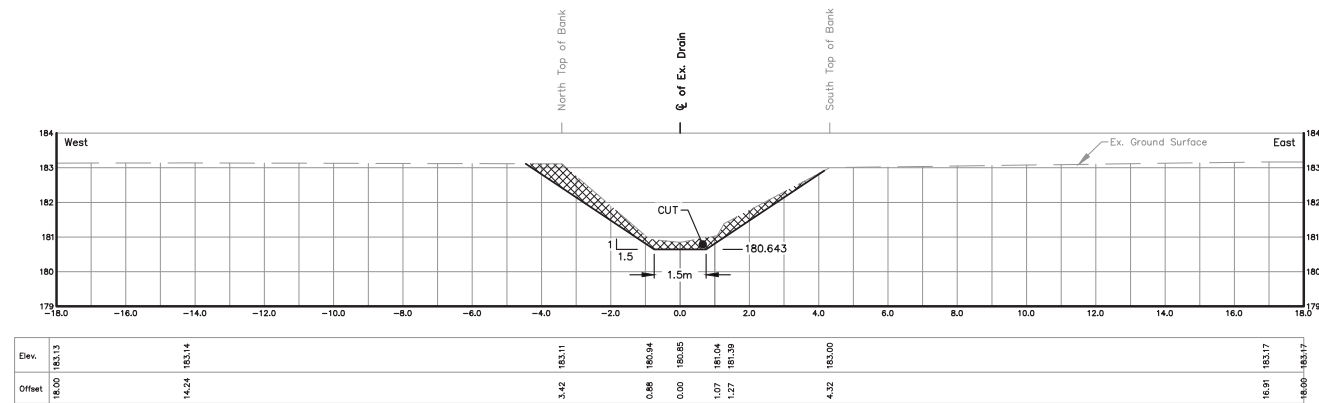
STA. 8+434.8
Scale = 1:100



STA. 8+694.6
Scale = 1:100



STA. 8+631.0
Scale = 1:100

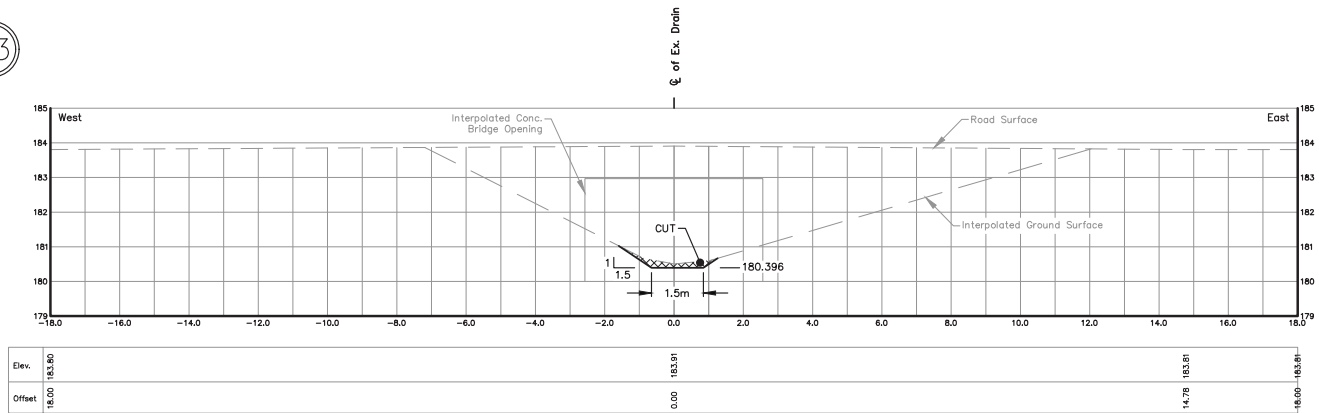


STA. 8+586.3
Scale = 1:100

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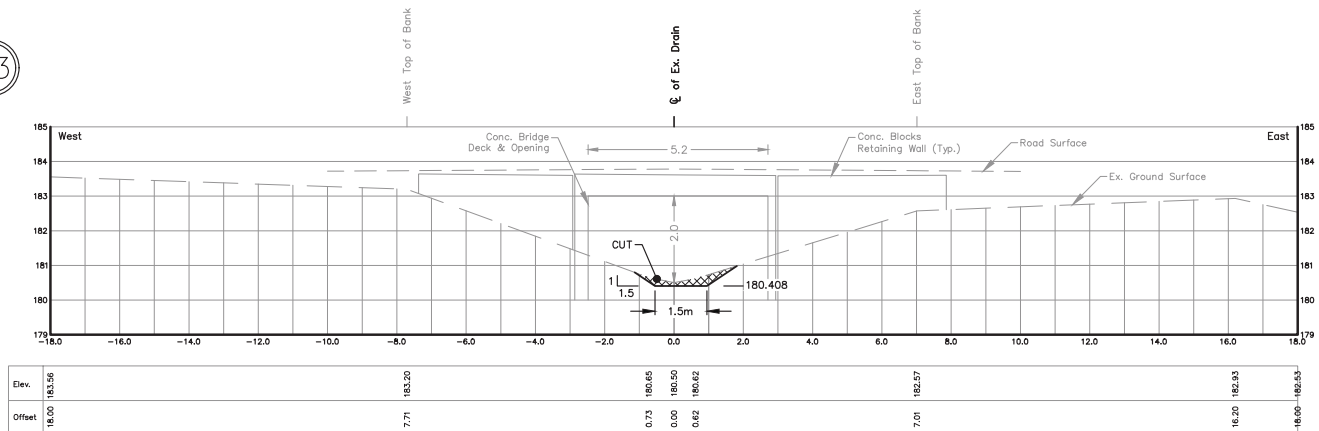
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 42 OF 51

23

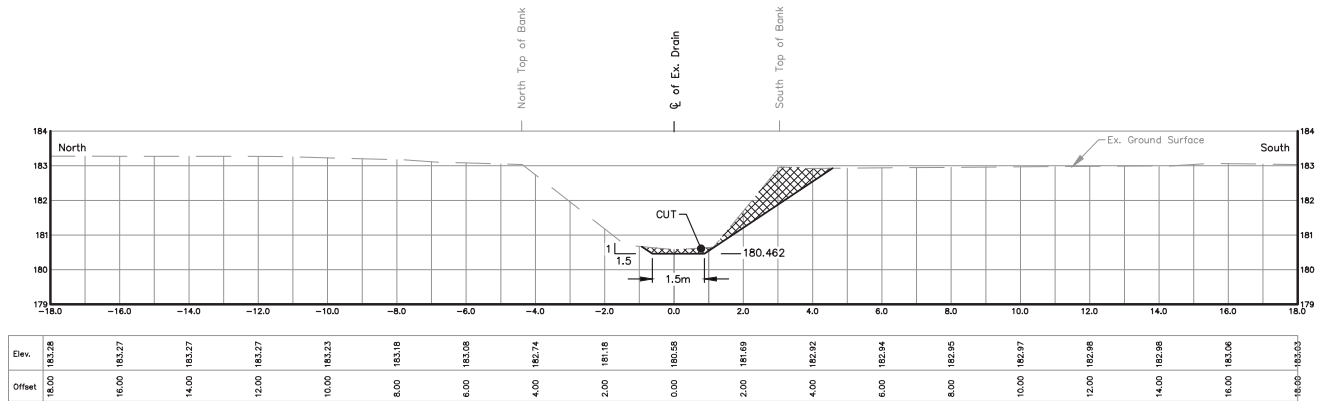


STA. 8+794.7
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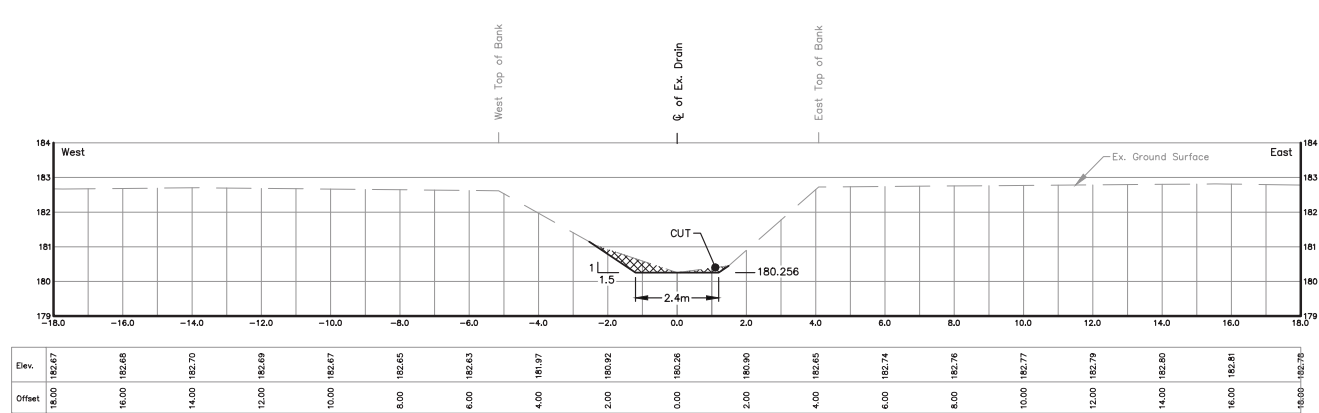
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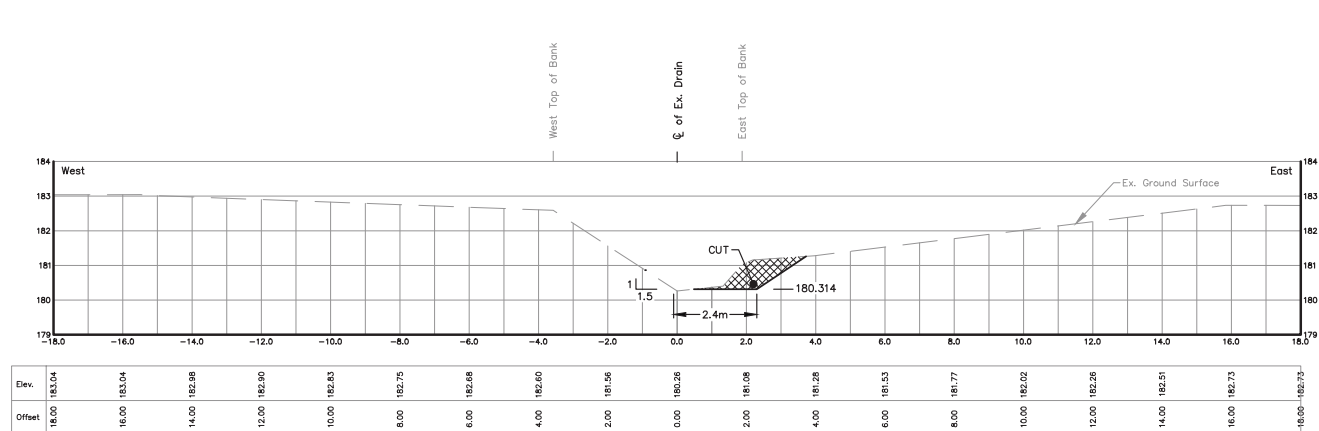
STA. 8+784.8
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STA. 8+739.5
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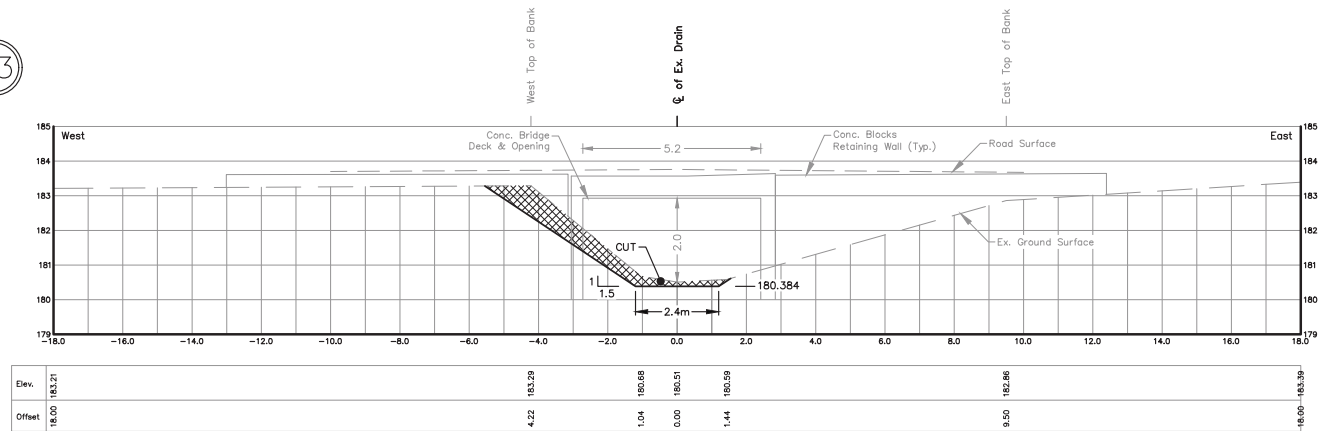


STA. 8+913.3
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STA. 8+864.3
Scale = 1:100

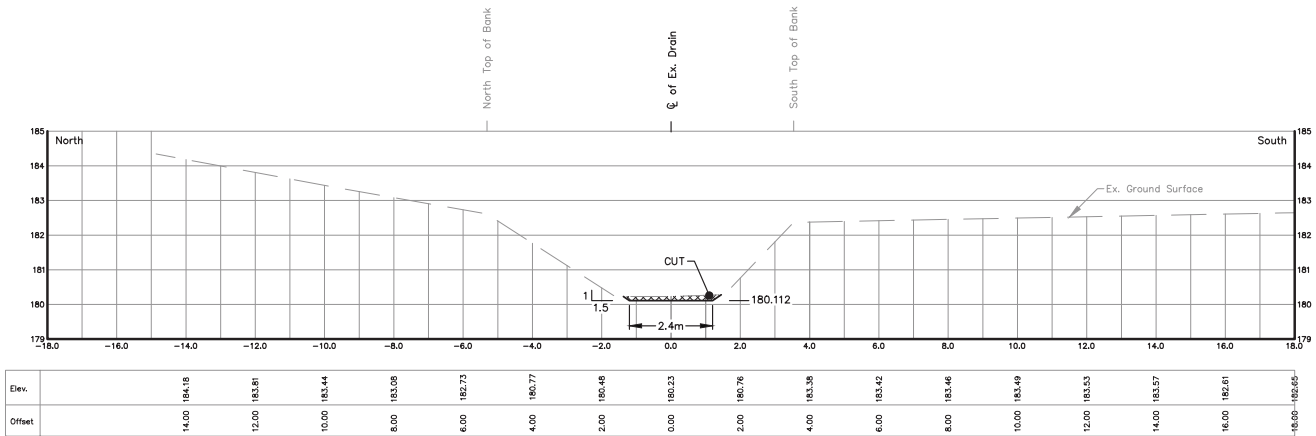
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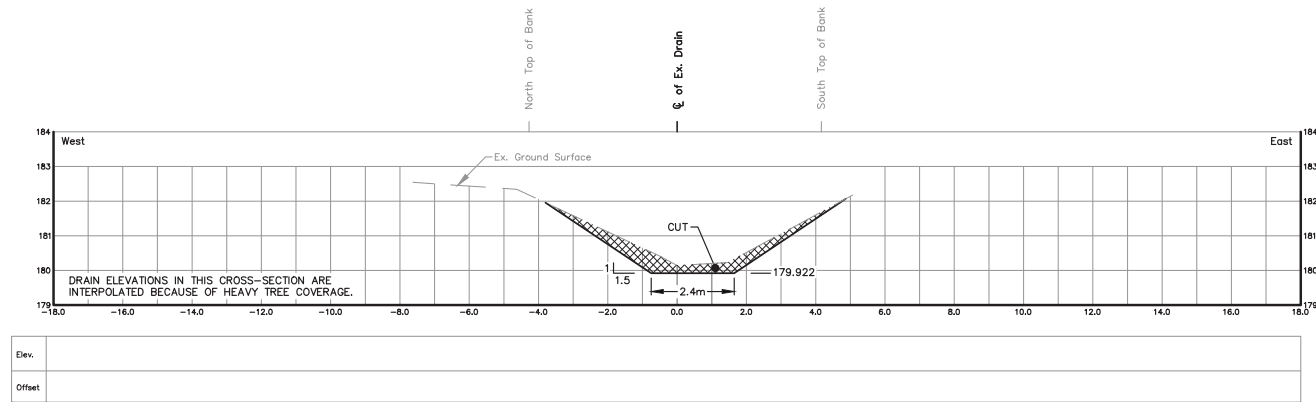
STA. 8+804.8
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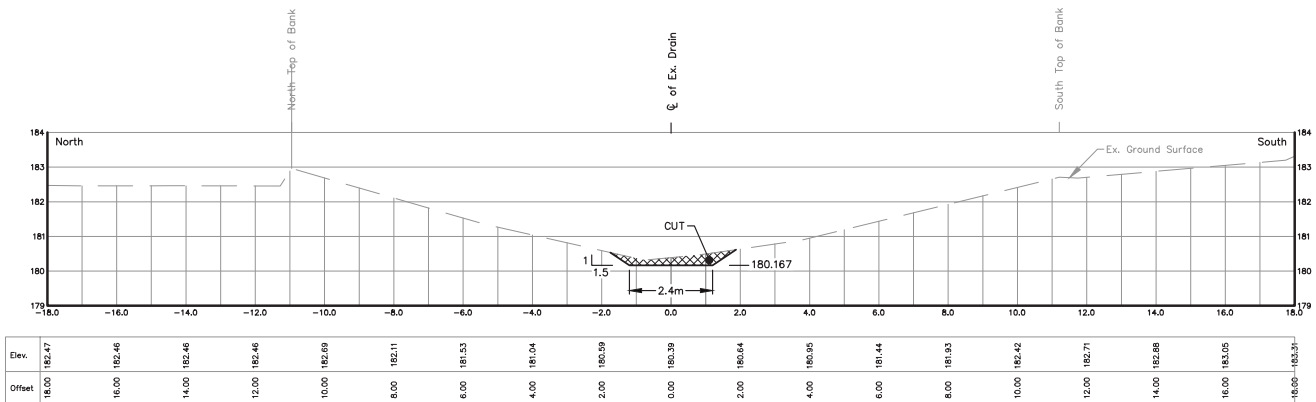
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
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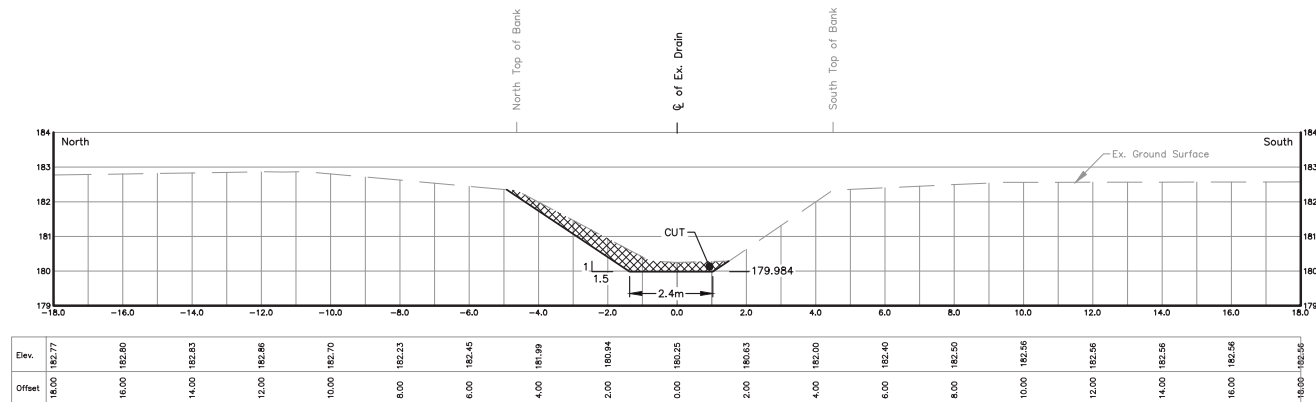
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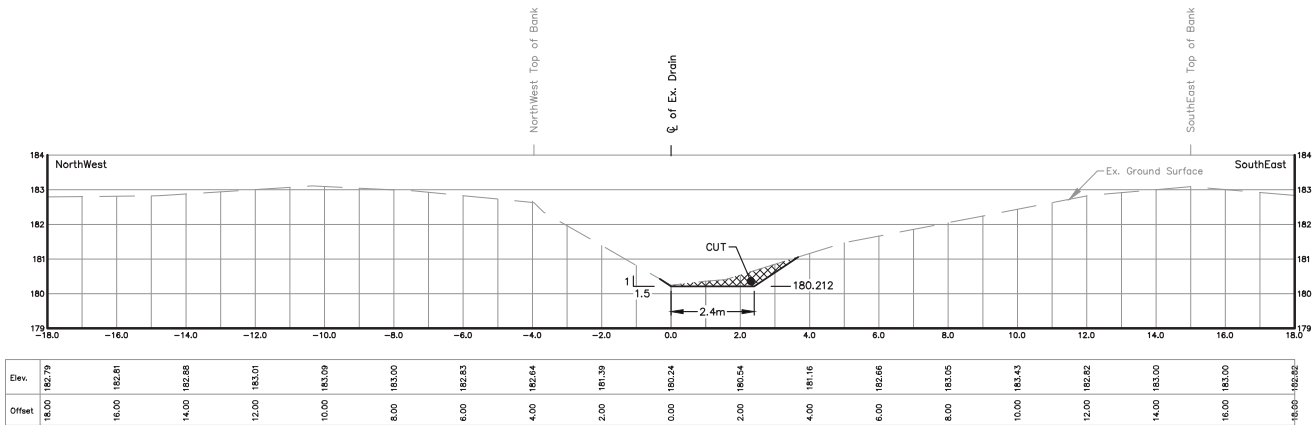
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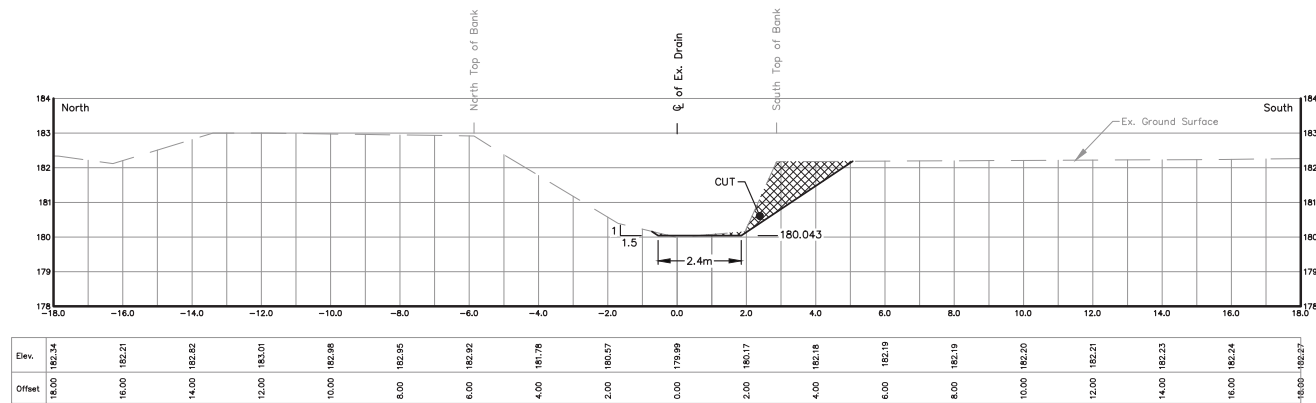
STA. 8+988.1
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STA. 9+140.4
Scale = 1:100

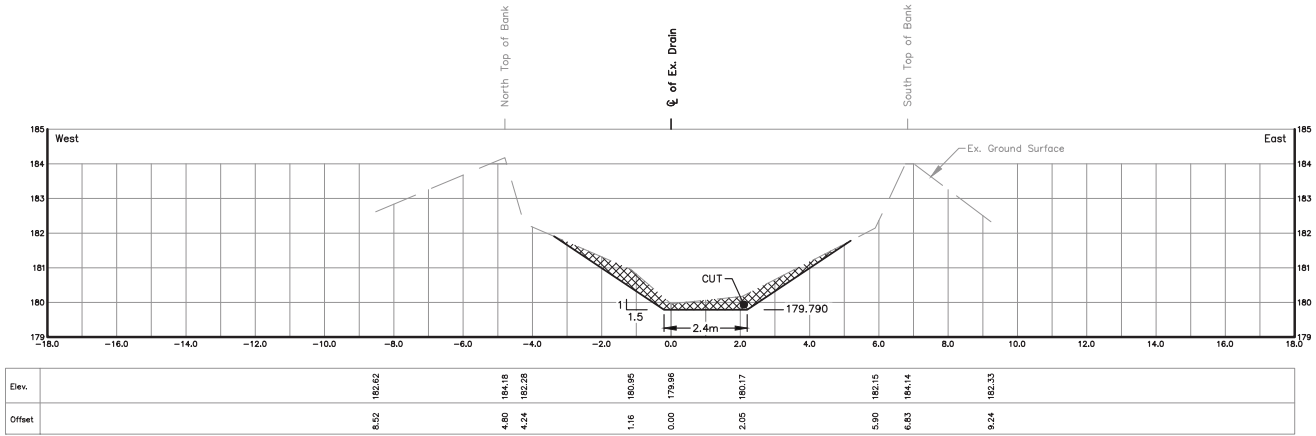


STA. 8+950.4
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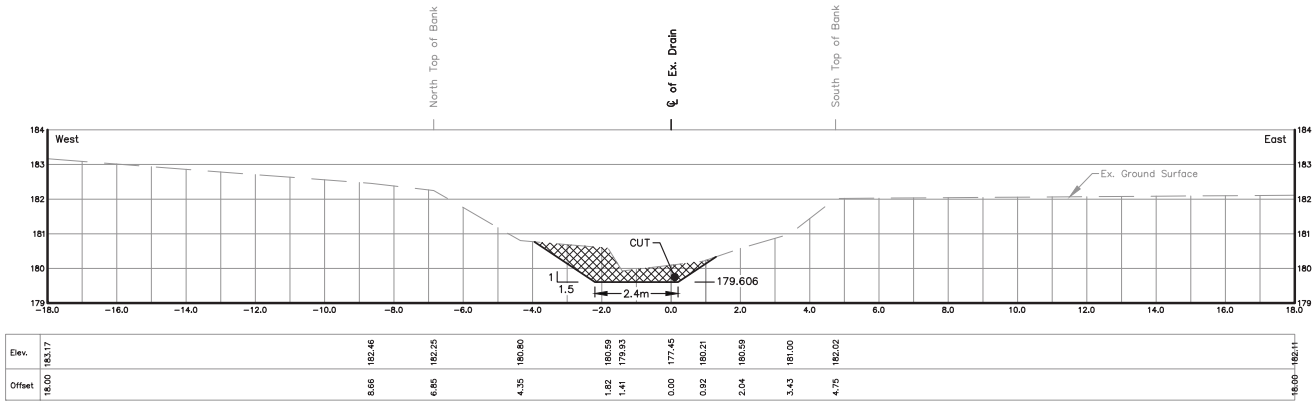


STA. 9+091.7
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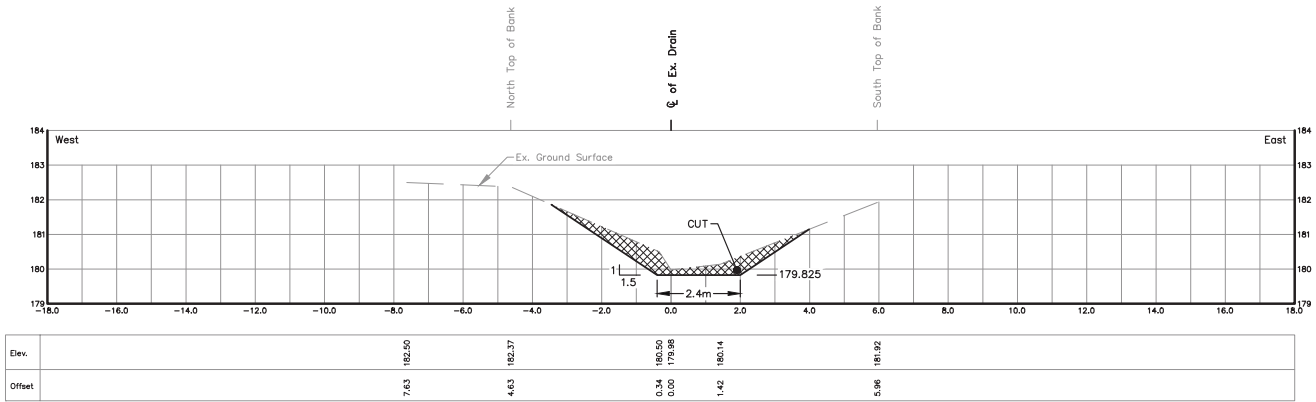
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI20150010 - Sections\B.dwg 2/21/15 1:16



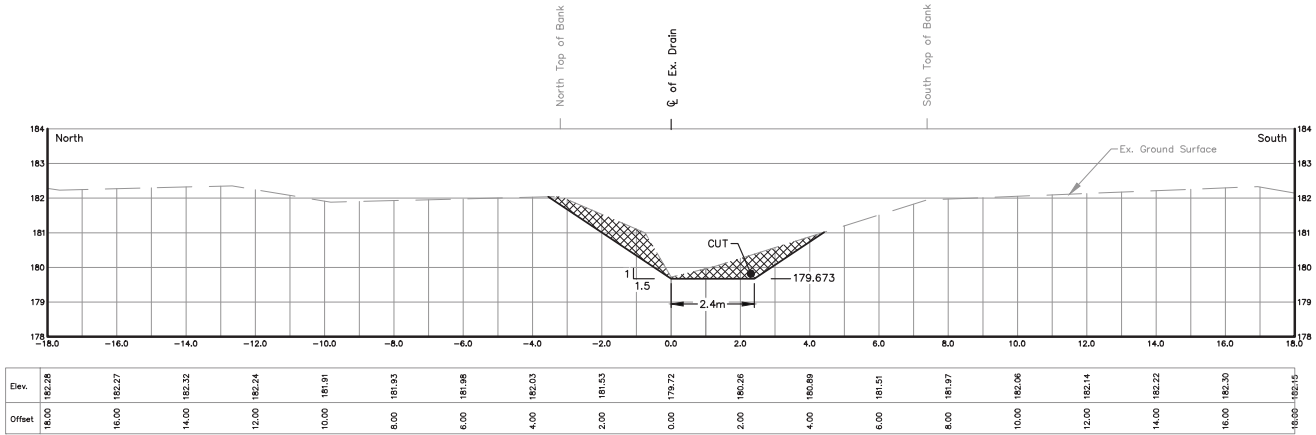
STA. 9+306.3
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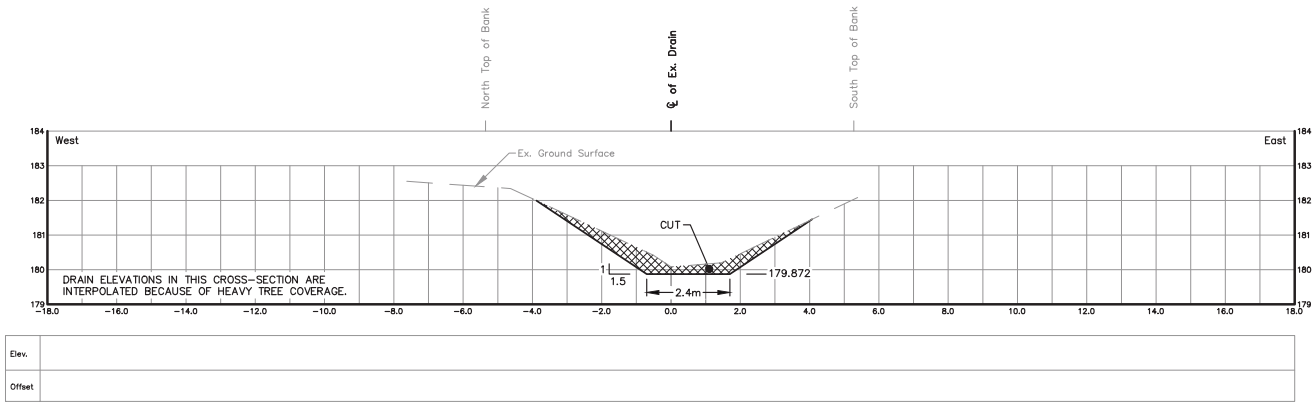
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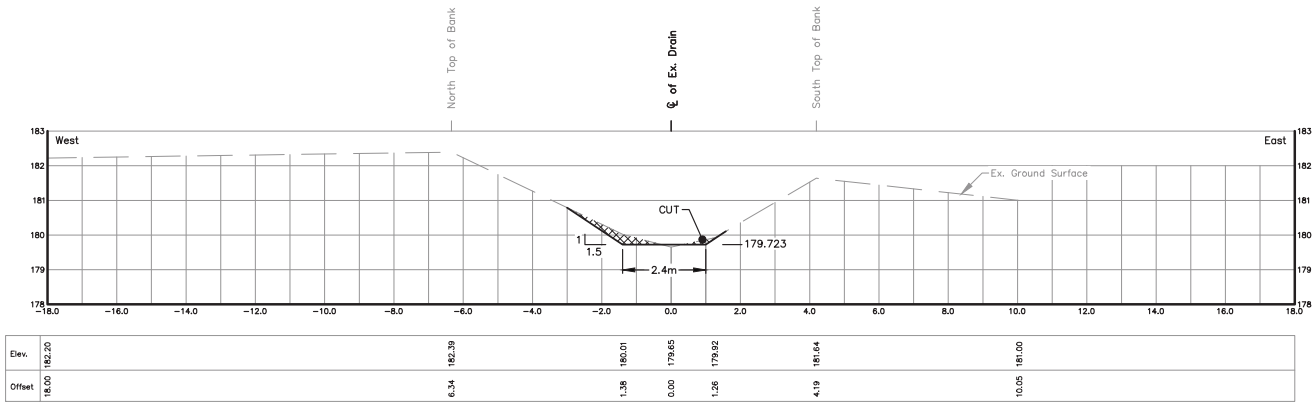
STA. 9+277.0
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STA. 9+401.6
Scale = 1:100



STA. 9+237.0
Scale = 1:100



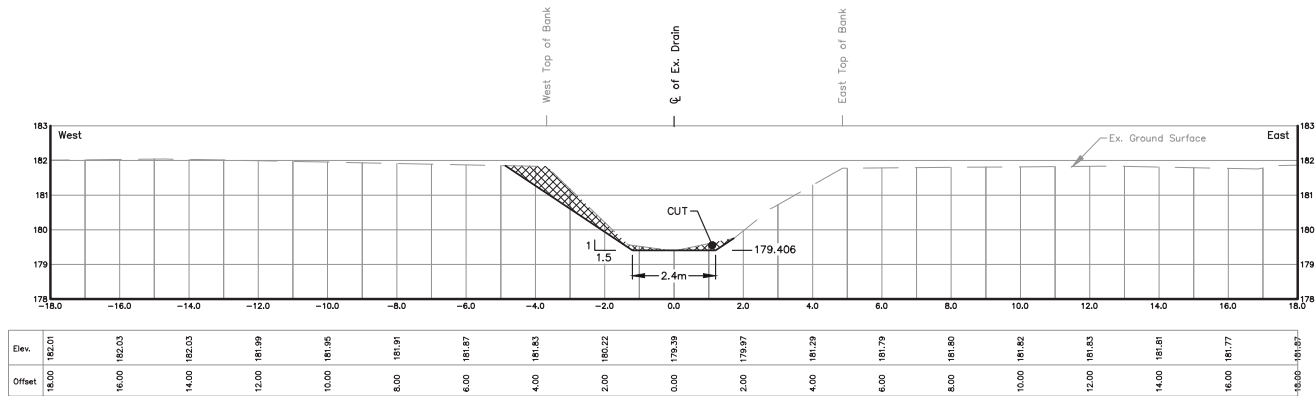
STA. 9+362.8
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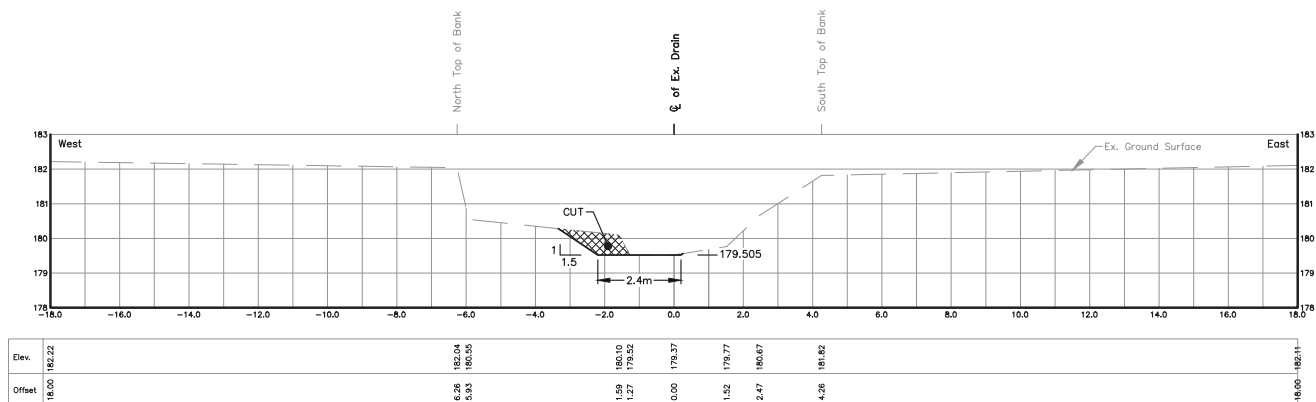
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG

FILE No.: SHEET No.:
2015D010 45 OF 51

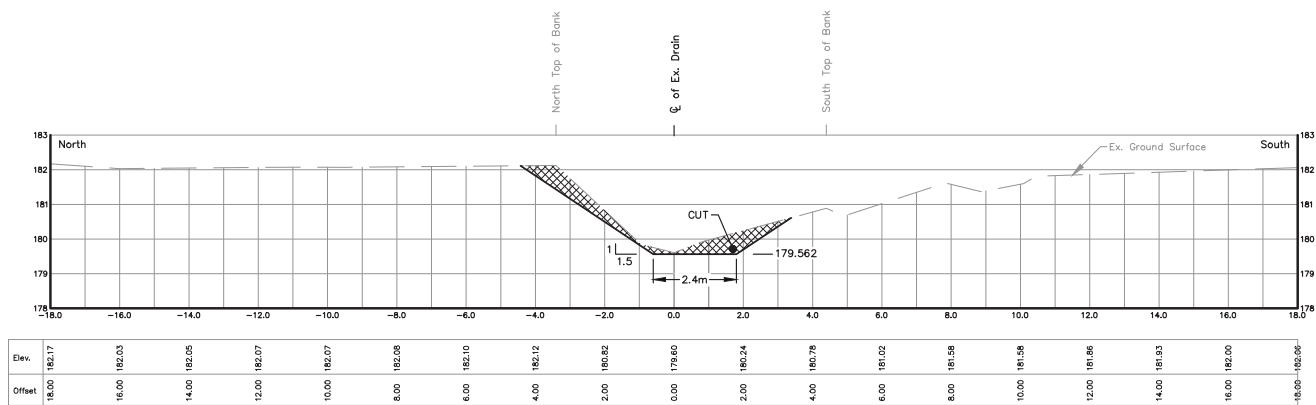
C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI-20150010 Sections\Bearing 2021-105-16



STA. 9+562.0
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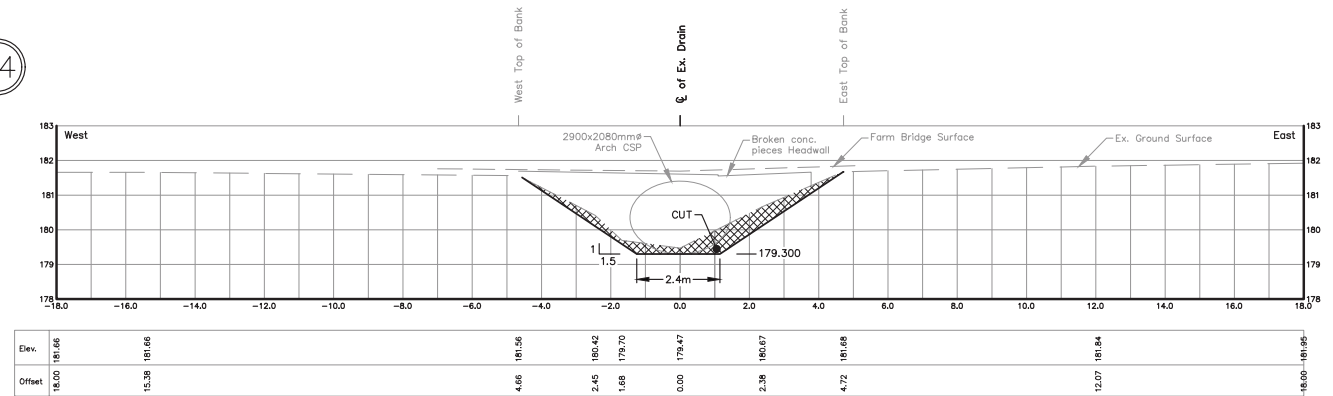


STA. 9+524.5
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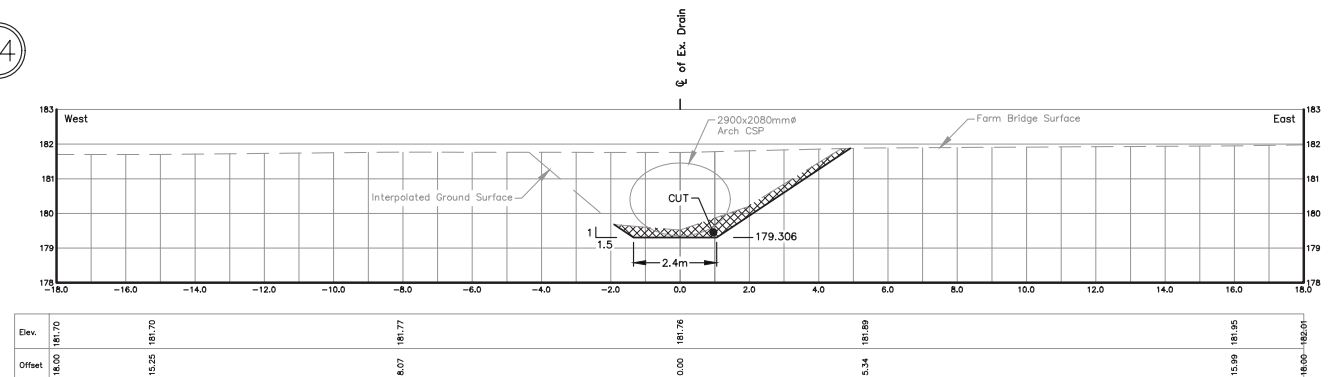
STA. 9+499.1
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24



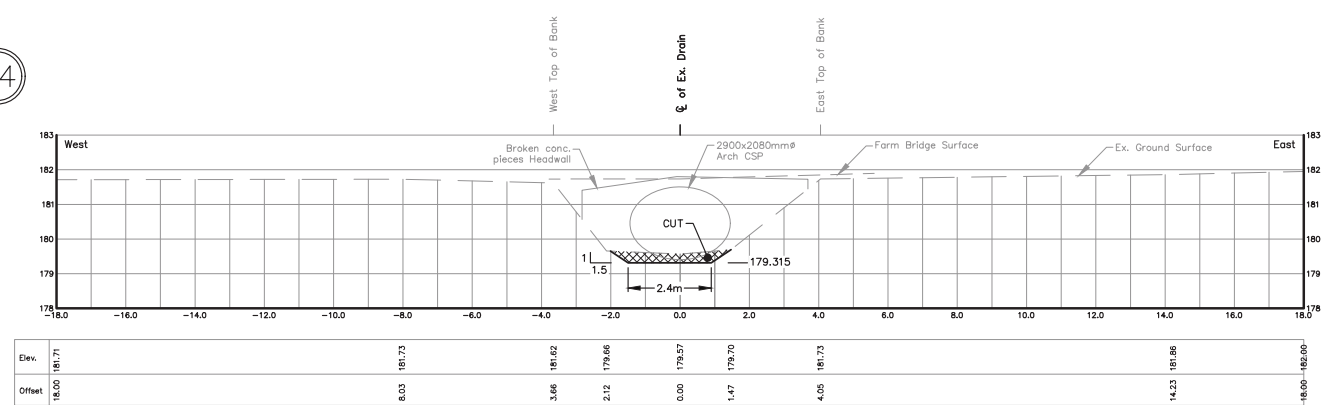
STA. 9+608.6
Scale = 1:100

24



STA. 9+606.1
Scale = 1:100

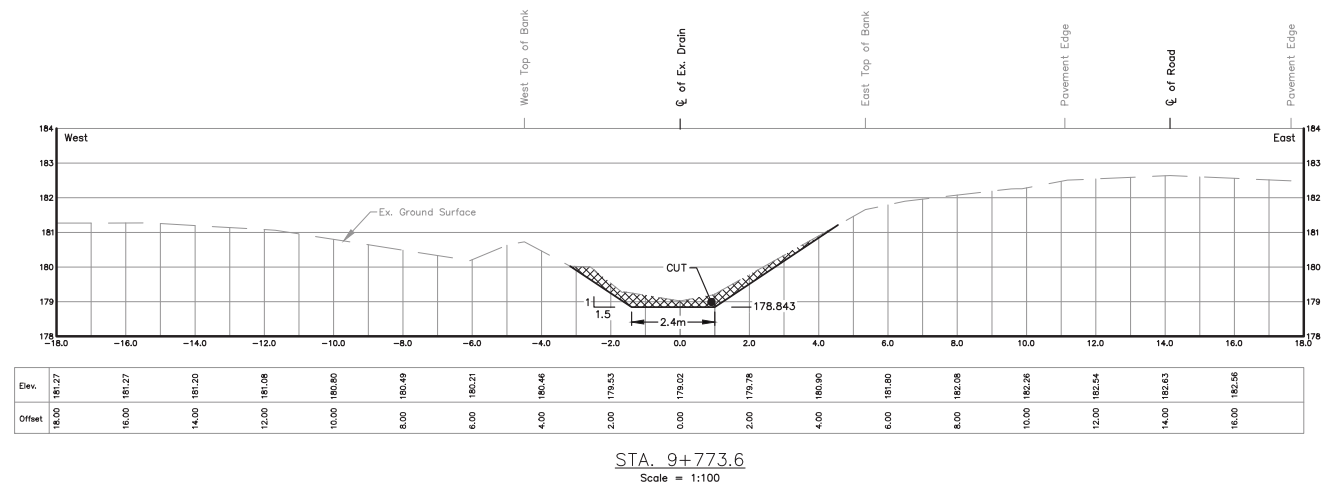
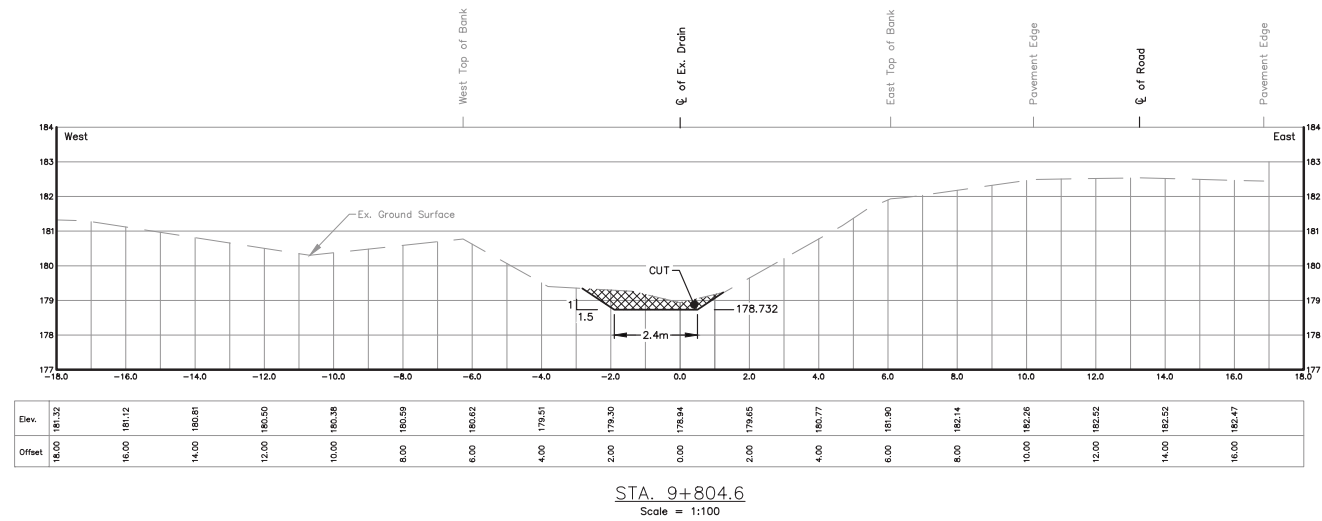
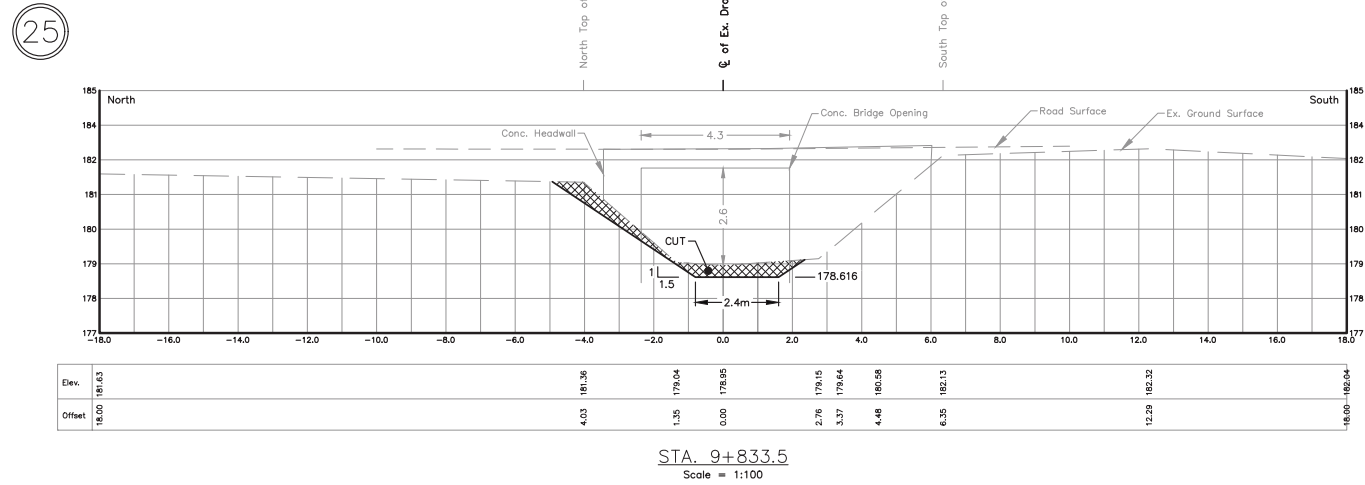
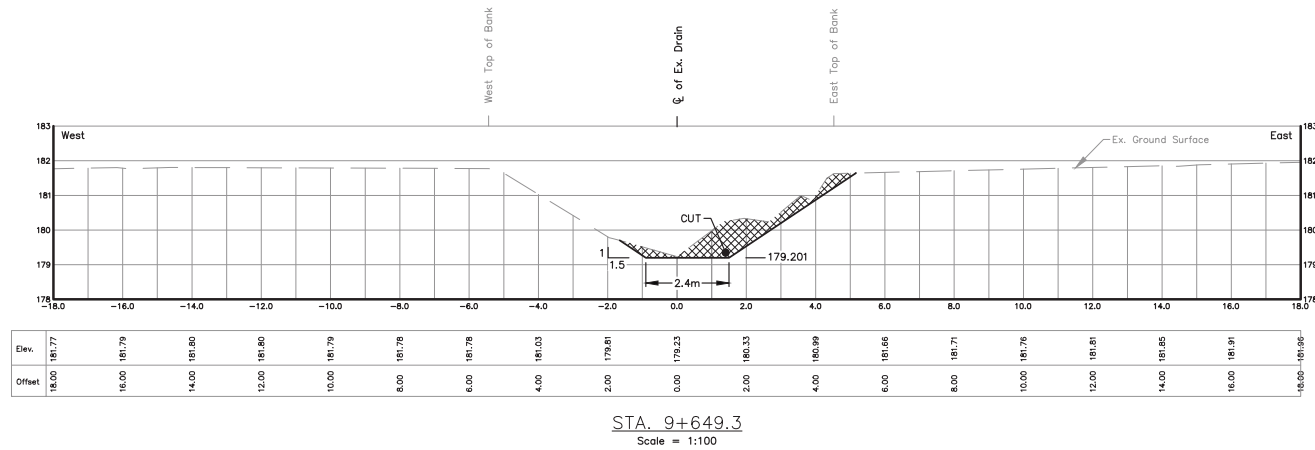
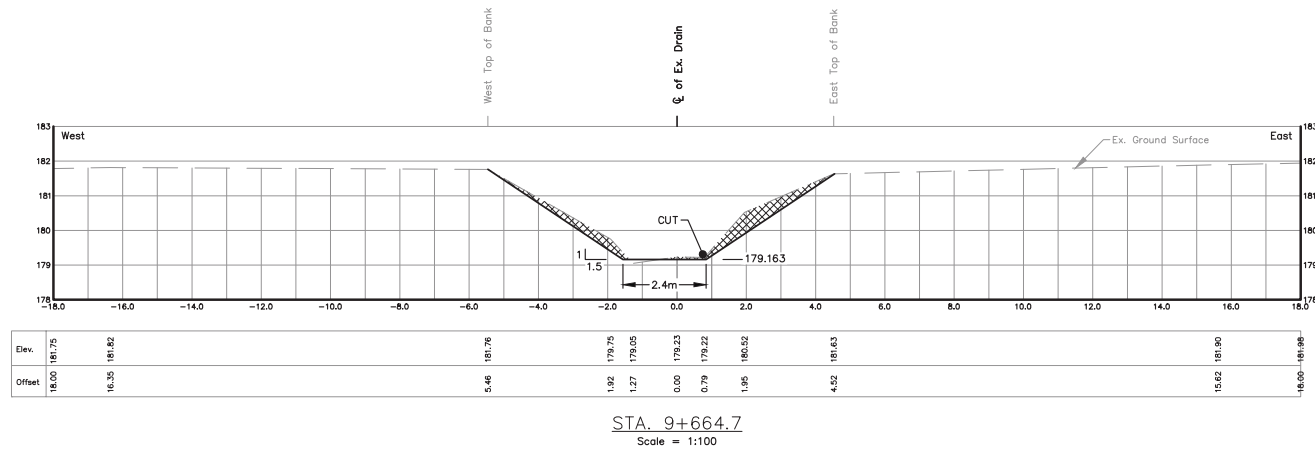
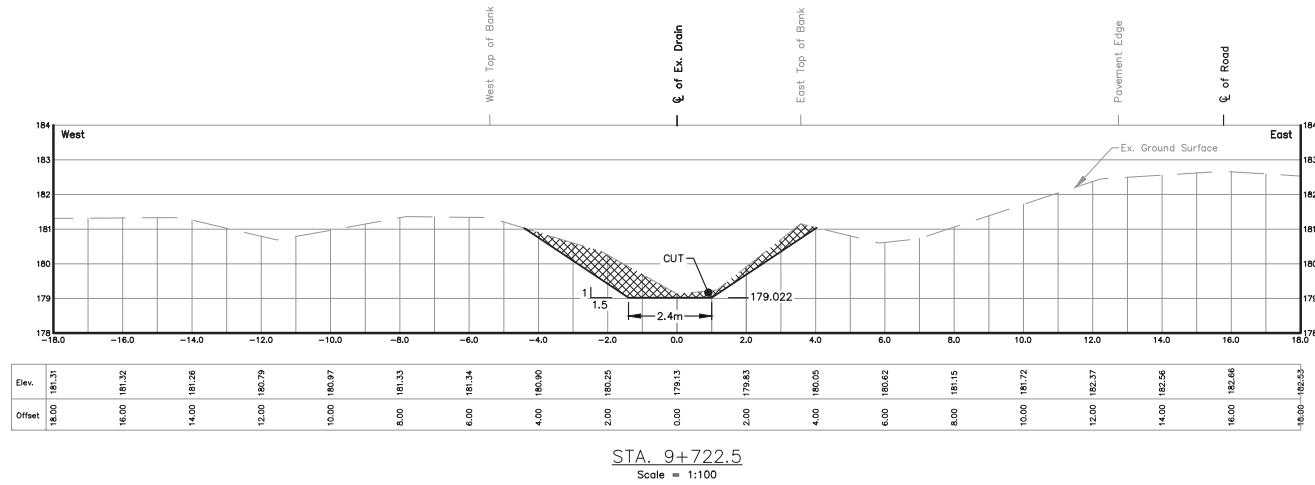
24



STA. 9+602.5
Scale = 1:100

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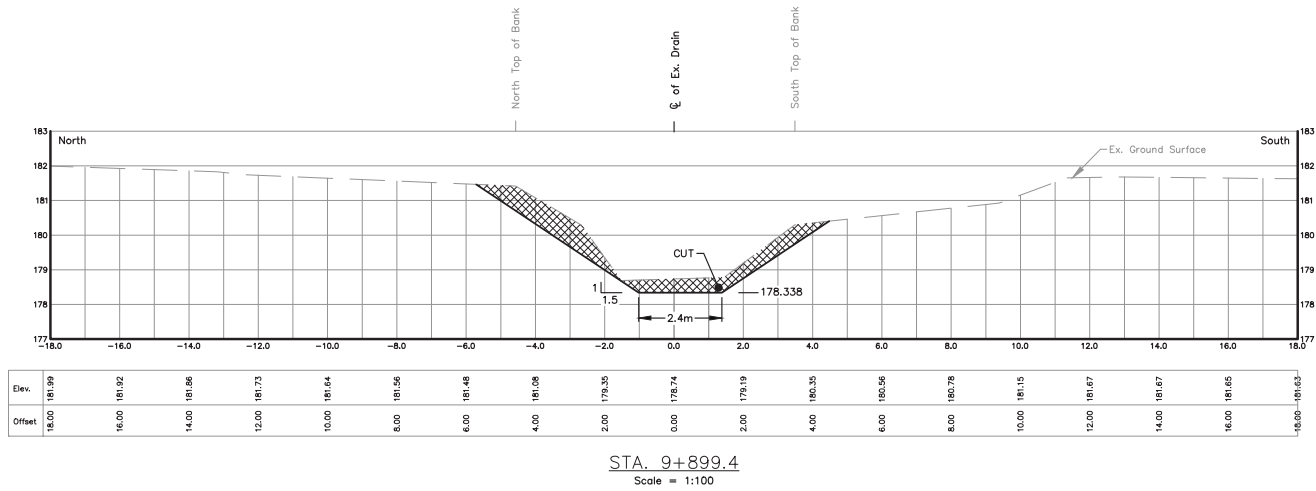
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 46 OF 51



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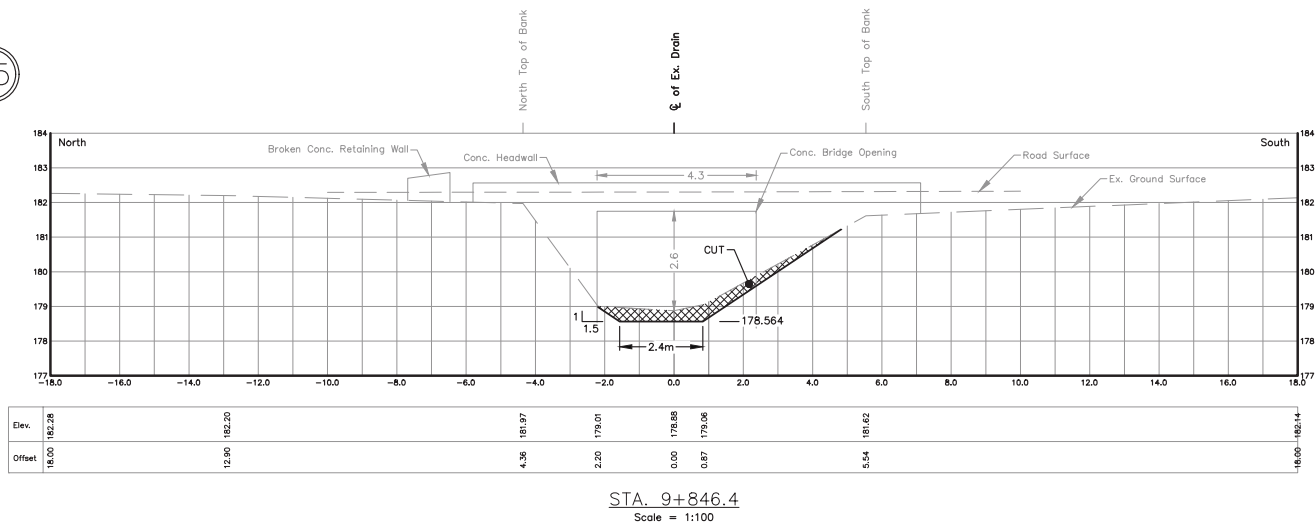
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: SHEET No.:
2015D010 47 OF 51

C:\Users\John\Desktop\REI-20150010 - Sullivan Creek Drain\REI-20150010 Sections\B.dwg 2/23/15 1:16

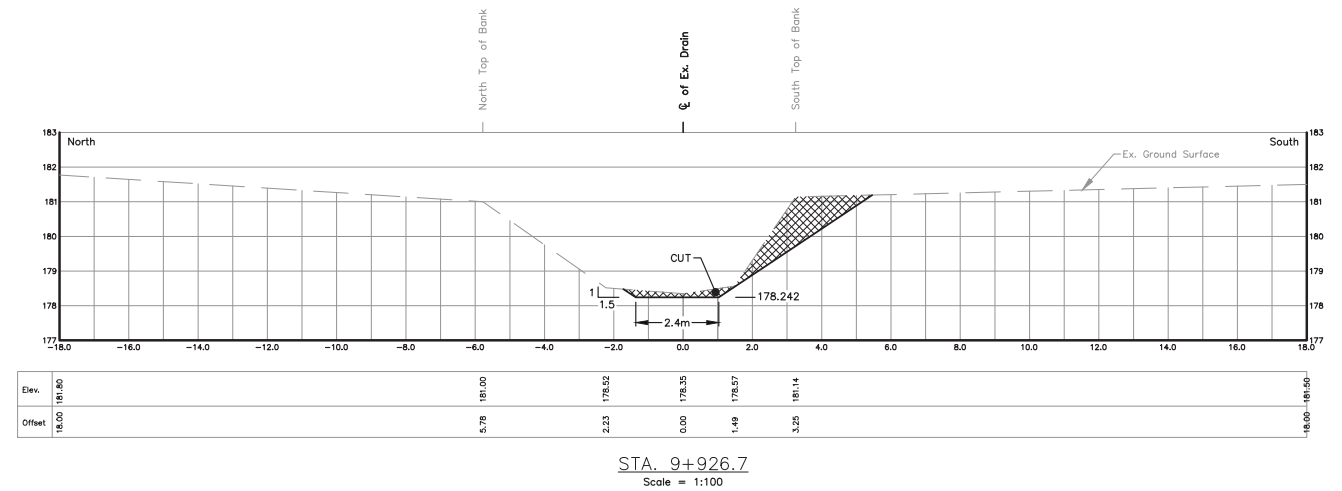
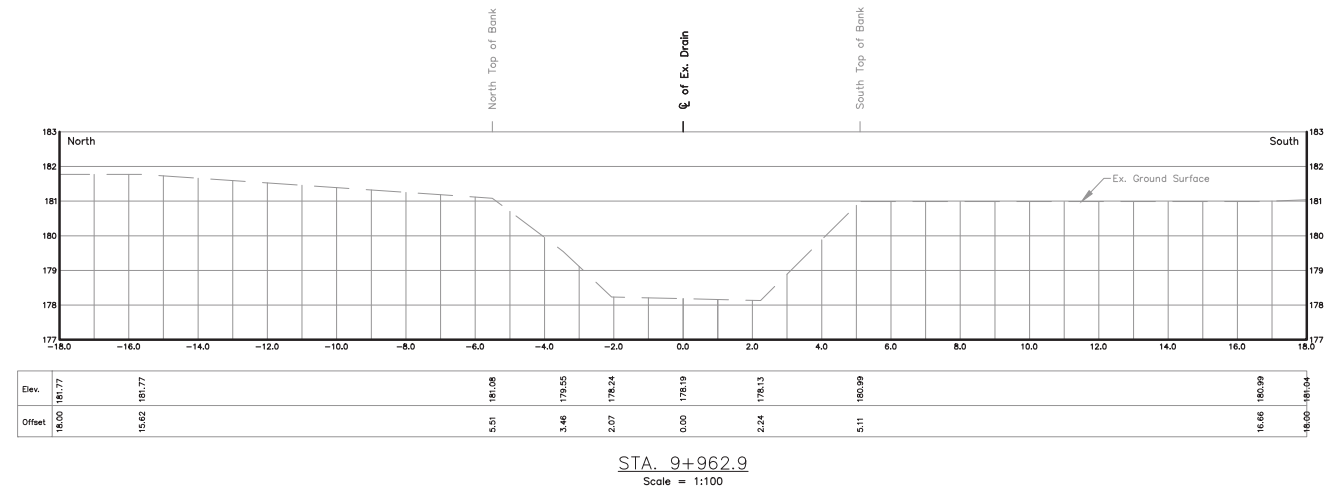
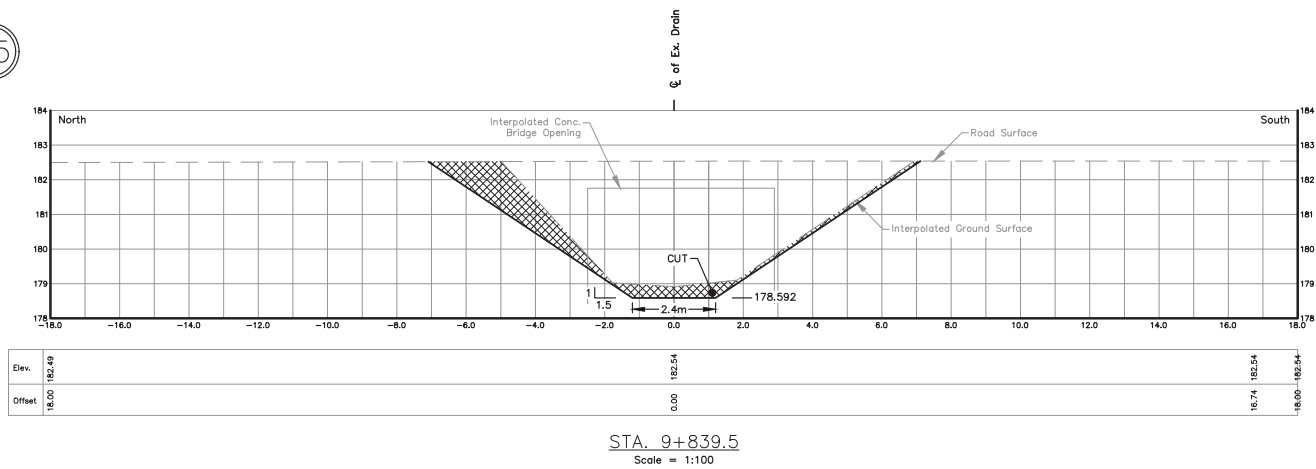


END OF SULLIVAN CREEK DRAIN

25

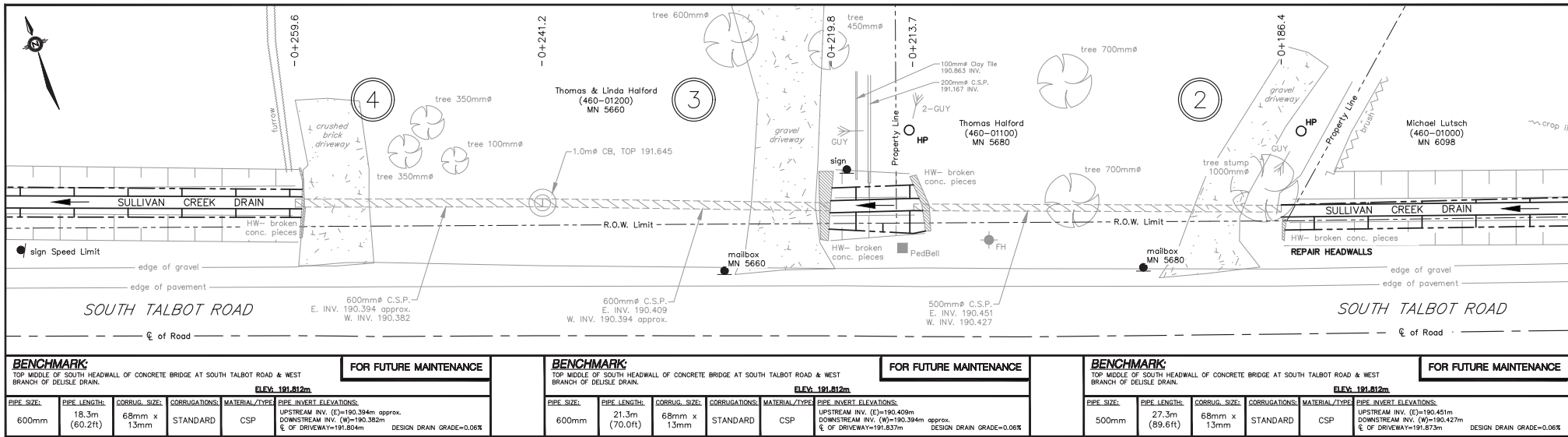


25



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FILE No.: SHEET No.:
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BRIDGE #4 PLAN

SCALE=1:200

BRIDGE #3 PLAN

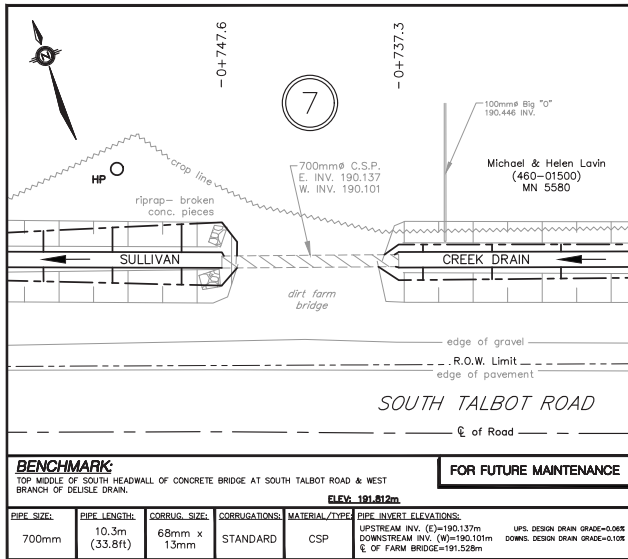
SCALE=1:200

BRIDGE #2 PLAN

SCALE=1:200

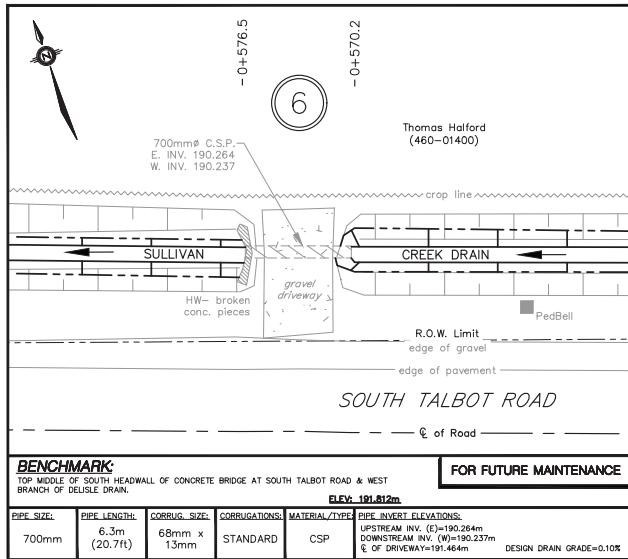
BRIDGE #1 PLAN

SCALE=1:200



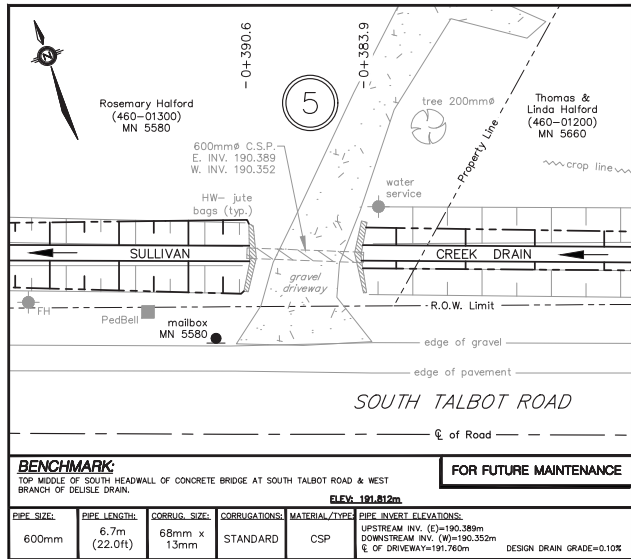
BRIDGE #7 PLAN

SCALE=1:200



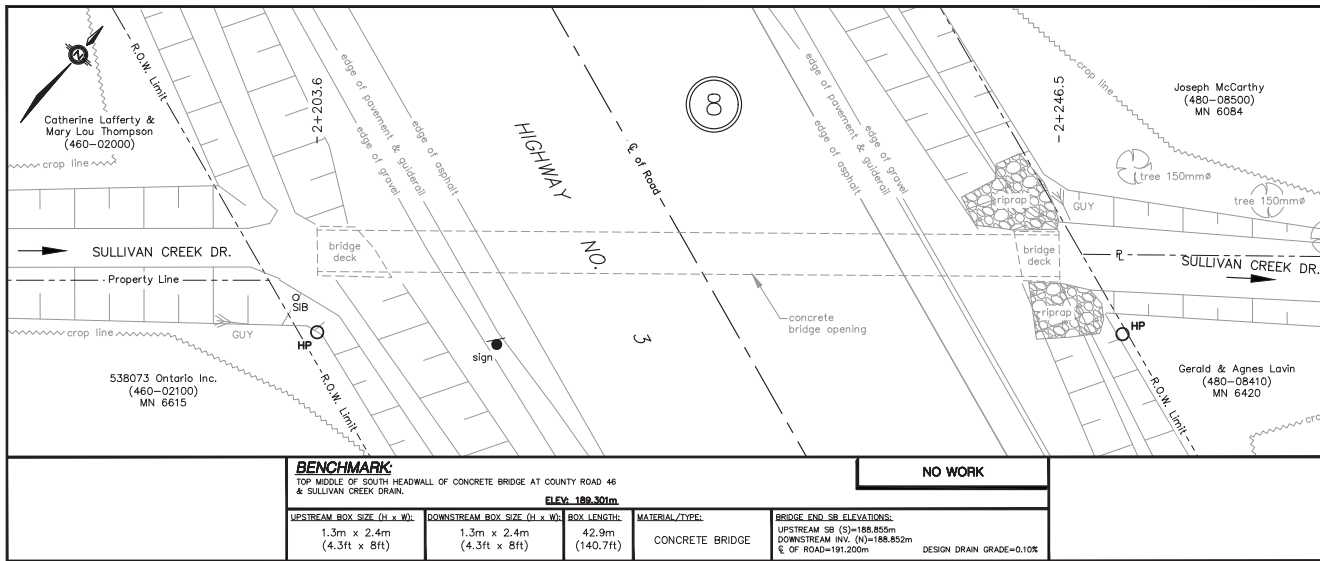
BRIDGE #6 PLAN

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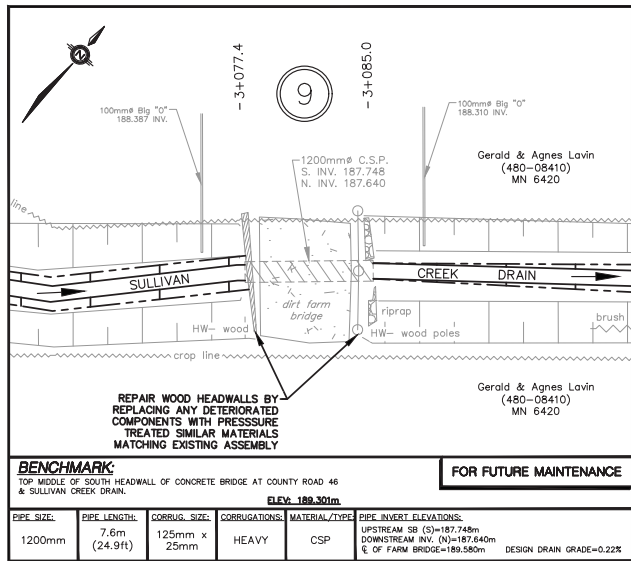
BRIDGE #5 PLAN

SCALE=1:200



BRIDGE #8 PLAN

SCALE=1:200

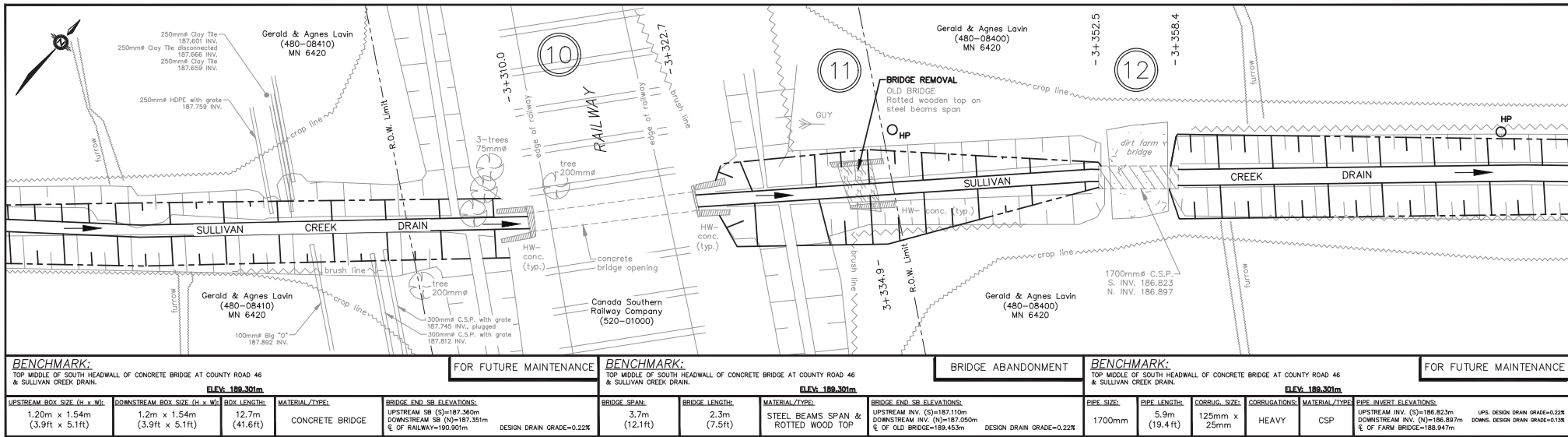


BRIDGE #9 PLAN

SCALE=1:200

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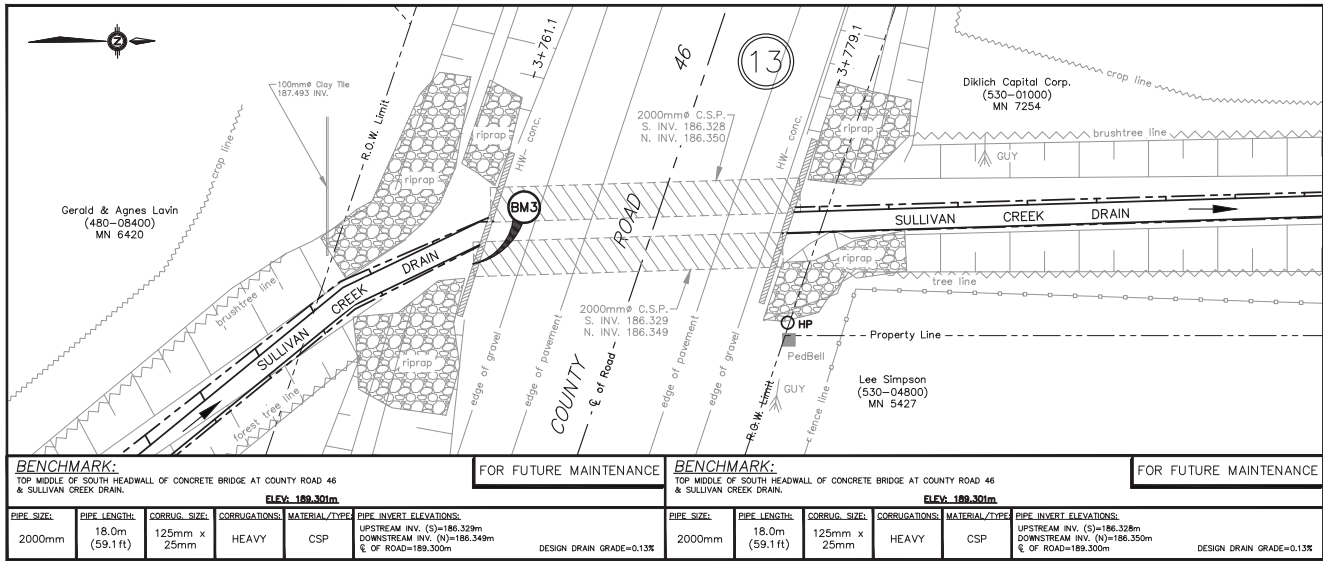
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 49 OF 51



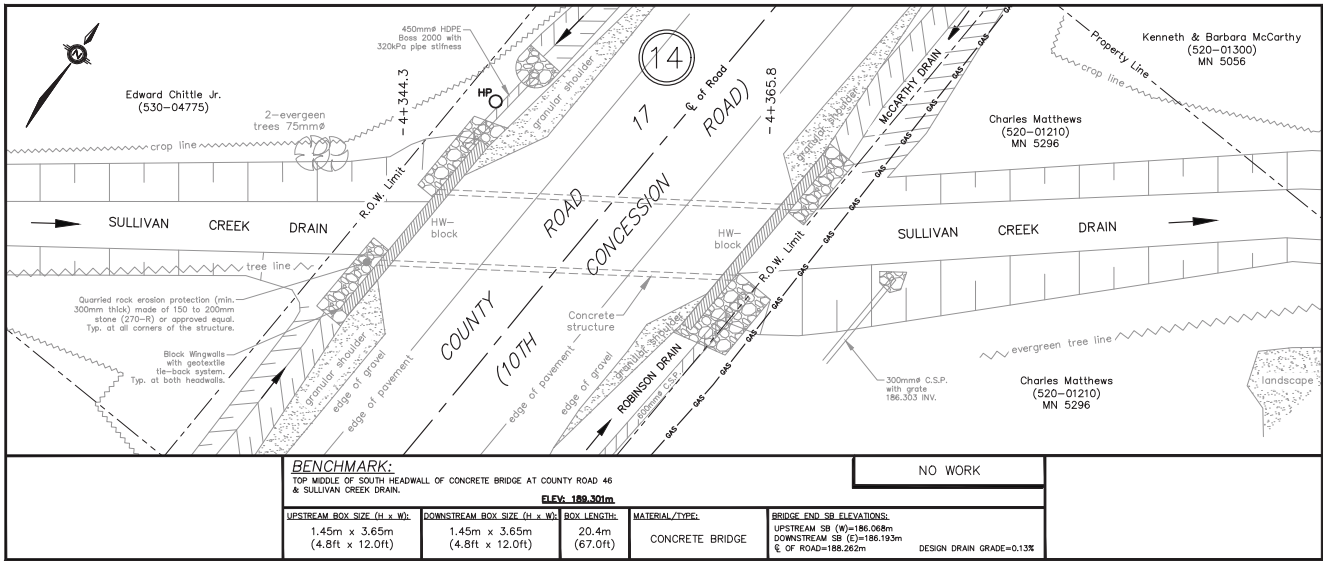
BRIDGE #10 PLAN
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BRIDGE #11 PLAN
SCALE=1:200

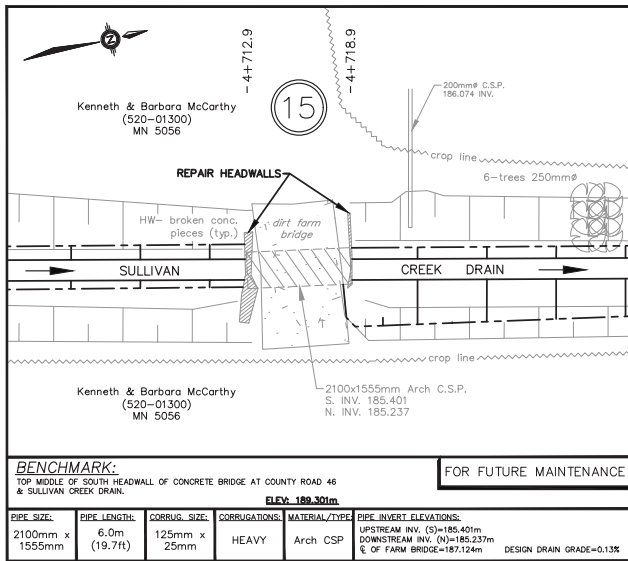
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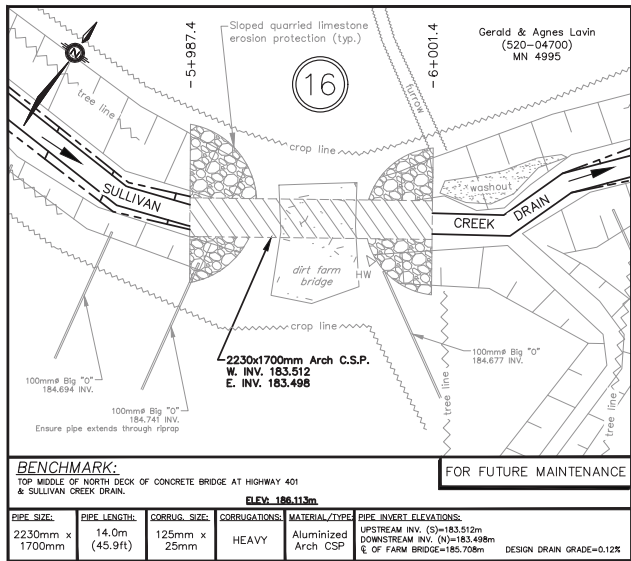
BRIDGE #13 PLAN
SCALE=1:200



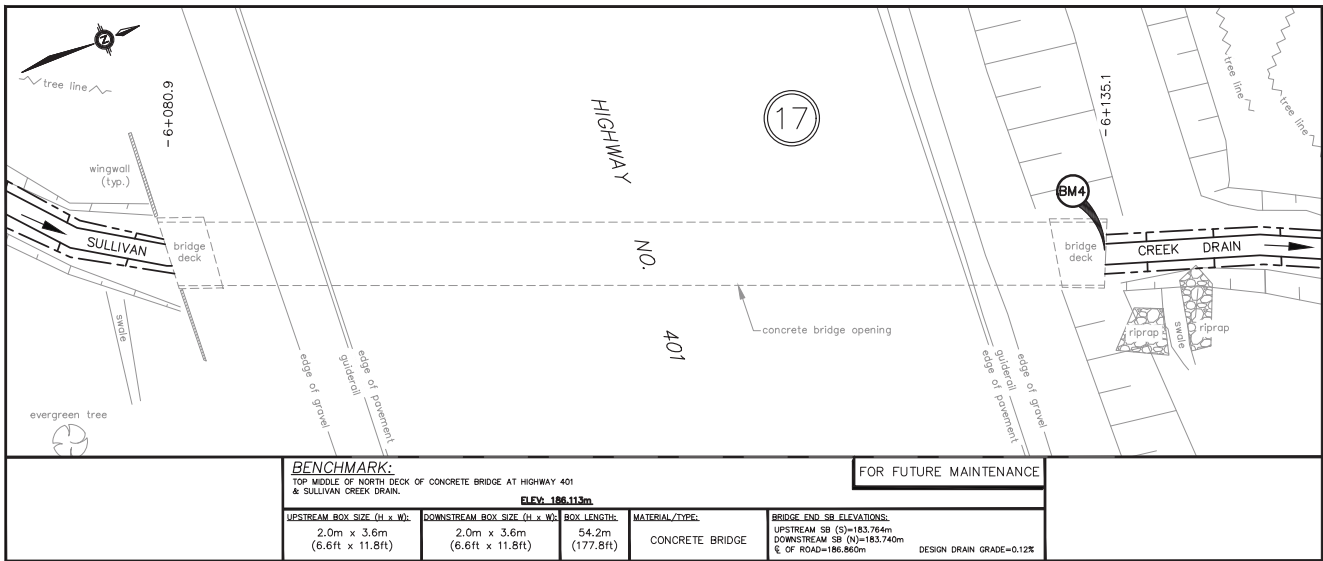
BRIDGE #14 PLAN
SCALE=1:200



BRIDGE #15 PLAN
SCALE=1:200



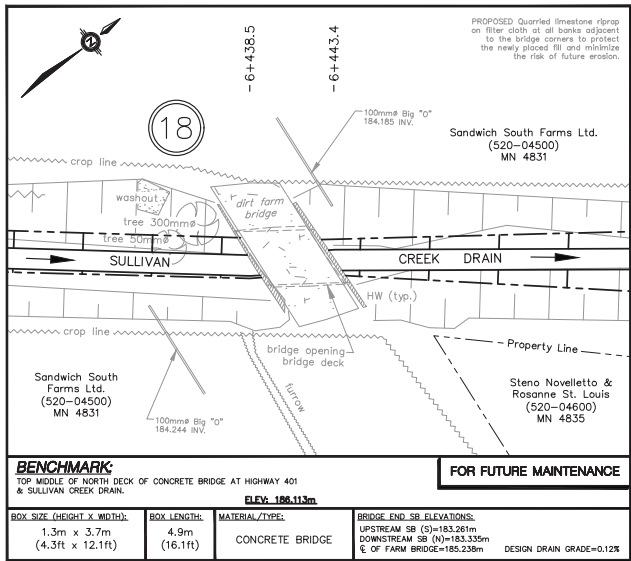
BRIDGE #16 PLAN
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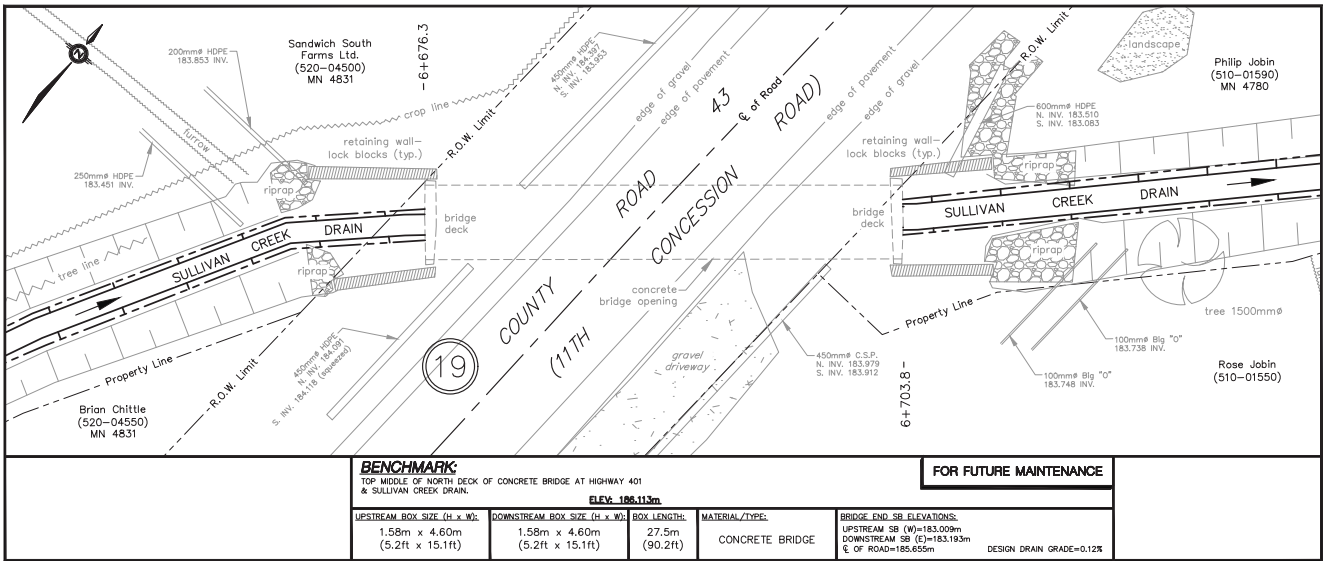
BRIDGE #17 PLAN
SCALE=1:200

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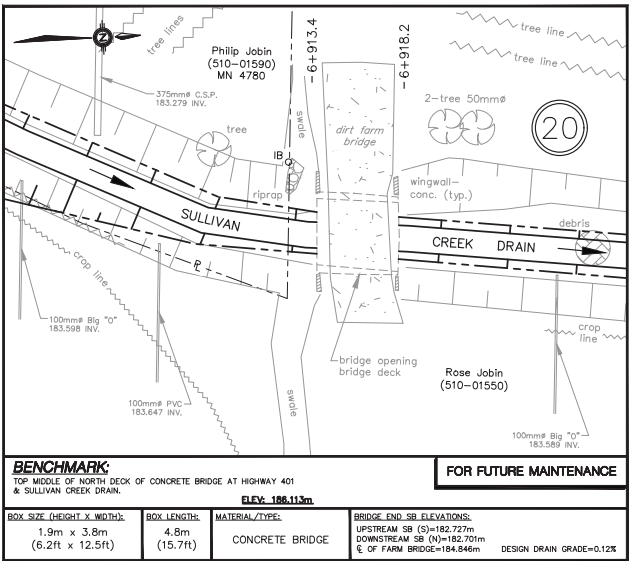
DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 50 OF 51



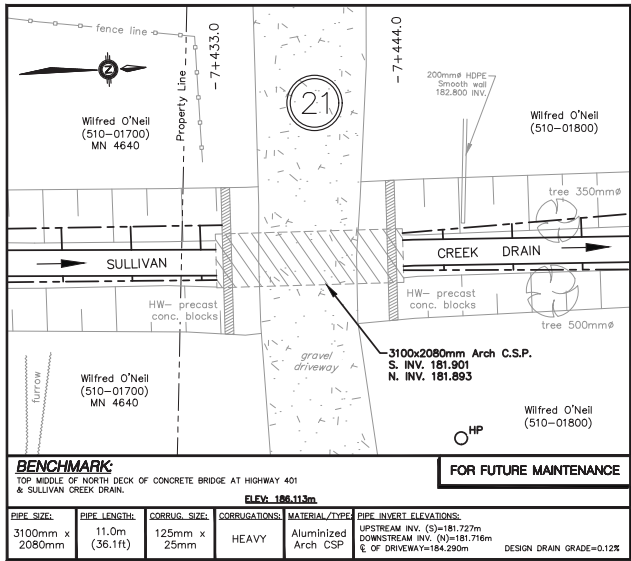
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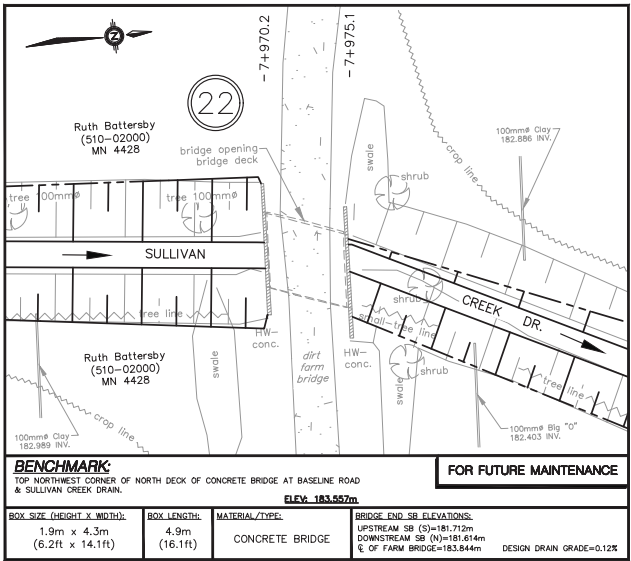
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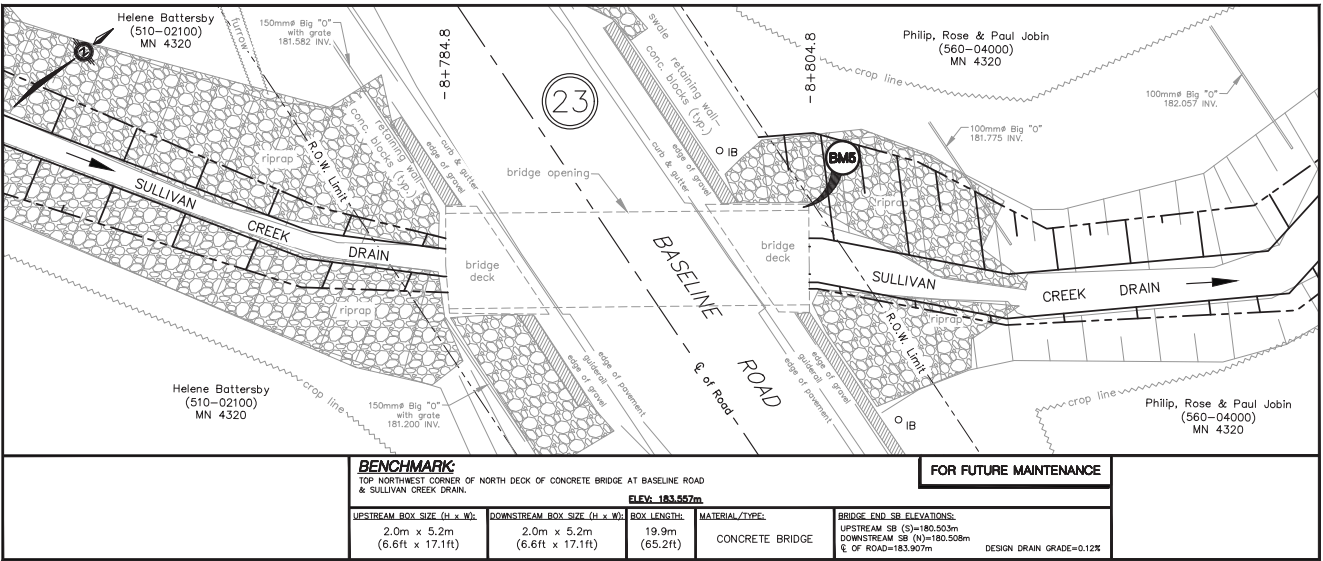
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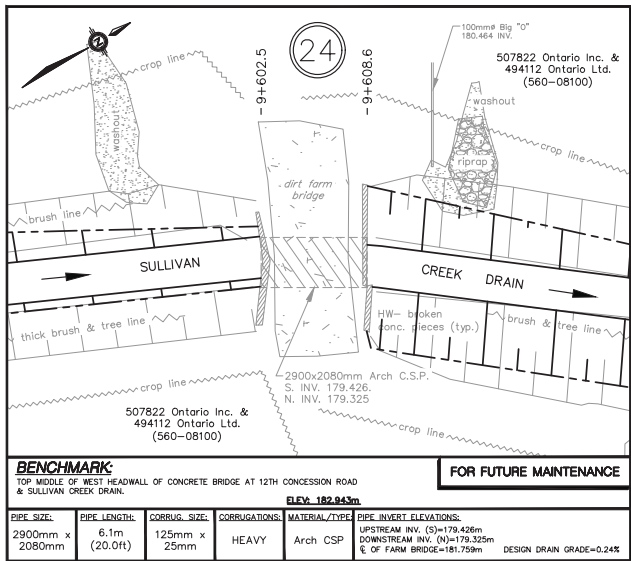
BRIDGE #21 PLAN
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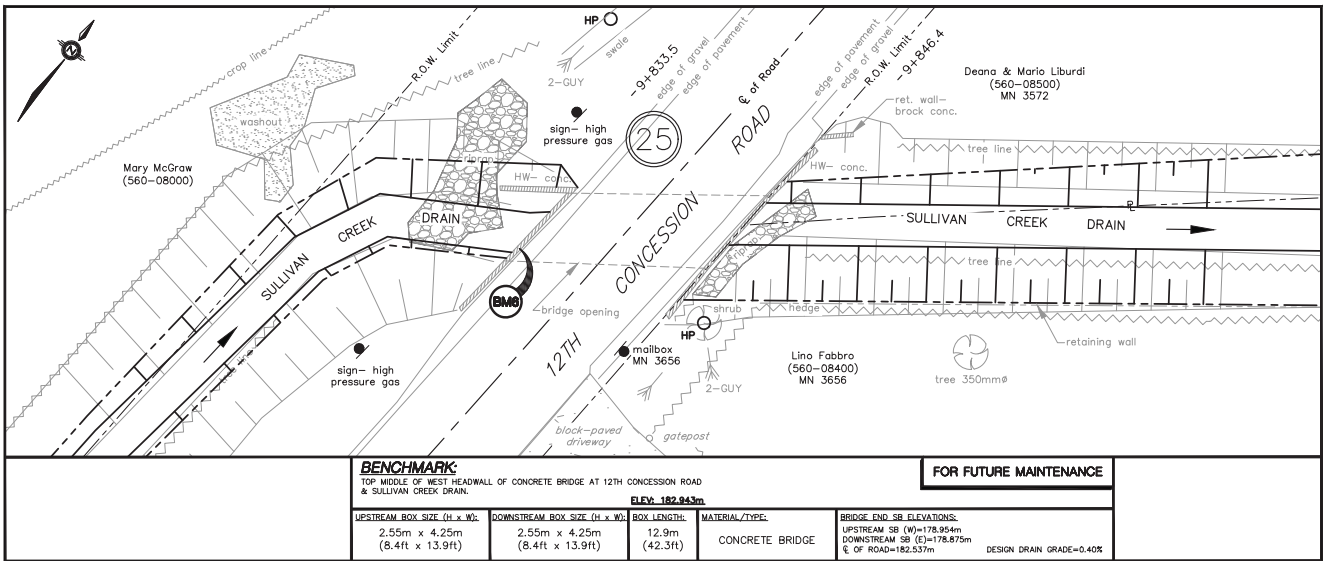
BRIDGE #22 PLAN
SCALE=1:200



BRIDGE #23 PLAN
SCALE=1:200



BRIDGE #24 PLAN
SCALE=1:200



BRIDGE #25 PLAN
SCALE=1:200

WATERSHED PLAN & PROJECT AREA FOR EXCESS SOILS

OF THE

SULLIVAN CREEK DRAIN

(Geographic Township of Sandwich South)

IN THE

TOWN OF TECUMSEH

IN THE

COUNTY OF ESSEX • ONTARIO

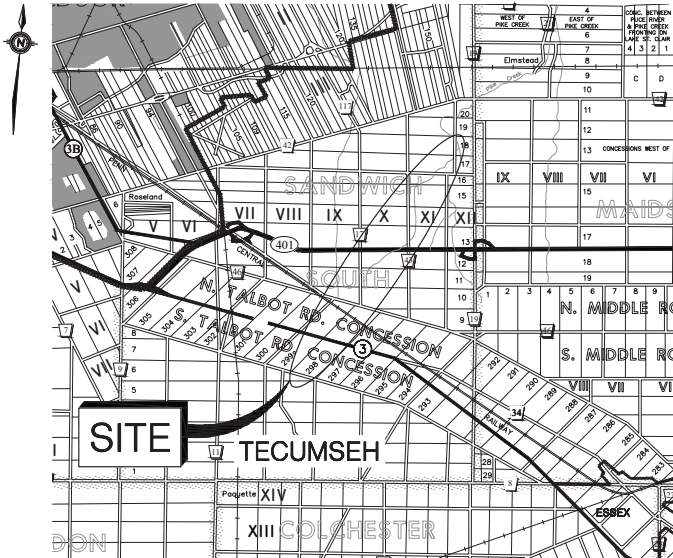
ROOD
ENGINEERING
INC.

CONSULTING ENGINEERS
Leamington, Ontario
519-322-1621

DATE: January 9th, 2023

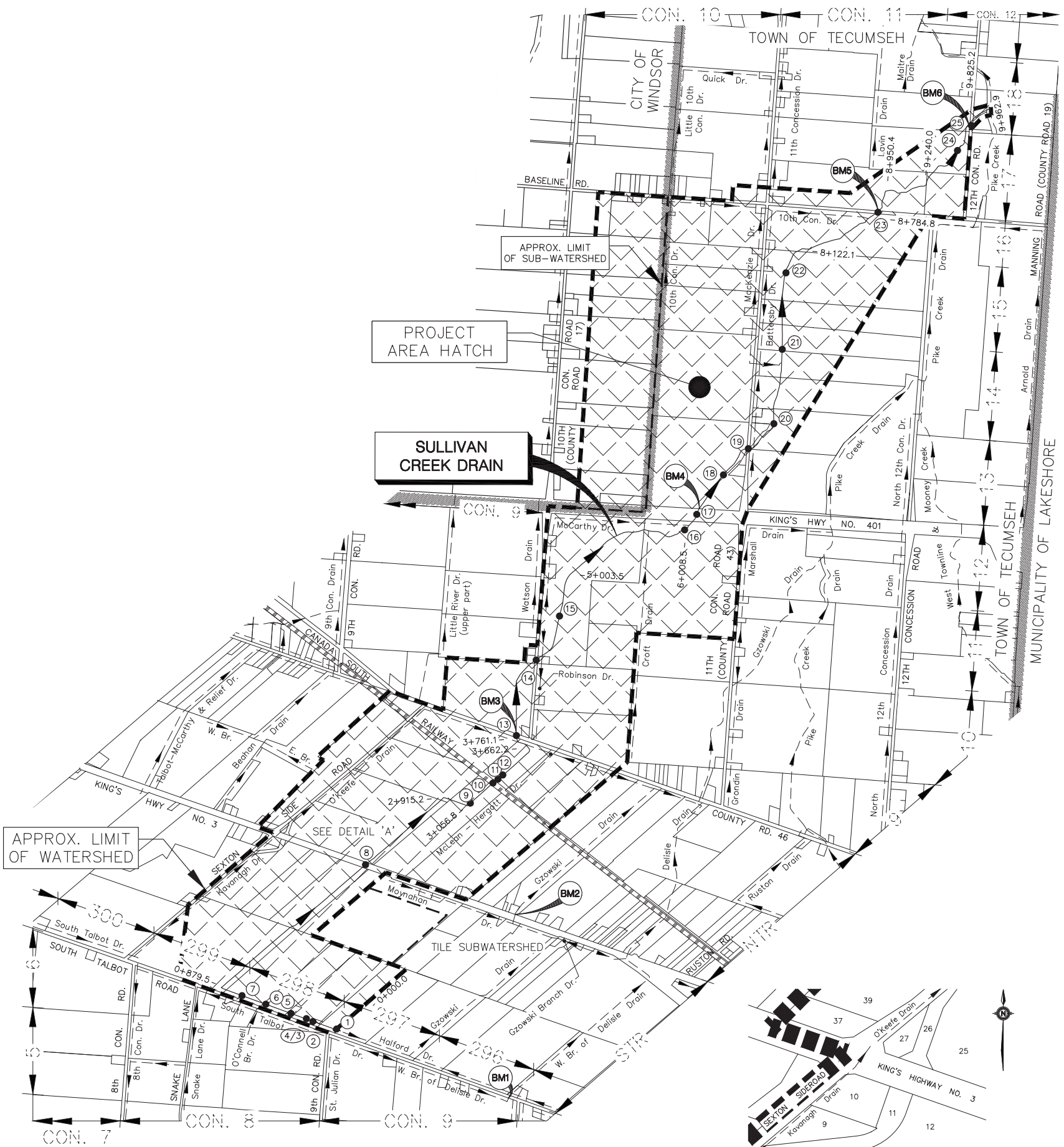
BENCHMARKS:

1. TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT SOUTH TALBOT ROAD & WEST BRANCH OF DELISLE DRAIN.
ELEV. = 191.812m
2. CUT CROSS AT TOP NORTHEAST CORNER OF HEADWALL OF CONCRETE BRIDGE AT GZOWSKI DRAIN & NORTH SIDE OF HIGHWAY NO. 3.
ELEV. = 189.897m
3. TOP MIDDLE OF SOUTH HEADWALL OF CONCRETE BRIDGE AT COUNTY ROAD 46 & SULLIVAN CREEK DRAIN.
ELEV. = 189.301m
4. TOP MIDDLE OF NORTH DECK OF CONCRETE BRIDGE AT HIGHWAY 401 & SULLIVAN CREEK DRAIN.
ELEV. = 186.113m
5. TOP NORTHWEST CORNER OF NORTH DECK OF CONCRETE BRIDGE AT BASELINE ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 183.557m
6. TOP MIDDLE OF WEST HEADWALL OF CONCRETE BRIDGE AT 12TH CONCESSION ROAD & SULLIVAN CREEK DRAIN.
ELEV. = 182.943m



KEY MAP

SCALE=1:100,000



WATERSHED PLAN

SCALE=1:15,000

DETAIL 'A'

SCALE=1:3,000

THESE PLANS HAVE BEEN REDUCED
AND THE SCALE THEREFORE VARIES.
FULL SCALE PLANS MAY BE VIEWED
AT THE MUNICIPAL OFFICE.

DRAWN BY: G.S. & S.H.
PLOT CODE: 1:1
COMPUTER FILE: REI2015D010.DWG
FILE No.: 2015D010
SHEET No.: 52

APPENDIX “REI-F”



Soil Characterization Report

Sullivan Creek Drain E09SH(102)

Tecumseh, Ontario

Project No. OESAW2233

Prepared for:

Rood Engineering Inc.

9 Nelson Street, Leamington, Ontario, N8H 1G6

December 2022



WSP E&I Canada Limited
11865 County Road 42
Tecumseh, ON N8N 0H1
Canada
T: 519-735-2499
www.wsp.com

22 December 2022

Reference No. OESAW2233

VIA EMAIL

Rood Engineering Inc.
9 Nelson Street
Leamington, Ontario
N8H 1G6

Attention: Mr. Gerard Rood, P.Eng., President

Dear Mr. Rood;

**RE: Final Report – Soil Characterization Report
Sullivan Creek Drain E09SH(102)
Tecumseh, Ontario**

Please find enclosed one (1) electronic copy, in PDF format, of our final report entitled "Soil Characterization Report, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario."

We thank you for entrusting us with this assignment and look forward to future opportunities with your firm. In the meantime, should you have any questions or require any additional information, please do not hesitate to contact the undersigned.

Sincerely,

WSP E&I Canada Limited

Derek Saliba, B.Sc.
Environmental Scientist
Direct Tel.: 519-735-2499
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Soil Characterization Report

Sullivan Creek Drain E09SH(102)
Tecumseh, Ontario
Project No. OESAW2233

Prepared for:

Rood Engineering Inc.
9 Nelson Street, Leamington, Ontario, N8H 1G6

Prepared by:

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T: 519-735-2499
December 2022

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Executive Summary

WSP E&I Canada Limited (WSP), was retained by Rood Engineering Inc. (Client) to conduct a Soil Characterization Report (SCR) of the Sullivan Creek Drain E09SH(102) located in Tecumseh, Ontario (hereinafter referred to as the "Project Area"). A key plan showing the location of the Project Area is provided on Figure 1. Soil sample locations are shown on Figure 2.

The SCR was undertaken to: 1) assess Areas of Potential Environmental Concern (APECs) identified in a Assessment of Past Uses (APU) previously carried out at the Project Area by WSP, as documented in "Assessment of Past Uses, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario," dated 15 November 2022, (WSP APU); 2) Assess the identified APECs as per the Sampling and Analysis Plan (SAP) previously carried out at the Project Area by WSP, as documented in "Sampling and Analysis Plan, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario," dated 15 November 2022, (WSP SAP); and 3) determine the location and concentration of contaminants in the soil on, in or under the Project Area.

This SCR was conducted in general accordance with the requirements of clause 12 (4) (c) of Ontario Regulation 406/19 – *On-Site and Excess Soil Management* (O. Reg. 406/19). The SCR was conducted in accordance with the proposed scope of work and Terms of Reference provided in WSP's proposal / work agreement POESASW22371 dated 27 October 2022 and subsequent amendments.

Based on the results of the SCR, soil within the Project Area has been categorized into three zones (Excess Soil Zones 1, 2, and 3). The identified soil zones will be subject to specific requirements in terms of destination locations and/or on-Site reuse. The approximate extent of the Excess Soil Zones has been delineated to soil sample locations advanced as part of this investigation and the limits of the Project Area as shown on Figures 3 and 4. The requirements for each soil zone is provided below:

Excess Soil Zone 1 – Soil meeting Table 3 SCS for On-Site Reuse

Soils with concentrations below the Table 3 SCS were identified across the Project Area with the following exception: between S-SA3 and the northern end of the Project Area from surface to 0.3 mbgs.

The soil designated as Excess Soil Zone 1 (other than this one area) can be reused on-site.

Excess Soil Zone 2 – Soil meeting Table 3.1 ESQS for Beneficial Off-Site Reuse

Soils with concentrations below the Table 3.1 ESQS were not identified on the Project Area and therefore no soil is designated as Excess Soil Zone 2 and cannot be reused at beneficial reuse sites where Table 3.1 ESQS for I/C/C property use apply.

Excess Soil Zone 3 – Soil exceeding Table 3.1 ESQS for Off-Site Disposal

Impacted soils exceeding the Table 3.1 ESQS were identified as follows:

- Acenaphthylene at S-SA1, S-SA3, S-SA4, and S-SA6; and
- Anthracene at S-SA1 and S-SA4

Excess Soil Zone 3 is located across the entire Project Area from surface to 0.3 mbgs.

Soil excavated from this zone is not suitable for beneficial reuse off-site. Therefore, soil excavated from this zone that is being removed from the Project Area can be deposited at either one of the following:

- a reuse site for which site-specific ESQS are developed using the BRAT model or other risk assessment method to determine if this soil can still be reused beneficially off-Site
- a waste management facility such as a landfill for disposal; TCLP analysis results indicated the soil is non-hazardous.

WSP typically recommends a vertical and horizontal delineation program around the boreholes with soil exceedances to minimize the volume of soil in Excess Soil Zone 3. This delineation program could be completed prior to construction (borehole advancement), or at the beginning of construction (test pits with contractor assistance). However, WSP notes that based on the low volume of excess soil (236 m³), a delineation program may not be necessary.

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Appendix B: Laboratory Certificates of Analysis
Appendix C: Limitations

List of Acronyms and Abbreviations

ABNs	Acid, Base, Neutral Extractables
APEC	Area of Potential Environmental Concern
APU	Assessment of Past Uses
AST	Aboveground Storage Tank
BH	Borehole
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CALA	Canadian Association for Laboratory Accreditation
C of A	Certificate of Approval
CN	Cyanide
COC	Contaminant of Concern
COPC	Contaminant of Potential Concern
COV	Combustible Organic Vapour
CPs	Chlorophenols
CSM	Conceptual Site Model
DNAPL	Dense Non-aqueous Phase Liquid
DO	Dissolved Oxygen
EC	Electrical Conductivity
EPA	Environmental Protection Act
ESA	Environmental Site Assessment
ESQS	Excess Soil Quality Standards
I/C/C	Industrial/Commercial/Community
LNAPL	Light Non-aqueous Phase Liquid
LSL	Leachate Screening Level
mASL	Metres Above Sea Level
mbgs	Metres Below Ground Surface
MECP	Ministry of the Environment, Conservation and Parks
MOE	Ministry of the Environment
MOECC	Ministry of the Environment and Climate Change
MOEE	Ministry of the Environment and Energy
MTM	Modified Transverse Mercator
MW	Monitoring Well
NAPL	Non-aqueous Phase Liquid
PCA	Potentially Contaminating Activity
OCs	Organochlorine Pesticides
ORP	Oxidation Reduction Potential
PCBs	Polychlorinated Biphenyls
PCDDs/PCDFs	Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans (Dioxins and Furans)
PHCs	Petroleum Hydrocarbons
PAHs	Polycyclic Aromatic Hydrocarbons
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
RA	Risk Assessment
RDL	Reporting Detection Limit
RL	Reporting Limit
RPD	Relative Percent Difference
R/P/I	Residential/Parkland/Institutional

RSC	Record of Site Condition
SAP	Sampling and Analysis Plan
SAR	Sodium Adsorption Ratio
SCC	Standards Council of Canada
SCS	Site Condition Standard
SOA	Standing Offer Agreement
SPLP	Synthetic Precipitate Leachate Procedure
TCLP	Toxicity Characteristic Leaching Procedure
THM	Trihalomethanes
TP	Test Pit
µg/g	Micrograms per Gram
USCS	Unified Soil Classification System
UTM	Universal Transverse Mercator
TOV	Total Organic Vapour
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 Introduction

WSP E&I Canada Limited ("WSP"), was retained by Rood Engineering Inc. ("Client") to conduct a Soil Characterization Report (SCR) of the Sullivan Creek Drain E09SH(102) located in Tecumseh, Ontario (hereinafter referred to as the "Project Area"). A key plan showing the location of the Project Area is provided on Figure 1.

The SCR was undertaken to: 1) assess Areas of Potential Environmental Concern (APECs) identified in a Assessment of Past Uses (APU) previously carried out at the Project Area by WSP, as documented in "Assessment of Past Uses, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario," dated 15 November 2022, (WSP APU); 2) Assess the identified APECs as per the Sampling and Analysis Plan (SAP) previously carried out at the Project Area by WSP, as documented in "Sampling and Analysis Plan, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario," dated 15 November 2022, (WSP SAP); and 3) determine the location and concentration of contaminants in the soil on, in or under the Project Area. This SCR was conducted in accordance with the requirements of clause 12 (4) (c) of Ontario Regulation 406/19 – *On-Site and Excess Soil Management* (O. Reg. 406/19). The SCR was conducted in accordance with the proposed scope of work and Terms of Reference provided in WSP's proposal / work agreement POESASW22371 dated 27 October 2022 and subsequent amendments.

1.1 Project Area Information

General information concerning the Project Area is provided in Table 1.1 below.

Table 1.1. Property Information

Municipal Address	County Road 46, southwest of County Road 17					
Current Project Area Use	Creek Drain					
Proposed Project Area Use	Creek Drain					
UTM (NAD 83)	Zone:	17T	Easting:	341884	Northing:	4676627
Estimated Excess Soil Volume	236 m ³					
Project Area Dimensions	Length:	451.1 m				
	Width:	Approximately 2.8 m				

Contact information for the Project Area Owner, Project Leader and Qualified Person are provided in Table 1.2 below.

Table 1.2. Project Area Owner, Project Leader and Qualified Person Information

Project Area Owner	Town of Tecumseh	Cameron Hedges Engineering Project Manager 519-735-2184 ext. 128 917 Lesperance Road Tecumseh, ON, N8N 1W9
Project Leader	Rood Engineering Inc.	Gerard Rood President Gerard.reinc@gmail.com 519-322-1621 9 Nelson Street Leamington, ON, N8H 1G6
Qualified Person	WSP E&I Canada Limited	Cindy McKee, P. Geo., QP _{ESA} Senior Environmental Geoscientist Cindy.mckee@wsp.com 519-735-2499 11865 County Road 42 Tecumseh, ON, N8N 0H1

2.0 Background Information

2.1 Assessment of Past Uses Summary

The findings of WSP APU are listed in the APEC table below.

Table 2.1. Areas of Potential Environmental Concern

Area of Potential Environmental Concern	Location/Area of APEC on Project Area	Potentially Contaminating Activity*	Location of PCA	Contaminants of Potential Concern
APEC-1: Former railway that cuts through southern portion of Project Area	Southern portion of Project Area (1,329 m ²)	PCA 1: 46. Rail Yards, Tracks and Spurs	On-Site: Southern portion of Project Area	PHC, BTEX, Metals, EC, SAR, pH, PAHs, OCs
N/A	Non-APEC-1 portions of Project Area (8,963 m ²)	N/A	On-Site: Central and northern portions of Project Area	PHCs, BTEX, Metals, EC, SAR, pH
PCA – *Potentially Contaminating Activity as provided in Schedule D of O.Reg. 153/04 as amended, where applicable.				
BTEX – Benzene, Toluene, Ethylbenzene and Xylenes OCs – Organochlorine Pesticides PAHs – Polycyclic Aromatic Hydrocarbons PHCs – Petroleum Hydrocarbons		M – Metals – (Ba, Be, B, Cd, Cr, Co, Cu, Pb, Mo, Ni, Ag, Tl, U, V, Zn including hydrides, As, Sb, Se) EC – Electrical Conductivity SAR – Sodium Adsorption Ratio		

Based on the APU conducted by WSP, APECs were identified resulting from PCAs associated with known and suspected contaminants located on the Project Area. An SAP and SCR were recommended to address these APECs.

With the exception of the APU described above, no other environmental, geological or geotechnical reports for the Project Area were provided to or reviewed by WSP.

2.2 Sampling and Analysis Plan

Based at the volume of soil at each APEC and following the in-situ sampling protocol provided in Section 2 (3) (15) of the Excess Soil Rules Document, the sampling requirements for the Project Area and within each APEC are listed in Table 2.2 below.

Table 2.2. Summary of Required Number of Samples, Applicable Standards and Leachate Screening Levels

APEC	Approximate Soil Volume (m ³)	Associated Surface Samples	Required Number of Bulk Samples	Applicable Standards	Required Number of Leachate Samples	Applicable LSL
APEC-1	31	SA-A1 to SA-A3	3	Table 3.1 SCS	0	N/A

APEC	Approximate Soil Volume (m ³)	Associated Surface Samples	Required Number of Bulk Samples	Applicable Standards	Required Number of Leachate Samples	Applicable LSL
Non-APEC-1 portions of Project Area	206	SA-A4 to SA-A8	2	Table 3.1 SCS	0	N/A
Table 3 SCS – Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use Table 3.1 ESQS – Table 3.1 Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use						

Sampling locations have been assessed to address APECs identified in the APU, see Figure 2 for the surface sample locations. Table 2.3 below outlines the bulk soil sampling requirements at each borehole location to characterize the excess soil within each APEC.

Table 2.3. Summary of Required Bulk Soil Chemical Analysis Per Sampling Location

Proposed Borehole Identification	Metals	PHCs	BTEX	PAHs	OCs
S-SA1	1	1	1	1	1
S-SA2	1	1	1	1	1
S-SA3	1	1	1	1	1
S-SA4	0	0	0	0	0
S-SA5	0	0	0	0	0
S-SA6	1	1	1	0	0
S-SA7	0	0	0	0	0
S-SA8	1	1	1	0	0
Total	5	5	5	3	3
Duplicates	1	1	1	1	1
Duplicate samples should be collected at a rate of one (1) in ten (10) bulk samples and identified with the naming convention "DUP1, DUP2" etc. Metals includes EC, SAR, and pH					

Environmental soil chemical analysis is not required for S-SA4, S-SA5, and S-SA7 in order to satisfy O.Reg 406/19 requirements.

As the Project Area has an estimated excess soil volume under 350 m³ (236 m³), mSPLP laboratory analysis is not required under O.Reg 406/19.

3.0 Soil Characterization Scope of Work

3.1 Overview of Site Investigation

The investigations documented in this report were carried out to characterize the subsurface soil conditions within the Project Area with respect to the previously noted APECs and to provide an SCR compliant with the requirements of O. Reg. 406/19. This report is not intended to be a Phase Two Environmental Site Assessment and it is understood that a Record of Site Condition (RSC) filing is not required for the Project Area at this time.

The SCR was conducted on 29 November 2022 and involved the advancement of eight (8) shallow surface samples at the Project Area, identified as S-SA1 through S-SA8 to facilitate the collection of representative soil samples for laboratory analyses.

This SCR was conducted in accordance with the requirements set forth under O. Reg. 406/19 and related supporting documents established there under. The sampling methods employed in carrying out the investigations complied with the requirements established by the MECP in the document entitled *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario* (MOEE, 1996). The scope of work for the SCR included of the following tasks:

- Developing a site-specific Health & Safety Plan (HASP) for the intrusive work at the Project Area;
- Arranging for the locations of public and private underground and overhead;
- A surface soil sampling program including the sampling of eight (8) surface soil samples to facilitate the collection of fill and/or soil samples and field screening for evidence of negative impact including the presence of “free flowing product”, using visual, olfactory and sample headspace screening methods;
- Submitting select bulk soil samples for laboratory analysis as per Table 2.2 above, suspect contaminants of potential concern (COPC) include: metals (metals, hydrides, EC, SAR, pH); polycyclic aromatic hydrocarbons (PAHs); benzene, toluene, ethylbenzene, xylenes (BTEX); petroleum hydrocarbons (PHCs) F1-F4; and organochlorine pesticides (OCs);
- Submitting select leachate soil samples, representing worst case based on bulk chemical analysis, for toxic characteristic leachate procedure (TCLP) laboratory analysis including metals & inorganics, VOCs and benzo(a)pyrene (B(a)P);
- Soil samples should be collected using professionally accepted methods, minimizing the potential of cross contamination, under the supervision of a qualified person;
- Comparing the analytical results reported for the bulk soil samples to the appropriate generic Site Condition Standards (SCS) established by the Ministry of the Environment, Conservation and Parks (MECP) as provided in “*Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act*” dated April 15, 2011 in order to determine on-Site reuse options;
- Comparing the analytical results reported for the bulk and leachate soil samples to the appropriate generic Excess Soil Quality Standards (ESQS) established by the MECP as provided in “*Rules for Soil*”

Management and Excess Soil Quantity Standards" dated December 8, 2020 (Excess Soil Rules Document) in order to determine beneficial reuse options; and,

- Preparing a SCR, inclusive of figures, tables, and certificates of analysis, documenting the methodology and findings of the investigations and conclusions and recommendations regarding soil quality and the need for additional investigation and/or remedial activities, and determining the classification of potential receiver sites.

3.2 Deviations from Sampling and Analysis Plans

The following deviations to the work plan are noted:

- S-SA4 was submitted for laboratory analysis of PAHs in an attempt to delineate the Table 3 SCS exceedance at S-SA3.

4.0 Investigation Methods

4.1 General

The SCR was carried out in accordance with the SAP, with the deviations listed on Section 3.2, and in accordance with the WSP Standard Operating Procedures (SOP) cited therein.

4.2 Drilling and Excavating

The locations of all buried and overhead services were obtained prior to initiating any of the subsurface investigations.

4.2.1 Soil Sampling

The shallow soil investigation was completed by WSP utilizing a shovel. The shallow soil samples were advanced to depth of 0.3 metres below ground surface (mbgs) on 29 November 2022. Sampling tools were washed with phosphate free soap and rinsed with distilled water between samples.

4.2.2 Shallow Soil Sample Locations

The shallow soil sample locations, all collected at a depth of 0.3 mbgs, are provided in the table below and shown on Figure 2,

Table 4.1. Soil Sample Locations

Sample Location Identification	Northing	Easting	Soil Description	COVs
S-SA1	4676464	341698	Sandy clay with organics	0
S-SA2	4676465	341699	Sandy clay with organics	0
S-SA3	4676485	341714	Wet sand fill with clay	0
S-SA4	4676532	341768	Sandy clay with organics	0
S-SA5	4676575	341816	Soft dark brown clayey silt	0
S-SA6	4676612	341859	Soft dark brown clayey silt	0
S-SA7	4676709	341960	Sandy clay with organics	0
S-SA8	4676746	341930	Sandy clay with organics	0

4.3 Soil Sampling

4.3.1 Sampling Method

The soil samples retrieved during the shallow soil sampling program were examined, classified, and logged according to soil type, moisture content, colour, consistency, and presence of visual and/or olfactory indicators of negative impact. The soil samples recovered at the Project Area were subsampled based on visual observations including fill/soil type and visual/olfactory evidence of suspected impact.

Soil samples were split into duplicate fractions upon recovery at the surface. The primary sample fractions were placed in laboratory supplied glass sample jars and stored in coolers with ice for potential laboratory

analysis. Samples selected for analysis of volatile parameters including VOC (including BTEX) and PHC F1 were micro-cored and field preserved using methanol charged vials supplied by the analytical laboratory to minimize potential losses due to volatilization. The duplicate sample fractions were placed in "Ziploc" sample bags and stored at ambient temperature for subsequent field vapour screening purposes.

All soil samples were collected in accordance with strict environmental sampling protocols to minimize loss of volatile organics and to ensure reliable and representative results. Disposable nitrile gloves were used and replaced between the handling of successive samples. All soil sampling equipment (stainless steel trowels, spatulas, etc.) was thoroughly decontaminated between soil sample locations to prevent potential cross-contamination. Decontamination activities included:

- Physical removal of any adhered debris;
- Wash/scrub in "Alconox" soap solution;
- Distilled water rinse;
- Methanol rinse; and
- Air dry.

Soil samples considered to be representative of "worst-case" environmental conditions were selected for chemical analysis based on visual and olfactory observations made in the field and on field screening results.

4.4 Field Screening Methods

All soil samples were screened in the field for gross evidence of negative environmental impact including staining and odours. Soil sample headspace screening was also performed to facilitate sample selections for laboratory analysis and to provide a semi-quantitative assessment of the vertical contaminant distributions at each borehole location. The duplicate soil sample fractions were screened for COV concentrations using the sample headspace method. COV concentrations were measured using an RKI Eagle 2 combined combustible gas analyzer (CGA). Where COV measurements were made, the instrument was operated in the methane elimination mode. The RKI Eagle 2 was calibrated at the start of each day of the field sampling programs using hexane reference gas (1650 ppm). It was also verified against the reference gases at the end of each day to assess potential instrument drift. The resolution of the instrument is 5 ppm hexane equivalent. The instrument response is compound specific. The measured soil vapour concentrations for COV are discussed in Section 4.2.2 and 5.2.2.

4.5 Analytical Testing

Representative soil samples collected during the investigation were submitted for laboratory analysis of suspect parameters of concern. All laboratory chemical analyses were conducted by Paracel Laboratories Ltd. of Ottawa, Ontario. Paracel is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) in accordance with ISO/IEC 17025:2017 – "General Requirements for the Competence of Testing and Calibration Laboratories" for the tested parameters set out in the Soil, Ground Water and Sediment Standards.

4.6 Residue Management Procedures

Investigation-derived wastes including soil cuttings generated during the investigation were placed back into the shallow soil sampling location.

4.7 Quality Assurance and Quality Control Measures

A strict Quality Control (QA/QC) program was implemented and maintained throughout the project to ensure that the Project Area data are representative of the actual Project Area conditions. The QA/QC program provides a method of documented checks to assess the precision and accuracy of collected data. The QA/QC program includes a set of standard procedures or protocols to be followed throughout the investigations. To this end, WSP field and QA/QC protocols have been developed to meet or exceed those defined in the Ministry of the Environment (MOE) documents entitled *"Guideline for Phase II Environmental Site Assessments in Ontario"* (Draft, March 2006) and *"Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario"* (1996) and Canadian Council of Ministers of the Environment (CCME) *"Guidance Manual Sampling, Analysis, and Data Management for Contaminated Sites"* (1993). The field QC program included the following components:

1. The use of personnel protective equipment including hard hats, safety glasses, safety work boots and chemically resistant latex/nitrile gloves for sample handling;
2. Thorough documentation of all field activities and sample handling practices including field notes, chain of custody forms, memos to file, etc.;
3. Thorough decontamination of non-dedicated sampling equipment employed in all investigation phases;
4. The use of laboratory analytical protocols and method detection limits that have been established in accordance with regulatory requirements for the Province of Ontario.

The *"Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act"*, 09 March 2004, amended as of 01 July 2011 (the "Analytical Protocol"), establishes performance criteria for use when assessing the reliability of data reported by analytical laboratories. These include maximum hold times for the storage of samples/sample extracts between collection and analysis, specified/approved analytical methods, required laboratory quality assurance samples such as blanks and field and laboratory duplicates, specified recovery ranges for spiked samples and surrogates (compounds added to samples in known concentrations for quality assurance purposes), Reporting Limits (RLs) and specified precision required when analyzing laboratory duplicate and spike/controlled reference material samples.

5.0 Review and Evaluation

5.1 Geology

The subsurface conditions encountered at the Project Area are described in Table 4.1. In general, the soil conditions at the Project Area consisted of surficial fill consisting of sandy clay with some organics.

One composite soil sample (consisting of S-SA1, S-SA5, and S-SA8) was submitted for grain size analysis. The grain size distribution curves are presented in Appendix A. Based on the grain size distribution, the predominant subsurface soil conditions across the Project Area are considered medium-fine textured for the purposes of assessment.

5.2 Soil: Field Screening

5.2.1 Staining and Odours

No odours or staining suggestive of petroleum hydrocarbon impacts were detected in any of the soil and/or sediment samples collected at the Project Area.

5.2.2 COV Concentrations

COV concentration headspace measurements recorded in the soil samples collected at the Project Area were all 0 ppm. These concentrations are not indicative of impact by petroleum hydrocarbons. The COV results are semi-quantitative at best and are generally only used for relative sample comparison purposes when selecting samples for laboratory analysis. The COV concentrations headspace measurements are summarized in Table 4.1.

6.0 Regulatory Framework

6.1 Ontario Regulation 406/19 – Generic Excess Soil Quality Standards

The analytical results were compared to the criteria presented in the MECP document titled *“Rules for Soil Management and Excess Soil Quality Standards”* dated December 8, 2020. Based on the proposed volume of excess soil to be generated at the project area (236 m³), the volume independent ESQS (applicable for excess soil quantities greater than 350 m³) were applied.

Based on the requirements of the Client and the intended reuse of the excess soil, the ESQS for industrial/commercial/community (ICC) property use in potable groundwater conditions were selected for assessment purposes. The soil analytical results were assessed using the Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition for ICC property Use (Table 3.1 ESQS).

6.2 Ontario Regulation 406/19 – Generic Leachate Screening Level

As the volumes of the soil being removed from the Project Area were less than 350 m³, mSPLP analysis was not required in accordance with O. Reg. 406/19.

6.3 Ontario Regulation 153/04 - Soil, Ground Water and Sediment Standards

In order to determine suitability of soil for on Site reuse, the analytical data has been compared to O. Reg 153/04 Site Condition Standards (SCS) as described in the *“Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act”* dated 15 April 2011. In order to determine the applicable SCS, WSP reviewed the existing Project Area use and site specific conditions including: 1) the existing/proposed property use; 2) the existing/potential ground water use; 3) depth of clean-up; 4) soil texture; 5) depth to bedrock; 6) proximity to a water body; and 7) soil pH.

The SCS applicable to the Project Area have been evaluated based on the following rationale:

- There are no known areas of natural significance¹ or conditions in the vicinity of the Project Area, which would cause the Project Area to be classified as potentially sensitive according to the Ministry of Natural Resources' Natural Heritage Information Centre web site;
- Based on knowledge of the surrounding area, the depth of the soil on the Project Area is greater than 2.0 mbgs;

1 An “Area of Natural Significance” means any of the following: 1) An area reserved or set apart as a provincial park or conservation reserve under the Provincial Parks and Conservation Reserves Act, 2006; 2) An area of natural and scientific interest (life science or earth science) identified by the Ministry of Natural Resources as having provincial significance; 3) A wetland identified by the Ministry of Natural Resources as having provincial significance; 4) An area designated by a municipality in its official plan as environmentally significant, however expressed, including designations of areas as environmentally sensitive, as being of environmental concern and as being ecologically significant; 5) An area designated as an escarpment natural area or an escarpment protection area by the Niagara Escarpment Plan under the Niagara Escarpment Planning and Development Act; 6) An area identified by the Ministry of Natural Resources as significant habitat of a threatened or endangered species; 7) An area which is habitat of a species that is classified under section 7 of the Endangered Species Act, 2007 as a threatened or endangered species; 8) Property within an area designated as a natural core area or natural linkage area within the area to which the Oak Ridges Moraine Conservation Plan under the Oak Ridges Moraine Conservation Act, 2001 applies; and 9) An area set apart as a wilderness area under the Wilderness Areas Act.

- The Project Area is not considered a “shallow soil property” as defined by O. Reg. 153/04;
- The Project Area is in an area of non-potable ground water and the Project Area and surrounding properties are supplied with municipal water system;
- The Project Area includes land that is within 30 m of a water body as it is a drainage ditch. Since the drainage ditch is generally dry, the Project Area is not considered a sensitive site under O.Reg. 153/04. The nearest waterbody is the Detroit River located approximately 12 km north of the Project Area. Regional ground water flow on the Project Area is anticipated to flow to the north (towards the Pike Creek Drain);
- The existing and intended future use of the Project Area is a drainage ditch (industrial use);
- Soil pH values measured at the Project Area were within the required range of 5 to 9 for surface soils and 5 to 11 for subsurface soils; and,
- Based on the grain size analysis, subsurface soil conditions across the Project Area are considered medium-fine.

Based on the Project Area characteristics and the continued use as a drainage ditch, the Table 3 SCS for I/C/C property use and medium-fine textured soils in a non-potable ground water condition as provided in *Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act* (MECP, April 15, 2011) have been applied in assessing the soil quality at the Project Area.

6.4 Ontario Regulation 347 Waste Classification

The legislative and regulatory requirements for contaminated soil disposal in Ontario are established by *Ontario Regulation 347/90 – General, Waste Management*, as amended (“O.Reg. 347/90”). The Schedule 4 Leachate Quality Criteria, as provided in O.Reg. 347/90, were developed as a guideline for waste classification and consequently determine the appropriate method of waste disposal. Analysis of soil samples in accordance with the toxicity characteristic leaching procedure (TCLP) is required in order to evaluate soil characteristics with respect to the Schedule 4 Leachate Quality Criteria.

7.0 Laboratory Analyses

The results of the soil sample analyses carried out as part of this investigation are summarized in Tables 1 and 2 (attached). Copies of the laboratory Certificates of Analysis are provided in Appendix B.

7.1 Soil Analysis

The results of the soil sample analyses in the context of the applicable ESQS and SCS are shown in Table 7.1 below,

Table 7.1. Soil Analysis

APEC	Approximate Soil Volume (m ³)	Table 3 SCS Exceedances	Table 3.1 ESQS Exceedances
APEC-1	31	No exceedances	Acenaphthylene – S-SA1 & S-SA3 Anthracene – S-SA1
Non-APEC-1 portions of Project Area	206	Acenaphthylene – S-SA4 Benzo(a)pyrene – S-SA4 & S-SA6	Acenaphthylene – S-SA4 & S-SA6 Anthracene – S-SA4

As per O.Reg 153/04 Section 48(2), two (or more) soil samples collected within a 2 m radius (same sampling location and depth), then the average of the sampling results can be compared to SCS. With respect to Table 3 SCS exceedances, at samples S-SA1 and DUPS-S1, as shown in Table 1, the average of benzo(a)pyrene is below Table 3 SCS and therefore would not be considered an exceedance.

7.2 Toxic Characteristic Leachate Procedure Analysis

One composite sample collected during the Excess Soil investigation was submitted for waste classification testing in accordance with *O.Reg. 347/90 – General, Waste Management* ("O.Reg. 347/90"). The sample was prepared as a composite sample by selecting soil aliquots from the excess soil cuttings generated during drilling. The sample was subject to flashpoint determination and analysis of general inorganics, metals, VOC, PCB, organochlorine pesticides and benzo[a]pyrene in accordance with the TCLP. The results of the waste classification testing along with the Schedule 4 leachate quality criteria are summarized in Table 2. The results of the waste classification indicate that the soil would be classified as non-hazardous solid waste if removed from the Project Area.

7.3 Quality Assurance Program

Duplicate samples are analyzed to assess the precision of the field sampling and laboratory analytical processes. Relative percent difference (RPD) acceptance limits only apply where the average of the results for the sample and its duplicate is greater than five times the laboratory reportable detection limit (RDL).

The soil field QA/QC program consisted of analyzing blind field duplicate samples for PHC F1 to F4, VOCs, PAHs, OC pesticides, and metals and inorganics. The RPD values could not be calculated for analyzed chemical parameters with measured concentrations less than five (5) times their respective RDLs. RPDs for those parameters with measured concentrations/values greater than five (5) times their RDLs were within acceptable limits, with exception of barium, cobalt, copper, lead, nickel, vanadium, zinc, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, and pyrene at S-SA1 and its duplicate DUPS-S1. Other than

at benzo(a)pyrene, the original and duplicate samples were below Table 3 SCS. These elevated RPDs are not considered significant and do not impact the quality of the analytical results.

All samples/sample extracts were analyzed within their applicable hold times using approved analytical methods. The RLs were met for all tested parameters. No parameters were detected in any laboratory method blank. Surrogate recoveries were within acceptable ranges in all cases for all samples. Agreement between the corresponding datasets for the reference material samples where applicable and recoveries reported for spiked samples/blanks, where applicable, is acceptable. Agreement between the corresponding datasets for the laboratory duplicate samples is considered acceptable. The overall quality control for this analysis meets acceptability criteria. In summary, the analytical results reported for samples collected during this investigation are considered to have met the performance criteria of the Analytical Protocol.

8.0 Soil Reuse Protocol

Based on the results of the SCR, soil within the project area has been categorized into three zones (Zones 1, 2 and 3). The identified soil zones will be subject to specific requirements in terms of destination locations and/or on-Site reuse. The approximate extent of the Excess Soil Zones has been delineated to borehole locations advanced as part of this investigation and the limits of the Project Area as shown on Figures 3 and 4. The requirements for each soil zone is provided below:

8.1 Excess Soil Zone 1 – Soil meeting Table 3 SCS for On-Site Reuse

Soils with concentrations below the Table 3 SCS were identified across the Project Area with the following exception: between S-SA3 and the northern end of the Project Area from surface to 0.3 mbgs.

The soil designated as Excess Soil Zone 1 (other than this one area) can be reused on-site.

8.2 Excess Soil Zone 2 – Soil meeting Table 3.1 ESQS for Off-Site Beneficial Reuse

Soils with concentrations below the Table 3.1 ESQS were not identified on the Project Area and therefore no soil is designated as Excess Soil Zone 2 and cannot be reused at beneficial reuse sites where Table 3.1 ESQS for I/C/C property use apply.

8.3 Excess Soil Zone 3 – Soil exceeding Table 3.1 ESQS for Off-Site Disposal

Impacted soils exceeding the Table 3.1 ESQS were identified as follows:

- Acenaphthylene at S-SA1, S-SA3, S-SA4, and S-SA6; and
- Anthracene at S-SA1 and S-SA4

Excess Soil Zone 3 is located across the entire Project Area from surface to 0.3 mbgs.

Soil excavated from this zone is not suitable for beneficial reuse off-site. Therefore, soil excavated from this zone that is being removed from the Project Area can be deposited at either one of the following:

- a reuse site for which site-specific ESQS are developed using the BRAT model or other risk assessment method to determine if this soil can still be reused beneficially off-Site; and
- a waste management facility such as a landfill for disposal; TCLP analysis results indicated the soil is non-hazardous.

WSP recommends a vertical and horizontal delineation program around the boreholes with soil exceedances to minimize the volume of soil in Excess Soil Zone 3. This delineation program could be completed prior to construction (borehole advancement), or at the beginning of construction (test pits with contractor assistance). However, WSP notes that based on the low volume of excess soil (236 m³), a delineation program may not be necessary.

9.0 Signatures

I, Derek Saliba, B.Sc., by the signature provided below, certify that I conducted or supervised the carrying out of this SCR and the findings and conclusions of the report. I, Cindy McKee, P. Geo., QP_{ESA}, by the signature provided below, certify that I completed a technical review of this SCR and concur with the findings and conclusions of the report.

Respectfully Submitted,

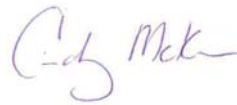
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10.0 References

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- WSP, 14 November 2022. "Sampling and Analysis Plan, Sullivan Creek Drain E09SH(102), Tecumseh, Ontario".



Tables



Notes on Excess Soil Analytical Summary Tables

All Units in Micrograms per Gram (µg/g) Except Where Indicated Otherwise.

RDL = Laboratory Analytical Reporting Detection Limit.

RL = MOE 2011 Analytical Protocol Reporting Limit.

- = Not Analyzed or No Published Value.

DUP = Quality Assurance/Quality Control Duplicate Sample.

RPD = Relative Percent Difference (Between Primary and Duplicate Samples).

* Denotes RPD Exceeds Recommended Alert Criterion Exceeded, However, Parameter Concentration Less than 5 Times Laboratory RDL.

< = Less Than Laboratory Analytical Reporting Detection Limit.

(a) The Boron Standards are for Hot Water Soluble Extract for All Surface Soils. For Subsurface Soils the Standards are for Total Boron (Mixed Strong Acid Digest), Since Plant Protection for Soils Below the Root Zone is not a Significant Concern.

(b) Analysis for Methyl Mercury Only Applies When Mercury (Total) Standard is Exceeded.

(c) F1 Fraction Does Not Include BTEX; However, the Proponent has the Choice as to Whether or not to Subtract BTEX from the Analytical Result.

(d) The Methylnaphthalene Standards are Applicable to Both 1-Methyl Naphthalene and 2-Methyl Naphthalene, with the Provision that if Both are Detected the Sum of the Two Must not Exceed the Standard.

55	Parameter Concentration May Exceed Applicable Standard Due to Elevated Method Detection Limit.
183	Parameter Concentration Exceeds MECP Table 3.1 Full Depth Excess Soil Standard for Industrial/Commercial/Community (I/C/C) Property Use.
797	Parameter Concentration Exceeds MECP Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercail/Community (I/C/C) Property Use.

Excess Soil Standards = Rules for Soil Management and Excess Soil Quality Standards, Ontario Ministry of the Environment, Conservation and Parks, 2019.

Inputted by: DS
Reviewed by: TG



Table 1. Summary of Excess Soil Analyses

Sample No.					Excess Soil ESQS	EPA Standard Full Depth	S-SA1	DUPS-S1 (of S-SA1)			S-SA2	S-SA3	S-SA4	S-SA6	S-SA8
Soil Type															
Sample Depth (m)															
Laboratory Name															
Laboratory Work Order No.															
Laboratory Sample ID															
Sample Date															
Reported Date															
Vol. Independent Full Depth Non-Potable I/C/C Property Use Table 3.1															
Non-Potable Table 3 I/C/C Use Fine															
Sandy Clay 0.3 Parcel 2249129 2249129-01 11/29/2022 12/7/2022															
Sandy Clay 0.3 Parcel 2249129 2249129-06 11/29/2022 12/7/2022															
AVG															
RPD															
Sandy Clay 0.3 Parcel 2249129 2249129-02 11/29/2022 12/7/2022															
Sand w/ Clay 0.3 Parcel 2249129 2249129-03 11/29/2022 12/7/2022															
Sandy Clay 0.3 Parcel 2250416 2250416-01 11/29/2022 12/14/2022															
Clayey Silt 0.3 Parcel 2249129 2249129-04 11/29/2022 12/19/2022															
Sandy Clay 0.3 Parcel 2249129 2249129-05 11/29/2022 12/7/2022															
Parameters															
ATG	Units	RDL	RL												
Metals															
Antimony	Metal	µg/g	0.8	1	40	50	<	<	NC	NC	<	<	N/A	<	<
Arsenic	Metal	µg/g	1	1	18	18	5.4	3.4	4.4	NC	4.7	3.4	N/A	5.2	2.8
Barium	Metal	µg/g	2.0	5	670	670	55.9	34.4	45.15	47.6	52.2	48.2	N/A	63.7	30.6
Beryllium	Metal	µg/g	0.4	2	8	10	0.6	<	NC	NC	0.5	<	N/A	0.7	<
Boron (total)	Metal	µg/g	5	5	120	120	7.6	<	NC	NC	7.2	<	N/A	8.8	<
Cadmium	Metal	µg/g	0.5	1	1.9	1.9	<	<	NC	NC	<	<	N/A	<	<
Chromium Total	Metal	µg/g	5	5	160	160	14.4	8.9	11.65	NC	13.2	10.5	N/A	17.8	8.1
Cobalt	Metal	µg/g	0.5	2	80	100	6.8	4.3	5.55	45	6.2	6.1	N/A	6.6	3.4
Copper	Metal	µg/g	1.0	5	230	300	15.7	10.3	13	41.5	14.8	11.0	N/A	16.2	5.8
Lead	Metal	µg/g	1	10	120	120	11.2	6.7	8.95	50.3	10.4	8.2	N/A	11.7	6.3
Molybdenum	Metal	µg/g	0.5	2	40	40	1.5	<	NC	NC	1.4	<	N/A	1.3	<
Nickel	Metal	µg/g	1	5	270	340	15.4	9.9	12.65	43.5	13.9	11.9	N/A	18.8	7.7
Selenium	Metal	µg/g	0.8	1	5.5	5.5	<	<	NC	NC	<	<	N/A	<	<
Silver	Metal	µg/g	0.5	0.5	40	50	<	<	NC	NC	<	<	N/A	<	<
Thallium	Metal	µg/g	0.5	1	3.3	3.3	<	<	NC	NC	<	<	N/A	<	<
Uranium	Metal	µg/g	0.50	1	33	33	<	<	NC	NC	<	<	N/A	<	<
Vanadium	Metal	µg/g	0.4	10	86	86	24.0	14.6	19.3	48.7	22.0	16.9	N/A	26.8	12.5
Zinc	Metal	µg/g	5	30	340	340	63.8	39.1	51.45	48	61.3	42.6	N/A	81.3	30.5
Other Regulated Parameters															
Sodium Adsorption Ratio	ORP	-	n/a	5	12	12	0.55	0.55	0.55	0	0.62	0.19	N/A	0.42	0.86
Electrical Conductivity (mS/cm)	ORP	µS/cm	0.005	0.7	1400.0	1400.0	475	521	498	9.24	540	458	N/A	613	413
pH	ORP	-	n/a	0.1	12	12	7.11	7.03	7.07	1.13	6.90	6.98	N/A	6.97	6.96
Petroleum Hycrocarbons															
Petroleum Hydrocarbons F1 ^d	PHC	µg/g	7	10	25	55	<	<	NC	NC	<	<	N/A	<	<
Petroleum Hydrocarbons F2	PHC	µg/g	4	10	26	230	<	<	NC	NC	6	<	N/A	<	<
Petroleum Hydrocarbons F3	PHC	µg/g	8	50	1700	1700	32	42	37	NC	57	30	N/A	25	19
Petroleum Hydrocarbons F4	PHC	µg/g	6	50	3300	3300	20	26	23	NC	29	17	N/A	13	13
Volatile Organic Compounds															
Benzene	VOC	µg/g	0.02	0.02	0.034	0.4	<	<	NC	NC	<	<	N/A	<	<
Toluene	VOC	µg/g	0.05	0.2	7.8	19	<	<	NC	NC	<	<	N/A	<	<
Ethylbenzene	VOC	µg/g	0.05	0.05	1.9	78	<	<	NC	NC	<	<	N/A	<	<
Xylenes, m,p-	VOC	µg/g	0.05	-	-	-	<	<	NC	NC	<	<	N/A	<	<
Xylene, o-	VOC	µg/g	0.05	-	-	-	<	<	NC	NC	<	<	N/A	<	<
Xylene Mixture	VOC	µg/g	0.05	0.05	3	30	<	<	NC	NC	<	<	N/A	<	<
Semi-Volatiles															
Acenaphthene	sVOC	µg/g	0.02	0.02	15	96	<	<	NC	NC	<	<	0.03	<	N/A
Acenaphthylene	sVOC	µg/g	0.02	0.02	0.093	0.17	0.17	0.04	0.105	NC	0.08	0.12	0.46	0.13	N/A
Anthracene	sVOC	µg/g	0.02	0.02	0.16	0.74	0.20	0.04	0.12	NC	0.08	0.10	0.4	0.11	N/A
Benzo[a]anthracene	sVOC	µg/g	0.02	0.02	1	0.96	0.45	0.11	0.28	121.4	0.14	0.27	0.89	0.37	N/A
Benzo[a]pyrene	sVOC	µg/g	0.02	0.02	0.7	0.3	0.46	0.11	0.285	122.8	0.14	0.19	0.69	0.31	N/A
Benzo[b]fluoranthene	sVOC	µg/g	0.02	0.02	7	0.96	0.56	0.16	0.36	111.1	0.19	0.30	0.65	0.41	N/A
Benzo[g,h,i]perylene	sVOC	µg/g	0.02	0.02	13	9.6	0.24	0.07	0.155	NC	0.09	0.14	0.36	0.16	N/A
Benzo[k]fluoranthene	sVOC	µg/g	0.02	0.02	7	0.96	0.32	0.06	0.19	NC	0.09	0.28	0.30	0.20	N/A
Chrysene	sVOC	µg/g	0.02	0.02	14	9.6	0.45	0.15	0.3	100	0.17	0.30	0.63	0.39	N/A
Dibenzo[a,h]anthracene	sVOC	µg/g	0.02	0.02	0.7	0.1	0.07	<	NC	NC	0.03	0.04	0.17	0.04	N/A
Fluoranthene	sVOC	µg/g	0.02	0.02	70	9.6	0.99	0.21	0.6	130	0.32	0.49	1.62	0.74	N/A
Fluorene	sVOC	µg/g	0.02	0.02	6.8	69	<	<	NC	NC	<	<	0.02	<	N/A
Indeno [1,2,3-cd] pyrene	sVOC	µg/g	0.02	0.02	0.76	0.95	0.22	0.06	0.14	NC	0.08	0.13	0.48	0.15	N/A
1-Methylnaphthalene	sVOC	µg/g	0.02	0.02	8.7	85	0.05	0.04	0.045	NC	0.05	0.09	0.02	<	N/A
2-Methylnaphthalene	sVOC	µg/g	0.02	0.02	8.7	85	0.06	0.05	0.055	NC	0.06	0.08	0.03	<	N/A
Methylnaphthalene (1&2)	sVOC	µg/g	0.04	0.04	8.7	85	0.12	0.09	0.105	NC	0.10	0.17	0.05	<	N/A
Naphthalene	sVOC	µg/g	0.01	0.01	1.8	28	0.04	0.03	0.035	NC	0.03	0.04	0.01	<	N/A
Phenanthrene	sVOC	µg/g	0.02	0.02	12	16	0.12	0.07	0.095	NC	0.10	0.12	0.22	0.12	N/A
Pyrene	sVOC	µg/g	0.02	0.02	70	96	0.98	0.21	0.595	129.4	0.32	0.53	1.40	0.74	N/A
Pesticides, OC															
Aldrin	OC	µg/g	0.01	0.01	0.088	0.11	<	<	NC	NC	<	<	N/A	N/A	N/A
gamma-BHC (Lindane)	OC	µg/g	0.01	0.01	-	0.063	<	<	NC	NC	<	<	N/A	N/A	N/A
alpha-Chlordane	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
gamma-Chlordane	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
Chlordane	OC	µg/g	0.01	0.01	0.05	0.05	<	<	NC	NC	<	<	N/A	N/A	N/A
o,p-DDD	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
p,p-DDD	OC	µg/g	0.02	0.02	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
DDD	OC	µg/g	0.02	0.02	4.6	4.6	<	<	NC	NC	<	<	N/A	N/A	N/A
o,p-DDE	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
p,p-DDE	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
DDE	OC	µg/g	0.01	0.01	0.52	0.65	<	<	NC	NC	<	<	N/A	N/A	N/A
o,p-DDT	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
p,p-DDT	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
DDT	OC	µg/g	0.01	0.01	1.4	1.4	<	<	NC	NC	<	<	N/A	N/A	N/A
Dieldrin	OC	µg/g	0.02	0.02	0.088	0.11	<	<	NC	NC	<	<	N/A	N/A	N/A
Endrin	OC	µg/g	0.02	0.02	0.04	0.04	<	<	NC	NC	<	<	N/A	N/A	N/A
Endosulfan I	OC	µg/g	0.01	0.01	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
Endosulfan II	OC	µg/g	0.02	0.02	-	-	<	<	NC	NC	<	<	N/A	N/A	N/A
Heptachlor	OC	µg/g	0.01	0.01	0.072	0.19	<	<	NC	NC	<	<	N/A	N/A	N/A
Heptachlor Epoxide	OC	µg/g	0.01	0.01	0.05	0.05	<	<	NC	NC	<	<	N/A	N/A	N/A
Hexachlorobenzene	OC	µg/g	0.01	0.01	0.66	0.66	<	<	NC	NC	<	<	N/A	N/A	N/A
Hexachlorobutadiene	OC	µg/g	0.01	0.01	0.01	0.095	<	<	NC	NC	<	<	N/A	N/A	N/A
Hexachloroethane	OC	µg/g	0.01	0.01	0.13	0.43	<	<	NC	NC	<	<	N/A	N/A	N/A
Methoxychlor	OC	µg/g	0.01	0.01	0.19	1.6	<	<	NC	NC	<	<	N/A	N/A	N/A

Table 2. Summary of TCLP Analyses

		Sample No. Laboratory ID Sample Date Reported Date	Reg. 558 Schedule 4	TCLP-Sul 2250418-01 8-Dec-22 13-Dec-22
Parameters	RDL	RL		
Ignitability	n/a	n/a	-	Not Ignitable
EPA 1331 - TCLP Leachate Metals				
Arsenic	0.05	n/a	2.5	<
Barium	0.05	n/a	100	0.19
Boron	0.05	n/a	500	0.10
Cadmium	0.01	n/a	0.5	<
Chromium	0.05	n/a	5	<
Lead	0.05	n/a	5	<
Mercury	0.005	n/a	0.1	<
Selenium	0.05	n/a	1	<
Silver	0.05	n/a	5	<
Uranium	0.05	n/a	10	<
EPA 1331 - TCLP Leachate Inorganics				
Fluoride	0.05	n/a	150	<
Nitrate as N	1	n/a	1000	<
Nitrite as N	1	n/a	1000	<
Cyanide, free	0.02	n/a	20	<
EPA 1331 - TCLP Leachate Volatiles				
Benzene	0.005	n/a	0.5	<
Carbon Tetrachloride	0.005	n/a	0.5	<
Chlorobenzene	0.004	n/a	8	<
Chloroform	0.006	n/a	10	<
1,2-Dichlorobenzene	0.004	n/a	20	<
1,4-Dichlorobenzene	0.004	n/a	0.5	<
1,2-Dichloroethane	0.005	n/a	0.5	<
1,1-Dichloroethylene	0.006	n/a	1.4	<
Methyl Ethyl Ketone (2-Butanone)	0.30	n/a	200	<
Methylene Chloride	0.04	n/a	5	<
Tetrachloroethylene	0.005	n/a	3	<
Trichloroethylene	0.004	n/a	5	<
Vinyl Chloride	0.005	n/a	0.2	<
EPA 1331 - TCLP Leachate Organics				
Benzo[a]pyrene	0.0001	n/a	0.001	<

797 Concentration exceeds Schedule 4 of O. Reg. 347

RDL = Laboratory Analytical Reporting Detection Limit.

< = Less than RDL



Figures


DATE PLOTTED: 12/15/2022 3:17:49 PM
FILE LOCATION: W:\2022\ESA and Remediation\Projects\OESAW2233 - Road Engineering (Sullivan Creek Drain)\14 CAD\Drafting\AutoCAD files\OESAW2233-R03001.dwg



NOTES:
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WSP E&I CANADA LIMITED
REPORT No. OESAW2233. ALL LOCATIONS ARE APPROXIMATE.

REFERENCES:
CANMAP STREETFILES V2008.4.

ORIGINAL PAPER SIZE: 8½ x 11.

CLIENT: Rood Engineering Inc. 9 NELSON STREET LEAMINGTON, ONTARIO, N8H 1G6		DWN BY: LMK	PROJECT: SOIL CHARACTERIZATION REPORT SULLIVAN CREEK DRAIN E09SH(102) TECUMSEH, ONTARIO	DATE: DEC. 2022	
		CHK'D BY: CM		PROJECT No: OESAW2233	
WSP E&I Canada Limited 11865 COUNTY ROAD 42 TECUMSEH, ONTARIO, N8N 0H1 519-735-2499		DATUM: NAD83	TITLE: KEY PLAN	REV No: 0	
		PROJECTION: UTM Zone 17		FIGURE No: 1	
		SCALE: 1:25,000			

DATE PLOTTED: 12/15/2022 3:18:03 PM
FILE LOCATION: W:\2022\ESA and Remediation\Projects\OESAW2233 - Road Engineering (Sullivan Creek Drain)\14 CAD\Drafting\AutoCAD files\OESAW2233 - R03001.dwg

Area of Potential Environmental Concern	Location/Area of APEC on Project Area	Potentially Contaminating Activity	Location of PCA	Contaminants of Potential Concern
APEC-1: Former railway that cuts through southern portion of Project Area	Southern portion of Project Area (1,329 m ²)	PCA 1: 46. Rail Yards, Tracks and Spurs	On-Site: Southern portion of Project Area	PHC, BTEX, Metals, EC, SAR, pH, PAHs, Ocs
N/A	Non-APEC portion of Project Area (8,963 m ²)	N/A	On-Site: Central and northern portions of Project Area	PHCs, BTEX, Metals, EC, SAR, Ph

LEGEND:

- APPROXIMATE SITE BOUNDARY
- 30m BUFFER FROM THE PIPELINES
- APEC-1
- × SURFACE SAMPLE LOCATION

NOTES:

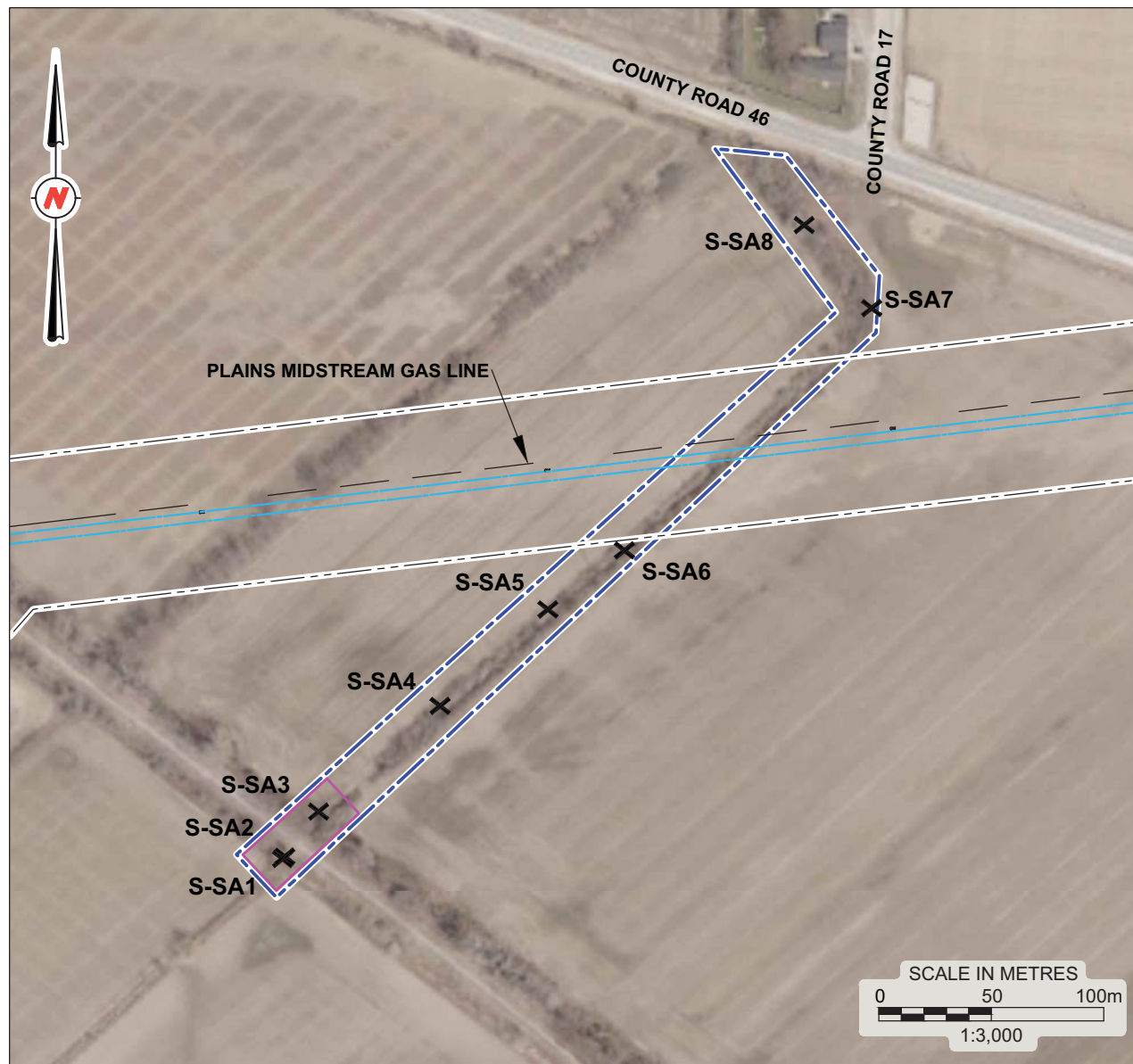
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE WSP E&I CANADA LIMITED REPORT No. OESAW2233.


ALL LOCATIONS ARE APPROXIMATE.

ORIGINAL PAPER SIZE: 8 1/2 x 11

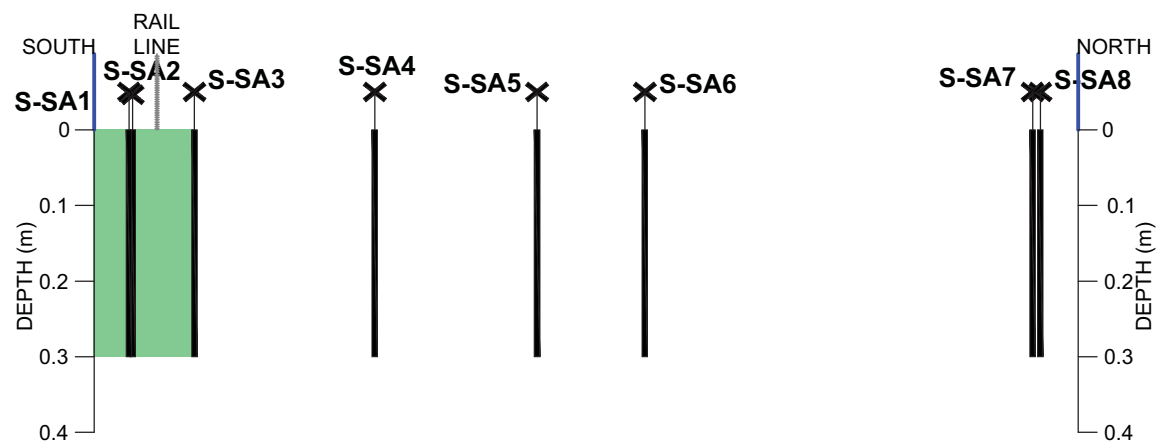
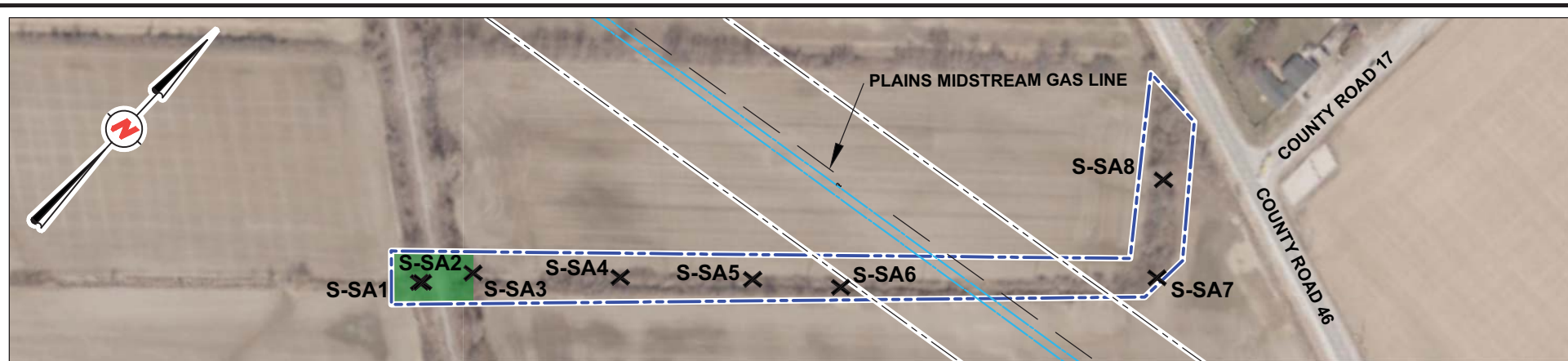
REFERENCES:

2022 AERIAL IMAGE FROM THE COUNTY OF ESSEX INTERACTIVE WEB MAPPING SITE.



CLIENT: Rood Engineering Inc. 9 NELSON STREET LEAMINGTON, ONTARIO, N8H 1G6		DWN BY: LMK	PROJECT: SOIL CHARACTERIZATION REPORT SULLIVAN CREEK DRAIN E09SH(102) TECUMSEH, ONTARIO	DATE: DEC. 2022
		CHK'D BY: CM		PROJECT No: OESAW2233
		DATUM: NAD83		
WSP E&I Canada Limited 11865 COUNTY ROAD 42 TECUMSEH, ONTARIO, N8N 0H1 519-735-2499			TITLE: SURFACE SAMPLE LOCATION PLAN	REV. No: 0
				FIGURE No: 2

DATE PLOTTED: 12/22/2022 9:21:05 AM
 FILE LOCATION: W:\2022\ESA and Remediation\Projects\OESAW2233 - Road Engineering (Sullivan Creek Drain)\14 CAD\Drafting\AutoCAD files\OESAW2233-RO3003.dwg



NOTES:
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ORIGINAL PAPER SIZE: 8 1/2 x 11

REFERENCES:
 2022 AERIAL IMAGE FROM THE COUNTY OF ESSEX INTERACTIVE WEB MAPPING SITE.

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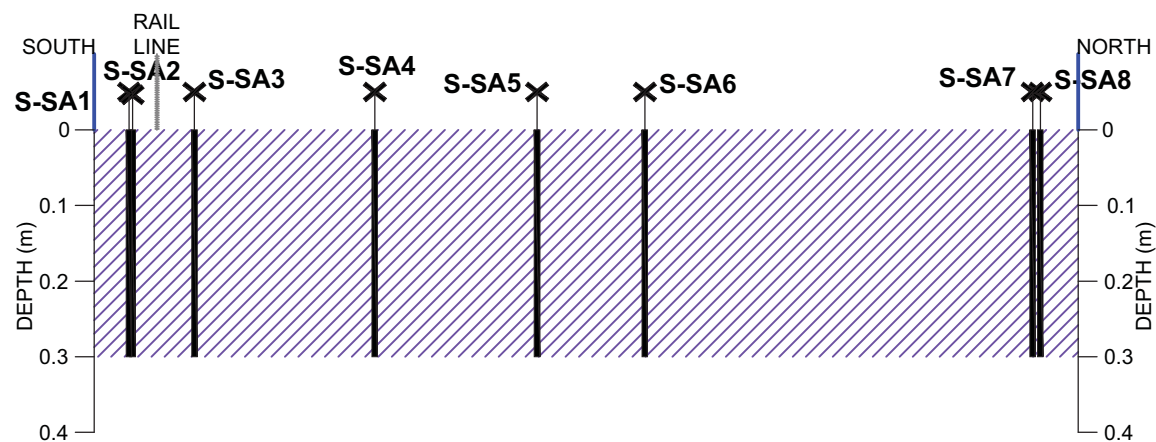
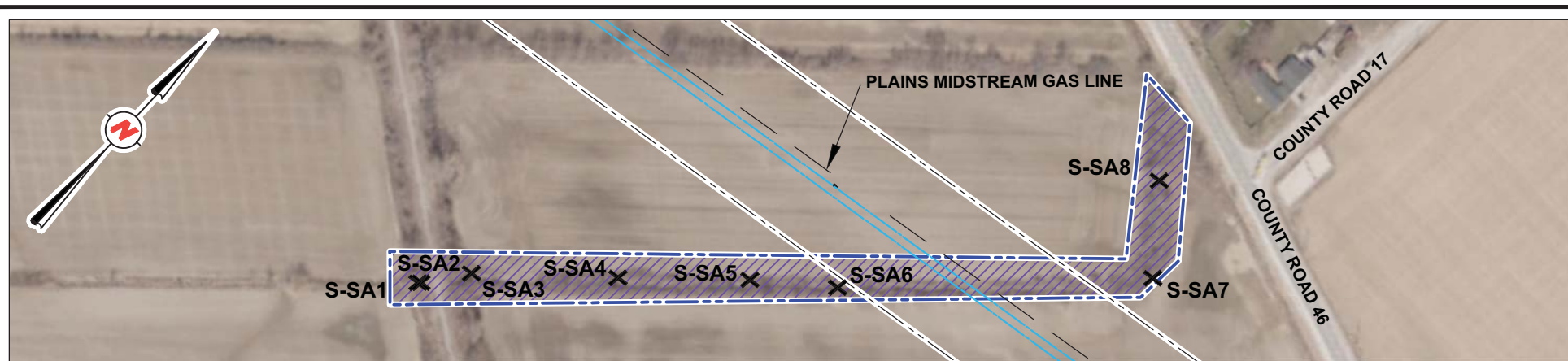
- APPROXIMATE PROJECT AREA BOUNDARY
- 30m BUFFER FROM THE PIPELINES
- × SURFACE SAMPLE LOCATION
- ZONE 1 – SOIL MEETING TABLE 3 SCS FOR ON-SITE REUSE

HORIZONTAL SCALE IN METRES
 0 50 100m
 1:3,000

VERTICAL SCALE IN METRES
 0 0.2 0.4m
 1:10

CLIENT:		DWN BY:	PROJECT:	DATE:
Rood Engineering Inc. 9 NELSON STREET LEAMINGTON, ONTARIO, N8H 1G6		LMK	SOIL CHARACTERIZATION REPORT SULLIVAN CREEK DRAIN E09SH(102) TECUMSEH, ONTARIO	DEC. 2022
		CHK'D BY:		PROJECT No:
		CM		OESAW2233
WSP E&I Canada Limited 11865 COUNTY ROAD 42 TECUMSEH, ONTARIO, N8N 0H1 519-735-2499		DATUM:	PROJECT AREA PLAN VIEW AND CROSS SECTION FOR EXCESS SOIL ZONE 1	REV. No:
		NAD83		0
		PROJECTION:		FIGURE No:
		UTM Zone 17		3
		SCALE:		
		AS SHOWN		

DATE PLOTTED: 12/22/2022 10:04:09 AM
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 THE WSP E&I CANADA LIMITED REPORT No. OESAW2233.
 ALL LOCATIONS ARE APPROXIMATE.

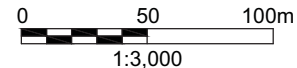
ORIGINAL PAPER SIZE: 8 1/2 x 11

REFERENCES:
 2022 AERIAL IMAGE FROM THE COUNTY OF ESSEX
 INTERACTIVE WEB MAPPING SITE.

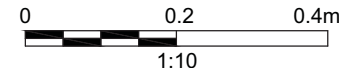
LEGEND:

- APPROXIMATE PROJECT AREA BOUNDARY
- 30m BUFFER FROM THE PIPELINES
- X** SURFACE SAMPLE LOCATION
- ZONE 2 – SOIL MEETING TABLE 3.1 ESQS FOR BENEFICIAL OFF-SITE REUSE
- ZONE 3 – SOIL EXCEEDING TABLE 3.1 ESQS FOR OFF-SITE DISPOSAL

HORIZONTAL SCALE IN METRES



VERTICAL SCALE IN METRES



CLIENT:		DWN BY:	PROJECT:	DATE:
Rood Engineering Inc. 9 NELSON STREET LEAMINGTON, ONTARIO, N8H 1G6		LMK	SOIL CHARACTERIZATION REPORT SULLIVAN CREEK DRAIN E09SH(102) TECUMSEH, ONTARIO	DEC. 2022
		CHK'D BY:		PROJECT No:
		CM	PROJECT AREA PLAN VIEW AND CROSS SECTION FOR EXCESS SOIL ZONES 2 & 3	OESAW2233
		DATUM:		REV. No:
		NAD83		0
		PROJECTION:		FIGURE No:
		UTM Zone 17		4
		SCALE:		
		AS SHOWN		

WSP E&I Canada Limited
 11865 COUNTY ROAD 42
 TECUMSEH, ONTARIO, N8N 0H1
 519-735-2499





Appendix A

Grain Size Analysis

WSP E&I Canada Ltd.
11865 County Road 42
Tecumseh, Ontario N8N 0H1
Tel +1 (519) 735-2499
Fax +1 (519) 735-9669
www.wsp.com



Wash loss Passing 75µm

LS-601 / ASTM C 117

Project Details

Project Number: OESAW2233.1000
Project Client: Rood Engineering Inc.
Project Name: Sullican Drain

Date Sampled: 29-Nov-2022
Date Received: 29-Nov-2022
Date Tested: 6-Dec-2022

Sampled by: DS
Tested by: JP

Lab number: 1031

Location: S-Sa1, Sa5, Sa8
Source of Material: Native

Test Results

Moisture content of sample	36.6%
Total weight of sample	275.2 g
Total weight of sample after wash	187.7 g
Wash loss percent Passing 75µm	31.8%

Signed by: 
Justin P., C.Tech. / Lab Manager

More information available upon request



Appendix B

Laboratory Certificates of Analysis

Certificate of Analysis

WSP E&I Canada Limited (Windsor)

11865 County Road 42
Tecumseh, ON N8N 2M1
Attn: Cindy McKee

Client PO: OESAW2233.****.****.5120.573000

Project: OESAW2233.****.****.5120.573000

Custody: Revised Report

Report Date: 19-Dec-2022

Order Date: 29-Nov-2022

Order #: 2249129

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2249129-01	S-SA1
2249129-02	S-SA2
2249129-03	S-SA3
2249129-04	S-SA6
2249129-05	S-SA8
2249129-06	DUPS-S1

Approved By:



Mark Foto, M.Sc.

Lab Supervisor

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
BTEX by P&T GC-MS	EPA 8260 - P&T GC-MS	1-Dec-22	2-Dec-22
Conductivity	MOE E3138 - probe @25 °C, water ext	2-Dec-22	2-Dec-22
pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	30-Nov-22	1-Dec-22
PHC F1	CWS Tier 1 - P&T GC-FID	1-Dec-22	2-Dec-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	30-Nov-22	2-Dec-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	1-Dec-22	1-Dec-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	2-Dec-22	6-Dec-22
REG 153: Pesticides, OC	EPA 8081B - GC-ECD	30-Nov-22	6-Dec-22
SAR	Calculated	1-Dec-22	2-Dec-22
Solids, %	CWS Tier 1 - Gravimetric	2-Dec-22	2-Dec-22

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	-	-
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Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA1	S-SA2	S-SA3	S-SA6		
Sample Date:	29-Nov-22 09:20	29-Nov-22 09:30	29-Nov-22 09:35	29-Nov-22 10:05	-	-
Sample ID:	2249129-01	2249129-02	2249129-03	2249129-04		
Matrix:	Soil	Soil	Soil	Soil		
MDL/Units						

Physical Characteristics

% Solids	0.1 % by Wt.	82.3	84.4	76.1	60.7	-	-
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General Inorganics

SAR	0.01 N/A	0.55	0.62	0.19	0.42	-	-
Conductivity	5 uS/cm	475	540	458	613	-	-
pH	0.05 pH Units	7.11	6.90	6.98	6.97	-	-

Metals

Antimony	1 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Arsenic	1 ug/g	5.4	4.7	3.4	5.2	-	-
Barium	1 ug/g	55.9	52.2	48.2	63.7	-	-
Beryllium	0.5 ug/g	0.6	0.5	<0.5	0.7	-	-
Boron	5 ug/g	7.6	7.2	<5.0	8.8	-	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	-	-
Chromium	5 ug/g	14.4	13.2	10.5	17.8	-	-
Cobalt	1 ug/g	6.8	6.2	6.1	6.6	-	-
Copper	5 ug/g	15.7	14.8	11.0	16.2	-	-
Lead	1 ug/g	11.2	10.4	8.2	11.7	-	-
Molybdenum	1 ug/g	1.5	1.4	<1.0	1.3	-	-
Nickel	5 ug/g	15.4	13.9	11.9	18.8	-	-
Selenium	1 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	-	-
Thallium	1 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Uranium	1 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Vanadium	10 ug/g	24.0	22.0	16.9	26.8	-	-
Zinc	20 ug/g	63.8	61.3	42.6	81.3	-	-

Volatiles

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA1	S-SA2	S-SA3	S-SA6		
Sample Date:	29-Nov-22 09:20	29-Nov-22 09:30	29-Nov-22 09:35	29-Nov-22 10:05	-	-
Sample ID:	2249129-01	2249129-02	2249129-03	2249129-04		
Matrix:	Soil	Soil	Soil	Soil		
MDL/Units						

Volatiles

Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	-	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Toluene-d8	Surrogate	112%	114%	119%	129%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	-	-
F2 PHCs (C10-C16)	4 ug/g	<4	6	<4	<4	-	-
F3 PHCs (C16-C34)	8 ug/g	32	57	30	25	-	-
F4 PHCs (C34-C50)	6 ug/g	20	29	17	13	-	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	-	-
Acenaphthylene	0.02 ug/g	0.17	0.08	0.12	0.13	-	-
Anthracene	0.02 ug/g	0.20	0.08	0.10	0.11	-	-
Benzo [a] anthracene	0.02 ug/g	0.45	0.14	0.27	0.37	-	-
Benzo [a] pyrene	0.02 ug/g	0.46	0.14	0.19	0.31	-	-
Benzo [b] fluoranthene	0.02 ug/g	0.56	0.19	0.30	0.41	-	-
Benzo [g,h,i] perylene	0.02 ug/g	0.24	0.09	0.14	0.16	-	-
Benzo [k] fluoranthene	0.02 ug/g	0.32	0.09	0.28	0.20	-	-
Chrysene	0.02 ug/g	0.45	0.17	0.30	0.39	-	-
Dibenzo [a,h] anthracene	0.02 ug/g	0.07	0.03	0.04	0.04	-	-
Fluoranthene	0.02 ug/g	0.99	0.32	0.49	0.74	-	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Client ID:	S-SA1	S-SA2	S-SA3	S-SA6		
Sample Date:	29-Nov-22 09:20	29-Nov-22 09:30	29-Nov-22 09:35	29-Nov-22 10:05	-	-
Sample ID:	2249129-01	2249129-02	2249129-03	2249129-04		
Matrix:	Soil	Soil	Soil	Soil		
MDL/Units						

Semi-Volatiles

Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.22	0.08	0.13	0.15	-	-
1-Methylnaphthalene	0.02 ug/g	0.05	0.05	0.09	<0.02	-	-
2-Methylnaphthalene	0.02 ug/g	0.06	0.06	0.08	<0.02	-	-
Methylnaphthalene (1&2)	0.04 ug/g	0.12	0.10	0.17	<0.04	-	-
Naphthalene	0.01 ug/g	0.04	0.03	0.04	<0.01	-	-
Phenanthrene	0.02 ug/g	0.12	0.10	0.12	0.12	-	-
Pyrene	0.02 ug/g	0.98	0.32	0.53	0.74	-	-
2-Fluorobiphenyl	Surrogate	70.1%	131%	82.4%	96.3%	-	-
Terphenyl-d14	Surrogate	96.4%	129%	100%	111%	-	-

Pesticides, OC

Aldrin	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
gamma-BHC (Lindane)	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
alpha-Chlordane	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
gamma-Chlordane	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Chlordane	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
o,p'-DDD	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
p,p'-DDD	0.02 ug/g	<0.02	<0.02	<0.02	-	-	-
DDD	0.02 ug/g	<0.02	<0.02	<0.02	-	-	-
o,p'-DDE	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
p,p'-DDE	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
DDE	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
o,p'-DDT	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
p,p'-DDT	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
DDT	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Dieldrin	0.02 ug/g	<0.02	<0.02	<0.02	-	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA1	S-SA2	S-SA3	S-SA6	
Sample Date:	29-Nov-22 09:20	29-Nov-22 09:30	29-Nov-22 09:35	29-Nov-22 10:05	-
Sample ID:	2249129-01	2249129-02	2249129-03	2249129-04	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Pesticides, OC

Endrin	0.02 ug/g	<0.02	<0.02	<0.02	-	-	-
Endosulfan I	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Endosulfan II	0.02 ug/g	<0.02	<0.02	<0.02	-	-	-
Heptachlor	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Heptachlor epoxide	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Hexachlorobenzene	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Hexachlorobutadiene	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Hexachloroethane	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Methoxychlor	0.01 ug/g	<0.01	<0.01	<0.01	-	-	-
Decachlorobiphenyl	Surrogate	117%	89.0%	103%	-	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA8	DUPS-S1			
Sample Date:	29-Nov-22 10:20	29-Nov-22 00:00			-
Sample ID:	2249129-05	2249129-06			-
Matrix:	Soil	Soil			
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	81.6	82.9	-	-	-	-
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General Inorganics

SAR	0.01 N/A	0.86	0.55	-	-	-	-
Conductivity	5 uS/cm	413	521	-	-	-	-
pH	0.05 pH Units	6.96	7.03	-	-	-	-

Metals

Antimony	1 ug/g	<1.0	<1.0	-	-	-	-
Arsenic	1 ug/g	2.8	3.4	-	-	-	-
Barium	1 ug/g	30.6	34.4	-	-	-	-
Beryllium	0.5 ug/g	<0.5	<0.5	-	-	-	-
Boron	5 ug/g	<5.0	<5.0	-	-	-	-
Cadmium	0.5 ug/g	<0.5	<0.5	-	-	-	-
Chromium	5 ug/g	8.1	8.9	-	-	-	-
Cobalt	1 ug/g	3.4	4.3	-	-	-	-
Copper	5 ug/g	5.8	10.3	-	-	-	-
Lead	1 ug/g	6.3	6.7	-	-	-	-
Molybdenum	1 ug/g	<1.0	<1.0	-	-	-	-
Nickel	5 ug/g	7.7	9.9	-	-	-	-
Selenium	1 ug/g	<1.0	<1.0	-	-	-	-
Silver	0.3 ug/g	<0.3	<0.3	-	-	-	-
Thallium	1 ug/g	<1.0	<1.0	-	-	-	-
Uranium	1 ug/g	<1.0	<1.0	-	-	-	-
Vanadium	10 ug/g	12.5	14.6	-	-	-	-
Zinc	20 ug/g	30.5	39.1	-	-	-	-

Volatiles

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA8	DUPS-S1			
Sample Date:	29-Nov-22 10:20	29-Nov-22 00:00			-
Sample ID:	2249129-05	2249129-06			-
Matrix:	Soil	Soil			
MDL/Units					

Volatiles

Benzene	0.02 ug/g	<0.02	<0.02	-	-	-	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	-	-	-	-
Toluene	0.05 ug/g	<0.05	<0.05	-	-	-	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	-	-	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	-	-	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	-	-	-	-
Toluene-d8	Surrogate	118%	114%	-	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	-	-	-	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	-	-	-	-
F3 PHCs (C16-C34)	8 ug/g	19	42	-	-	-	-
F4 PHCs (C34-C50)	6 ug/g	13	26	-	-	-	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	-	<0.02	-	-	-	-
Acenaphthylene	0.02 ug/g	-	0.04	-	-	-	-
Anthracene	0.02 ug/g	-	0.04	-	-	-	-
Benzo [a] anthracene	0.02 ug/g	-	0.11	-	-	-	-
Benzo [a] pyrene	0.02 ug/g	-	0.11	-	-	-	-
Benzo [b] fluoranthene	0.02 ug/g	-	0.16	-	-	-	-
Benzo [g,h,i] perylene	0.02 ug/g	-	0.07	-	-	-	-
Benzo [k] fluoranthene	0.02 ug/g	-	0.06	-	-	-	-
Chrysene	0.02 ug/g	-	0.15	-	-	-	-
Dibenzo [a,h] anthracene	0.02 ug/g	-	<0.02	-	-	-	-
Fluoranthene	0.02 ug/g	-	0.21	-	-	-	-
Fluorene	0.02 ug/g	-	<0.02	-	-	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Client ID:	S-SA8	DUPS-S1			
Sample Date:	29-Nov-22 10:20	29-Nov-22 00:00			-
Sample ID:	2249129-05	2249129-06			-
Matrix:	Soil	Soil			
MDL/Units					

Semi-Volatiles

Indeno [1,2,3-cd] pyrene	0.02 ug/g	-	0.06	-	-	-
1-Methylnaphthalene	0.02 ug/g	-	0.04	-	-	-
2-Methylnaphthalene	0.02 ug/g	-	0.05	-	-	-
Methylnaphthalene (1&2)	0.04 ug/g	-	0.09	-	-	-
Naphthalene	0.01 ug/g	-	0.03	-	-	-
Phenanthrene	0.02 ug/g	-	0.07	-	-	-
Pyrene	0.02 ug/g	-	0.21	-	-	-
2-Fluorobiphenyl	Surrogate	-	83.2%	-	-	-
Terphenyl-d14	Surrogate	-	97.9%	-	-	-

Pesticides, OC

Aldrin	0.01 ug/g	-	<0.01	-	-	-
gamma-BHC (Lindane)	0.01 ug/g	-	<0.01	-	-	-
alpha-Chlordane	0.01 ug/g	-	<0.01	-	-	-
gamma-Chlordane	0.01 ug/g	-	<0.01	-	-	-
Chlordane	0.01 ug/g	-	<0.01	-	-	-
o,p'-DDD	0.01 ug/g	-	<0.01	-	-	-
p,p'-DDD	0.02 ug/g	-	<0.02	-	-	-
DDD	0.02 ug/g	-	<0.02	-	-	-
o,p'-DDE	0.01 ug/g	-	<0.01	-	-	-
p,p'-DDE	0.01 ug/g	-	<0.01	-	-	-
DDE	0.01 ug/g	-	<0.01	-	-	-
o,p'-DDT	0.01 ug/g	-	<0.01	-	-	-
p,p'-DDT	0.01 ug/g	-	<0.01	-	-	-
DDT	0.01 ug/g	-	<0.01	-	-	-
Dieldrin	0.02 ug/g	-	<0.02	-	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	S-SA8	DUPS-S1			
Sample Date:	29-Nov-22 10:20	29-Nov-22 00:00			
Sample ID:	2249129-05	2249129-06			
Matrix:	Soil	Soil			
MDL/Units					

Pesticides, OC

Endrin	0.02 ug/g	-	<0.02	-	-	-	-
Endosulfan I	0.01 ug/g	-	<0.01	-	-	-	-
Endosulfan II	0.02 ug/g	-	<0.02	-	-	-	-
Heptachlor	0.01 ug/g	-	<0.01	-	-	-	-
Heptachlor epoxide	0.01 ug/g	-	<0.01	-	-	-	-
Hexachlorobenzene	0.01 ug/g	-	<0.01	-	-	-	-
Hexachlorobutadiene	0.01 ug/g	-	<0.01	-	-	-	-
Hexachloroethane	0.01 ug/g	-	<0.01	-	-	-	-
Methoxychlor	0.01 ug/g	-	<0.01	-	-	-	-
Decachlorobiphenyl	Surrogate	-	119%	-	-	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics								
Conductivity	ND	5	uS/cm					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
Pesticides, OC								
Aldrin	ND	0.01	ug/g					
gamma-BHC (Lindane)	ND	0.01	ug/g					
alpha-Chlordane	ND	0.01	ug/g					
gamma-Chlordane	ND	0.01	ug/g					
Chlordane	ND	0.01	ug/g					
o,p'-DDD	ND	0.01	ug/g					

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
p,p'-DDD	ND	0.02	ug/g					
DDD	ND	0.02	ug/g					
o,p'-DDE	ND	0.01	ug/g					
p,p'-DDE	ND	0.01	ug/g					
DDE	ND	0.01	ug/g					
o,p'-DDT	ND	0.01	ug/g					
p,p'-DDT	ND	0.01	ug/g					
DDT	ND	0.01	ug/g					
Dieldrin	ND	0.02	ug/g					
Endrin	ND	0.02	ug/g					
Endosulfan I	ND	0.01	ug/g					
Endosulfan II	ND	0.02	ug/g					
Heptachlor	ND	0.01	ug/g					
Heptachlor epoxide	ND	0.01	ug/g					
Hexachlorobenzene	ND	0.01	ug/g					
Hexachlorobutadiene	ND	0.01	ug/g					
Hexachloroethane	ND	0.01	ug/g					
Methoxychlor	ND	0.01	ug/g					
Surrogate: Decachlorobiphenyl	0.104		ug/g	104	50-140			
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.04	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	0.996		ug/g	74.7	50-140			
Surrogate: Terphenyl-d14	1.17		ug/g	87.6	50-140			
Volatiles								
Benzene	ND	0.02	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: Toluene-d8	8.15		ug/g	102	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	0.56	0.01	N/A	0.55			1.8	30	
Conductivity	473	5	uS/cm	475			0.4	5	
pH	7.01	0.05	pH Units	7.00			0.1	2.3	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	ND	8	ug/g	ND			NC	30	
F4 PHCs (C34-C50)	ND	6	ug/g	ND			NC	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	ND	1.0	ug/g	ND			NC	30	
Barium	7.1	1.0	ug/g	7.6			6.6	30	
Beryllium	ND	0.5	ug/g	ND			NC	30	
Boron	ND	5.0	ug/g	ND			NC	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium	ND	5.0	ug/g	ND			NC	30	
Cobalt	1.2	1.0	ug/g	1.1			11.1	30	
Copper	ND	5.0	ug/g	ND			NC	30	
Lead	1.1	1.0	ug/g	1.1			5.4	30	
Molybdenum	ND	1.0	ug/g	ND			NC	30	
Nickel	ND	5.0	ug/g	ND			NC	30	
Selenium	ND	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	ND	10.0	ug/g	ND			NC	30	
Zinc	ND	20.0	ug/g	ND			NC	30	
Pesticides, OC									
Aldrin	ND	0.01	ug/g	ND			NC	40	
gamma-BHC (Lindane)	ND	0.01	ug/g	ND			NC	40	

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
alpha-Chlordane	ND	0.01	ug/g	ND			NC	40	
gamma-Chlordane	ND	0.01	ug/g	ND			NC	40	
o,p'-DDD	ND	0.01	ug/g	ND			NC	40	
p,p'-DDD	ND	0.02	ug/g	ND			NC	40	
o,p'-DDE	ND	0.01	ug/g	ND			NC	40	
p,p'-DDE	ND	0.01	ug/g	ND			NC	40	
o,p'-DDT	ND	0.01	ug/g	ND			NC	40	
p,p'-DDT	ND	0.01	ug/g	ND			NC	40	
Dieldrin	ND	0.02	ug/g	ND			NC	40	
Endrin	ND	0.02	ug/g	ND			NC	40	
Endosulfan I	ND	0.01	ug/g	ND			NC	40	
Endosulfan II	ND	0.02	ug/g	ND			NC	40	
Heptachlor	ND	0.01	ug/g	ND			NC	40	
Heptachlor epoxide	ND	0.01	ug/g	ND			NC	40	
Hexachlorobenzene	ND	0.01	ug/g	ND			NC	40	
Hexachlorobutadiene	ND	0.01	ug/g	ND			NC	40	
Hexachloroethane	ND	0.01	ug/g	ND			NC	40	
Methoxychlor	ND	0.01	ug/g	ND			NC	40	
Surrogate: Decachlorobiphenyl	0.135		ug/g		111	50-140			
Physical Characteristics									
% Solids	98.1	0.1	% by Wt.	98.2			0.1	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] pyrene	ND	0.02	ug/g	ND			NC	40	
Benzo [b] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Benzo [g,h,i] perylene	ND	0.02	ug/g	ND			NC	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	ND	0.02	ug/g	ND			NC	40	

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	ND	0.02	ug/g	ND			NC	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g	ND			NC	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	ND	0.02	ug/g	ND			NC	40	
Surrogate: 2-Fluorobiphenyl	0.896		ug/g		64.8	50-140			
Surrogate: Terphenyl-d14	1.07		ug/g		77.5	50-140			
Volatiles									
Benzene	ND	0.02	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: Toluene-d8	8.46		ug/g		103	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	162	7	ug/g	ND	81.2	80-120			
F2 PHCs (C10-C16)	94	4	ug/g	ND	115	60-140			
F3 PHCs (C16-C34)	228	8	ug/g	ND	115	60-140			
F4 PHCs (C34-C50)	140	6	ug/g	ND	111	60-140			
Metals									
Arsenic	47.0	1.0	ug/g	ND	93.2	70-130			
Barium	45.7	1.0	ug/g	3.0	85.3	70-130			
Beryllium	46.6	0.5	ug/g	ND	93.1	70-130			
Boron	47.0	5.0	ug/g	ND	91.6	70-130			
Cadmium	42.3	0.5	ug/g	ND	84.5	70-130			
Chromium	47.4	5.0	ug/g	ND	91.7	70-130			
Cobalt	46.1	1.0	ug/g	ND	91.4	70-130			
Copper	44.1	5.0	ug/g	ND	86.9	70-130			
Lead	44.1	1.0	ug/g	ND	87.3	70-130			
Molybdenum	43.6	1.0	ug/g	ND	87.0	70-130			
Nickel	46.1	5.0	ug/g	ND	90.4	70-130			
Selenium	42.4	1.0	ug/g	ND	84.7	70-130			
Silver	44.5	0.3	ug/g	ND	89.0	70-130			
Thallium	46.2	1.0	ug/g	ND	92.3	70-130			
Uranium	48.8	1.0	ug/g	ND	97.4	70-130			
Vanadium	49.1	10.0	ug/g	ND	91.7	70-130			
Zinc	43.8	20.0	ug/g	ND	84.0	70-130			
Pesticides, OC									
Aldrin	0.34	0.01	ug/g	ND	140	50-140			
gamma-BHC (Lindane)	0.32	0.01	ug/g	ND	130	50-140			
alpha-Chlordane	0.31	0.01	ug/g	ND	127	50-140			
gamma-Chlordane	0.31	0.01	ug/g	ND	126	50-140			
o,p'-DDD	0.21	0.01	ug/g	ND	105	50-140			
p,p'-DDD	0.22	0.02	ug/g	ND	108	50-140			
o,p'-DDE	0.33	0.01	ug/g	ND	136	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
p,p'-DDE	0.31	0.01	ug/g	ND	127	50-140			
o,p'-DDT	0.21	0.01	ug/g	ND	87.0	50-140			
p,p'-DDT	0.22	0.01	ug/g	ND	90.2	50-140			
Dieldrin	0.33	0.02	ug/g	ND	134	50-140			
Endrin	0.13	0.02	ug/g	ND	51.7	50-140			
Endosulfan I	0.33	0.01	ug/g	ND	137	50-140			
Endosulfan II	0.29	0.02	ug/g	ND	121	50-140			
Heptachlor	0.32	0.01	ug/g	ND	130	50-140			
Heptachlor epoxide	0.34	0.01	ug/g	ND	139	50-140			
Hexachlorobenzene	0.32	0.01	ug/g	ND	134	50-140			
Hexachlorobutadiene	0.30	0.01	ug/g	ND	122	50-140			
Hexachloroethane	0.32	0.01	ug/g	ND	132	50-140			
Methoxychlor	0.33	0.01	ug/g	ND	135	50-140			
Surrogate: Decachlorobiphenyl	0.145		ug/g		119	50-140			
Semi-Volatiles									
Acenaphthene	0.166	0.02	ug/g	ND	96.1	50-140			
Acenaphthylene	0.138	0.02	ug/g	ND	79.5	50-140			
Anthracene	0.138	0.02	ug/g	ND	79.6	50-140			
Benzo [a] anthracene	0.123	0.02	ug/g	ND	71.0	50-140			
Benzo [a] pyrene	0.127	0.02	ug/g	ND	73.3	50-140			
Benzo [b] fluoranthene	0.167	0.02	ug/g	ND	96.4	50-140			
Benzo [g,h,i] perylene	0.158	0.02	ug/g	ND	91.1	50-140			
Benzo [k] fluoranthene	0.116	0.02	ug/g	ND	67.1	50-140			
Chrysene	0.173	0.02	ug/g	ND	100	50-140			
Dibenzo [a,h] anthracene	0.148	0.02	ug/g	ND	85.6	50-140			
Fluoranthene	0.132	0.02	ug/g	ND	76.3	50-140			
Fluorene	0.152	0.02	ug/g	ND	87.6	50-140			
Indeno [1,2,3-cd] pyrene	0.130	0.02	ug/g	ND	75.0	50-140			
1-Methylnaphthalene	0.144	0.02	ug/g	ND	83.0	50-140			
2-Methylnaphthalene	0.176	0.02	ug/g	ND	102	50-140			
Naphthalene	0.168	0.01	ug/g	ND	96.9	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Phenanthrene	0.158	0.02	ug/g	ND	91.1	50-140			
Pyrene	0.134	0.02	ug/g	ND	77.6	50-140			
Surrogate: 2-Fluorobiphenyl	1.30		ug/g		94.2	50-140			
Surrogate: Terphenyl-d14	1.62		ug/g		117	50-140			
Volatiles									
Benzene	4.10	0.02	ug/g	ND	102	60-130			
Ethylbenzene	3.71	0.05	ug/g	ND	92.8	60-130			
Toluene	3.86	0.05	ug/g	ND	96.5	60-130			
m,p-Xylenes	7.37	0.05	ug/g	ND	92.2	60-130			
o-Xylene	3.89	0.05	ug/g	ND	97.2	60-130			
Surrogate: Toluene-d8	7.80		ug/g		97.5	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 29-Nov-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Qualifier Notes:**QC Qualifiers:**

QR-05 Duplicate RPDs higher than normally accepted. Remaining batch QA\QC was acceptable. May be sample effect.

Sample Data Revisions:

None

Work Order Revisions / Comments:

Revision 1 - This report includes additional PAH data.

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Client Name: WSP E&I Canada Limited	Project Reference: OESAW2233.***.***.5120.573000	TAT: <input checked="" type="checkbox"/> Regular <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day Date Required: _____
Contact Name: Cindy McKee	Quote #: 21-332	
Address: 11865 County Road 42, Tecumseh, Ontario, N8N 2M1	PO #: No PO, use project reference	
Telephone: 519-735-2499	Email Address: cindy.mckee@wsp.com derek.saliba@wsp.com	

Criteria: ☐ O. Reg. 153/04 (As Amended) Table ☐ RSC Filing ☐ O. Reg. 558/00 ☐ PWQO ☐ CCME ☐ SUB (Storm) ☐ SUB (Sanitary) Municipality: _____ ☒ Other: O. Reg. 406/19

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Parcel Order Number:						Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	pH, SAR, EC	OCs <i>Post Analysis</i>								
Sample ID/Location Name									Date	Time																	
1	S-SA1					S		2	29-Nov-22	- 0920	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	S-SA2					S		2	29-Nov-22	- 0930	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	S-SA3					S		2	29-Nov-22	- 0935	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	S-SA6					S		2	29-Nov-22	- 1005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	S-SA8					S		2	29-Nov-22	- 1020	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	DUPS-S1					S		2	29-Nov-22	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7											<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8											<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9											<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10											<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: Use COC sample ID if difference between COC and soil jar
Compare to Table 1 SCS and Table 3.1

Method of Delivery:

Walk in

Relinquished By (Sign): <i>[Signature]</i>	Received by Driver/Depot: <i>K. Jakobsen</i>	Received at Lab: <i>Sumee Parn Parnmai</i>	Verified By: <i>K. Jakobsen</i>
Relinquished By (Print): Derek Saliba	Date/Time: Nov. 28/22 11:00	Date/Time: Nov. 29, 2022 10:40	Date/Time: Nov. 29/22 15:00
Date/Time: Nov 29, 2022 @ 1105	Temperature: 9.8 °C	Temperature: 3.4 °C	pH Verified [] By:

Certificate of Analysis

WSP E&I Canada Limited (Windsor)

11865 County Road 42
Tecumseh, ON N8N 2M1
Attn: Cindy McKee

Client PO: OESAW2233.****.****.5120.573000

Project: OESAW2233.****.****.5120.573000

Custody:

Report Date: 14-Dec-2022

Order Date: 8-Dec-2022

Order #: 2250416

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2250416-01	S-SA4

Approved By:



Alex Enfield, MSc

Lab Manager

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	13-Dec-22	14-Dec-22
Solids, %	CWS Tier 1 - Gravimetric	12-Dec-22	13-Dec-22

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	-	-
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Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Client ID:	S-SA4	-	-	-	-
Sample Date:	29-Nov-22 00:00	-	-	-	-
Sample ID:	2250416-01	-	-	-	-
Matrix:	Soil	-	-	-	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	72.2	-	-	-	-
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Semi-Volatiles

Acenaphthene	0.02 ug/g	0.03	-	-	-	-
Acenaphthylene	0.02 ug/g	0.46	-	-	-	-
Anthracene	0.02 ug/g	0.40	-	-	-	-
Benzo [a] anthracene	0.02 ug/g	0.89	-	-	-	-
Benzo [a] pyrene	0.02 ug/g	0.69	-	-	-	-
Benzo [b] fluoranthene	0.02 ug/g	0.65	-	-	-	-
Benzo [g,h,i] perylene	0.02 ug/g	0.36	-	-	-	-
Benzo [k] fluoranthene	0.02 ug/g	0.30	-	-	-	-
Chrysene	0.02 ug/g	0.63	-	-	-	-
Dibenzo [a,h] anthracene	0.02 ug/g	0.17	-	-	-	-
Fluoranthene	0.02 ug/g	1.62	-	-	-	-
Fluorene	0.02 ug/g	0.02	-	-	-	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.48	-	-	-	-
1-Methylnaphthalene	0.02 ug/g	0.02	-	-	-	-
2-Methylnaphthalene	0.02 ug/g	0.03	-	-	-	-
Methylnaphthalene (1&2)	0.03 ug/g	0.05	-	-	-	-
Naphthalene	0.01 ug/g	0.01	-	-	-	-
Phenanthrene	0.02 ug/g	0.22	-	-	-	-
Pyrene	0.02 ug/g	1.40	-	-	-	-
2-Fluorobiphenyl	Surrogate	59.8%	-	-	-	-
Terphenyl-d14	Surrogate	61.8%	-	-	-	-

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.03	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	0.450		ug/g	89.9	50-140			
Surrogate: Terphenyl-d14	0.339		ug/g	67.9	50-140			

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Physical Characteristics									
% Solids	82.7	0.1	% by Wt.	83.5			1.0	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	0.023	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	0.037	0.02	ug/g	0.035			3.7	40	
Benzo [a] pyrene	0.054	0.02	ug/g	0.054			0.6	40	
Benzo [b] fluoranthene	0.038	0.02	ug/g	0.035			9.7	40	
Benzo [g,h,i] perylene	0.072	0.02	ug/g	0.067			7.2	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	0.041	0.02	ug/g	0.037			9.7	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	0.046	0.02	ug/g	0.044			6.4	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	0.063	0.02	ug/g	0.064			1.8	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	0.075	0.02	ug/g	0.063			17.8	40	
Surrogate: 2-Fluorobiphenyl	0.391		ug/g		70.7	50-140			
Surrogate: Terphenyl-d14	0.365		ug/g		66.0	50-140			

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Semi-Volatiles									
Acenaphthene	0.479	0.02	ug/g	ND	86.7	50-140			
Acenaphthylene	0.524	0.02	ug/g	ND	94.8	50-140			
Anthracene	0.489	0.02	ug/g	ND	88.4	50-140			
Benzo [a] anthracene	0.625	0.02	ug/g	0.035	107	50-140			
Benzo [a] pyrene	0.499	0.02	ug/g	0.054	80.3	50-140			
Benzo [b] fluoranthene	0.445	0.02	ug/g	0.035	74.1	50-140			
Benzo [g,h,i] perylene	0.582	0.02	ug/g	0.067	93.1	50-140			
Benzo [k] fluoranthene	0.391	0.02	ug/g	ND	70.7	50-140			
Chrysene	0.585	0.02	ug/g	0.037	99.1	50-140			
Dibenzo [a,h] anthracene	0.534	0.02	ug/g	ND	96.6	50-140			
Fluoranthene	0.595	0.02	ug/g	0.044	99.7	50-140			
Fluorene	0.517	0.02	ug/g	ND	93.5	50-140			
Indeno [1,2,3-cd] pyrene	0.596	0.02	ug/g	0.064	96.3	50-140			
1-Methylnaphthalene	0.559	0.02	ug/g	ND	101	50-140			
2-Methylnaphthalene	0.549	0.02	ug/g	ND	99.3	50-140			
Naphthalene	0.511	0.01	ug/g	ND	92.4	50-140			
Phenanthrene	0.498	0.02	ug/g	ND	90.1	50-140			
Pyrene	0.651	0.02	ug/g	0.063	106	50-140			
Surrogate: 2-Fluorobiphenyl	0.360		ug/g		65.1	50-140			
Surrogate: Terphenyl-d14	0.386		ug/g		69.8	50-140			

Certificate of Analysis

Report Date: 14-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Qualifier Notes:**Sample Data Revisions:**

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Client Name: WSP E&I Canada Limited	Project Reference: OESAW2233. 5120.573000	TAT: <input checked="" type="checkbox"/> Regular <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day Date Required: _____
Contact Name: Cindy McKee	Quote #: 21-332	
Address: 11865 County Road 42, Tecumseh, Ontario, N8N 2M1	PO #: No PO, use project reference	
Telephone: 519-735-2499	Email Address: cindy.mckee@wsp.com derek.saliba@wsp.com	
Criteria: <input type="checkbox"/> O. Reg. 153/04 (As Amended) Table <input type="checkbox"/> RSC Filing <input checked="" type="checkbox"/> O. Reg. 558/00 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> SUB (Storm) <input type="checkbox"/> SUB (Sanitary) Municipality: _____ <input checked="" type="checkbox"/> Other: O. Reg. 406/19		

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)						Required Analyses														
Paracel Order Number: 2250416 and 2250418 (TCLP)																				
Sample ID/Location Name		Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	TCLP M&I	TCLP VOCs	TCLP B(a)P	TCLP Ignitability			
1	S-SA4	S		2	29-Nov-22	--	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	TCLP-Sul	S		3	8-Dec-22	- 1115	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Comments: Use COC sample ID if difference between COC and soil jar Compare to Table 1 SCS and Table 3.1				Method of Delivery: Walk in	
Relinquished By (Sign): <i>Cindy McKee</i>	Received by Driver/Depot: <i>Pat</i>	Received at Lab: <i>Km'ella</i>	Verified By: <i>K. Jakobsen</i>		
Relinquished By (Print): Cindy McKee	Date/Time: Dec 8/22 11:45	Date/Time: 12/09/22 10:07	Date/Time: Dec. 8/22 14:00		
Date/Time: Dec 8, 2022 @ 11:25am	Temperature: 9.8 °C	Temperature: 6.7 °C	pH Verified [] By: NA		

Certificate of Analysis

WSP E&I Canada Limited (Windsor)

11865 County Road 42
Tecumseh, ON N8N 2M1
Attn: Cindy McKee

Client PO: OESAW2233.****.****.5120.573000

Project: OESAW2233.****.****.5120.573000

Custody:

Report Date: 13-Dec-2022

Order Date: 8-Dec-2022

Order #: 2250418

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2250418-01	TCLP-Sul

Approved By:



Mark Foto, M.Sc.

Lab Supervisor

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Ignitability	based on EPA 1030	12-Dec-22	12-Dec-22
REG 558 - Cyanide	TCLP MOE E3015- Auto Colour	12-Dec-22	12-Dec-22
REG 558 - Fluoride	TCLP EPA 340.2 - ISE	12-Dec-22	12-Dec-22
REG 558 - Mercury by CVAA	TCLP EPA 7470A, CVAA	12-Dec-22	12-Dec-22
REG 558 - Metals, ICP-MS	TCLP EPA 6020 - Digestion - ICP-MS	12-Dec-22	12-Dec-22
REG 558 - NO3/NO2	TCLP EPA 300.1 - IC	12-Dec-22	12-Dec-22
REG 558 - PAHs	TCLP EPA 625 - GC-MS	12-Dec-22	12-Dec-22
REG 558 - VOCs	TCLP ZHE EPA 624 - P&T GC-MS	13-Dec-22	13-Dec-22
Solids, %	CWS Tier 1 - Gravimetric	9-Dec-22	12-Dec-22

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 558 Schedule 4	-
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Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	TCLP-Sul	-	-	-	Criteria:
Sample Date:	08-Dec-22 11:15	-	-	-	Reg 558 Schedule 4
Sample ID:	2250418-01	-	-	-	-
Matrix:	Soil	-	-	-	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	75.0	-	-	-	-
Ignitability		Negative	-	-	-	-

EPA 1311 - TCLP Leachate Inorganics

Fluoride	0.05 mg/L	<0.05	-	-	-	150 mg/L	-
Nitrate as N	1 mg/L	<1	-	-	-	1000 mg/L	-
Nitrite as N	1 mg/L	<1	-	-	-	1000 mg/L	-
Cyanide, free	0.02 mg/L	<0.02	-	-	-	20 mg/L	-

EPA 1311 - TCLP Leachate Metals

Arsenic	0.05 mg/L	<0.05	-	-	-	2.5 mg/L	-
Barium	0.05 mg/L	0.19	-	-	-	100 mg/L	-
Boron	0.05 mg/L	0.10	-	-	-	500 mg/L	-
Cadmium	0.01 mg/L	<0.01	-	-	-	0.5 mg/L	-
Chromium	0.05 mg/L	<0.05	-	-	-	5 mg/L	-
Lead	0.05 mg/L	<0.05	-	-	-	5 mg/L	-
Mercury	0.005 mg/L	<0.005	-	-	-	0.1 mg/L	-
Selenium	0.05 mg/L	<0.05	-	-	-	1 mg/L	-
Silver	0.05 mg/L	<0.05	-	-	-	5 mg/L	-
Uranium	0.05 mg/L	<0.05	-	-	-	10 mg/L	-

EPA 1311 - TCLP Leachate Volatiles

Benzene	0.005 mg/L	<0.005	-	-	-	0.5 mg/L	-
Carbon Tetrachloride	0.005 mg/L	<0.005	-	-	-	0.5 mg/L	-
Chlorobenzene	0.004 mg/L	<0.004	-	-	-	8 mg/L	-
Chloroform	0.006 mg/L	<0.006	-	-	-	10 mg/L	-
1,2-Dichlorobenzene	0.004 mg/L	<0.004	-	-	-	20 mg/L	-
1,4-Dichlorobenzene	0.004 mg/L	<0.004	-	-	-	0.5 mg/L	-

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Client ID:	TCLP-Sul	-	-	-	Criteria:
Sample Date:	08-Dec-22 11:15	-	-	-	Reg 558 Schedule 4
Sample ID:	2250418-01	-	-	-	-
Matrix:	Soil	-	-	-	
MDL/Units					

EPA 1311 - TCLP Leachate Volatiles

1,2-Dichloroethane	0.005 mg/L	<0.005	-	-	-	0.5 mg/L	-
1,1-Dichloroethylene	0.006 mg/L	<0.006	-	-	-	1.4 mg/L	-
Methyl Ethyl Ketone (2-Butanone)	0.3 mg/L	<0.30	-	-	-	200 mg/L	-
Methylene Chloride	0.04 mg/L	<0.04	-	-	-	5 mg/L	-
Tetrachloroethylene	0.005 mg/L	<0.005	-	-	-	3 mg/L	-
Trichloroethylene	0.004 mg/L	<0.004	-	-	-	5 mg/L	-
Vinyl chloride	0.005 mg/L	<0.005	-	-	-	0.2 mg/L	-
Toluene-d8	Surrogate	106%	-	-	-	-	-
4-Bromofluorobenzene	Surrogate	90.3%	-	-	-	-	-
Dibromofluoromethane	Surrogate	69.1%	-	-	-	-	-

EPA 1311 - TCLP Leachate Organics

Benzo [a] pyrene	0.0001 mg/L	<0.0001	-	-	-	0.001 mg/L	-
Terphenyl-d14	Surrogate	125%	-	-	-	-	-

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics								
Fluoride	ND	0.05	mg/L					
Nitrate as N	ND	1	mg/L					
Nitrite as N	ND	1	mg/L					
Cyanide, free	ND	0.02	mg/L					
EPA 1311 - TCLP Leachate Metals								
Arsenic	ND	0.05	mg/L					
Barium	ND	0.05	mg/L					
Boron	ND	0.05	mg/L					
Cadmium	ND	0.01	mg/L					
Chromium	ND	0.05	mg/L					
Lead	ND	0.05	mg/L					
Mercury	ND	0.005	mg/L					
Selenium	ND	0.05	mg/L					
Silver	ND	0.05	mg/L					
Uranium	ND	0.05	mg/L					
EPA 1311 - TCLP Leachate Organics								
Benzo [a] pyrene	ND	0.0001	mg/L					
Surrogate: Terphenyl-d14	0.031		mg/L	125	40-150			

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Fluoride	ND	0.05	mg/L	ND			NC	20	
Nitrate as N	ND	1	mg/L	ND			NC	20	
Nitrite as N	ND	1	mg/L	ND			NC	20	
Cyanide, free	ND	0.02	mg/L	ND			NC	20	
EPA 1311 - TCLP Leachate Metals									
Arsenic	ND	0.05	mg/L	ND			NC	29	
Barium	0.079	0.05	mg/L	0.074			6.2	34	
Boron	0.089	0.05	mg/L	0.054			NC	33	
Cadmium	ND	0.01	mg/L	ND			NC	33	
Chromium	ND	0.05	mg/L	ND			NC	32	
Lead	ND	0.05	mg/L	ND			NC	32	
Mercury	ND	0.005	mg/L	ND			NC	30	
Selenium	ND	0.05	mg/L	ND			NC	28	
Silver	ND	0.05	mg/L	ND			NC	28	
Uranium	ND	0.05	mg/L	ND			NC	27	
Physical Characteristics									
% Solids	77.4	0.1	% by Wt.	79.1			2.2	25	

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Fluoride	0.51	0.05	mg/L	ND	103	70-130			
Nitrate as N	10	1	mg/L	ND	102	70-130			
Nitrite as N	9	1	mg/L	ND	93.7	80-120			
Cyanide, free	0.060	0.02	mg/L	ND	60.1	60-136			
EPA 1311 - TCLP Leachate Metals									
Arsenic	0.585	0.05	mg/L	ND	117	83-119			
Barium	0.633	0.05	mg/L	0.074	112	83-116			
Boron	0.576	0.05	mg/L	0.054	105	71-128			
Cadmium	0.550	0.01	mg/L	ND	110	78-119			
Chromium	0.547	0.05	mg/L	ND	109	80-124			
Lead	0.484	0.05	mg/L	ND	96.7	77-126			
Mercury	0.0265	0.005	mg/L	ND	88.2	70-130			
Selenium	0.579	0.05	mg/L	ND	116	81-125			
Silver	0.480	0.05	mg/L	ND	96.1	70-128			
Uranium	0.562	0.05	mg/L	ND	112	70-131			
EPA 1311 - TCLP Leachate Organics									
Benzo [a] pyrene	0.0219	0.0001	mg/L	ND	87.7	40-150			
Surrogate: Terphenyl-d14	0.025		mg/L		102	40-150			
EPA 1311 - TCLP Leachate Volatiles									
Benzene	38.5	0.005	mg/L	ND	95.9	60-130			
Carbon Tetrachloride	40.6	0.005	mg/L	ND	100	60-130			
Chlorobenzene	40.9	0.004	mg/L	ND	102	60-130			
Chloroform	46.5	0.006	mg/L	ND	116	60-130			
1,2-Dichlorobenzene	42.4	0.004	mg/L	ND	105	60-130			
1,4-Dichlorobenzene	41.0	0.004	mg/L	ND	102	60-130			
1,2-Dichloroethane	38.9	0.005	mg/L	ND	96.7	60-130			
1,1-Dichloroethylene	37.8	0.006	mg/L	ND	93.6	60-130			
Methyl Ethyl Ketone (2-Butanone)	77.0	0.30	mg/L	ND	77.0	50-140			
Methylene Chloride	35.3	0.04	mg/L	ND	88.2	60-130			
Tetrachloroethylene	40.6	0.005	mg/L	ND	101	60-130			

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.5120.573000

Project Description: OESAW2233.****.5120.573000

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Trichloroethylene	42.0	0.004	mg/L	ND	104	60-130			
Vinyl chloride	32.8	0.005	mg/L	ND	82.1	50-140			
Surrogate: 4-Bromofluorobenzene	0.0838		mg/L		104	50-140			
Surrogate: Dibromofluoromethane	0.0886		mg/L		111	50-140			
Surrogate: Toluene-d8	0.0790		mg/L		98.8	50-140			

Certificate of Analysis

Report Date: 13-Dec-2022

Client: WSP E&I Canada Limited (Windsor)

Order Date: 8-Dec-2022

Client PO: OESAW2233.****.****.5120.573000

Project Description: OESAW2233.****.****.5120.573000

Qualifier Notes:

Sample Qualifiers :

QC Qualifiers:

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Client Name: WSP E&I Canada Limited
Contact Name: Cindy McKee
Address: 11865 County Road 42, Tecumseh, Ontario, N8N 2M1
Telephone: 519-735-2499

Project Reference: OESAW2233. 5120.573000
Quote #: 21-332
PO #: No PO, use project reference
Email Address: cindy.mckee@wsp.com
derek.saliba@wsp.com

Criteria: ☐ O. Reg. 153/04 (As Amended) Table ☐ RSC Filing ☒ O. Reg. 558/00 ☐ PQO ☐ CCME ☐ SUB (Storm) ☐ SUB (Sanitary) Municipality: ☒ Other: O.Reg. 406/19

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Page 1 of 1

TAT: ☒ Regular ☐ 3 Day
☐ 2 Day ☐ 1 Day

Date Required: _____

Paracel Order Number:

2250416 and 2250418
(TCLP)

Required Analyses

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	TCLP M&I	TCLP VOCs	TCLP B(a)P	TCLP Ignitability		
				Date	Time													
1 S-SM	S		2	29-Nov-22	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 TCLP-Sul	S		43	8-Dec-22	- 1115	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: Use COC sample ID if difference between COC and soil jar
Compare to Table 1 SCS and Table 3.1

Method of Delivery:

Relinquished By (Sign): *Cindy McKee* Received by Driver/Depot: *Pat* Received at Lab: *Km'Calla* Verified By: *K. Jakobson*

Relinquished By (Print): Cindy McKee Date/Time: Dec 8/22 11:45 Date/Time: 12/09/22 10:00 Date/Time: Dec 8/22 14:15

Date/Time: Dec 8, 2022 @ 11:25am Temperature: 9.8 °C Temperature: 6.9 °C pH Verified [] By: *NA*



Appendix C

Limitations

Limitations

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:
 - (a) The Standard Terms and Conditions which form a part of our Professional Services Contract;
 - (b) The Scope of Services;
 - (c) Time and Budgetary limitations as described in our Contract; and,
 - (d) The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in this report were based, in part, on visual observations of the site and attendant structures. Our conclusions cannot and are not extended to include those portions of the site or structures which were not reasonably available, in WSP's opinion, for direct observation.
4. The environmental conditions at the site were assessed, within the limitations set out above, having due regard for applicable environmental regulations as of the date of the inspection. A review of compliance by past owners or occupants of the site with any applicable local, provincial or federal by-laws, orders-in-council, legislative enactments and regulations was not performed.
5. The site history research included obtaining information from third parties and employees or agents of the owner. No attempt has been made to verify the accuracy of any information provided, unless specifically noted in our report.
6. Where testing was performed, it was carried out in accordance with the terms of our contract providing for testing. Other substances, or different quantities of substances testing for, may be present on site and may be revealed by different of other testing not provided for in our contract.
7. Because of the limitations referred to above, different environmental conditions from those stated in our report may exist. Should such different conditions be encountered, WSP must be notified in order that it may determine if modifications to the conclusions in the report are necessary.
8. The utilization of WSP's services during the implementation of any remedial measures will allow WSP to observe compliance with the conclusions and recommendations contained in the report. WSP's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
9. This report is for the sole use of the party to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. WSP accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.
10. This report is not to be given over to any third party for any purpose whatsoever without the written permission of WSP.
11. Provided that the report is still reliable, and less than 12 months old, WSP will issue a third-party reliance letter to parties client identifies in writing, upon payment of the then current fee for such letters. All third parties relying on WSP's report, by such reliance agree to be bound by our proposal and WSP's standard reliance letter. WSP's standard reliance letter indicates that in no event shall WSP be liable for any damages, howsoever arising, relating to third-party reliance on WSP's report. No reliance by any party is permitted without such agreement.



Unfinished Regular Council Business

No.	Meeting Date	Resolution	Subject	Action/Direction	Depart.	Status/Action Taken
19/18	May 22, 2018		Property Standards By-Law (Zoning)	It is directed that Administration harmonize the by-law regarding disconnected tractor-trailers on residential properties to be consistent within the Town.	DS	To be addressed in the new Comprehensive Zoning By-law: Update to Council in Q2 followed by Public Meetings
02/20	October 27, 2020	RCM 318/20	Regulations Regarding Storage and Parking of Commercial and Recreational Vehicles/Trailers in Residents' Zones	Administration to bring considerations to regulate the parking of these vehicles, units and trailers within the municipal right-of-way in the former Town of Tecumseh, to ensure that visibility sightlines are maintained to private driveways, and to recommend appropriate regulations surrounding the parking of such vehicles, units and trailers in the minimum side yard of a private property at the time the Town's zoning By-law is reviewed.	DS	To be addressed in the new Comprehensive Zoning By-law: Update to Council in Q2 followed by Public Meetings
03/20	October 27, 2020	RCM 319/20	Short Term Rentals	Administration undertake a regulatory review for both the short-term, owner-absent rental and the home-sharing short term rental categories.	DS	To be addressed in the new Comprehensive Zoning By-law: Update to Council in Q2 followed by Public Meetings
04/20	November 10, 2020	RCM 341/20	By-law to Prohibit and Regulate Public Nuisances Related to Odours and Lighting from Cannabis Cultivation	Administration to review and report back to Council on the appropriateness of a By-law in accordance with the <i>Municipal Act</i> that will address and regulate nuisances related to odour and lighting from the cultivation of cannabis plants; and investigate opportunities to consider the matter with the other municipalities in Essex County to try to seek a common regional regulatory approach.	DS	To be addressed in the new Comprehensive Zoning By-law: Update to Council in Q2 followed by Public Meetings
01/22	September 13, 2022	RCM 269/22	E Scooters/ Bike Program	That Administration be directed to investigate the possibility of a pilot project with vendors that offer public access to utilize their e scooters or e bikes as an alternative mode of transportation on a pay-to-ride basis, and report back to Council with options and budget implications in time for consideration during the 2023 budget deliberations.	CRS	Report to Council RCM April 25.

The Corporation of the Town of Tecumseh

By-Law Number 2023-054

Being a by-law to confirm the proceedings of the April 25, 2023 Regular Meeting of the Council of The Corporation of the Town of Tecumseh.

Whereas pursuant to Section 5(1) of the Municipal Act, 2001, S.O. 2001, c.25 as amended, the powers of a municipality shall be exercised by its Council; and

Whereas pursuant to Section 5(3) of the *Municipal Act, 2001*, S.O. 2001, c.25 as amended, a municipal power, including a municipality's capacity, rights, powers and privileges under Section 8 of the *Municipal Act, 2001*, S.O. 2001, c.25 as amended, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise; and

Whereas it is deemed expedient that the proceedings of the Council of The Corporation of the Town of Tecumseh at this meeting be confirmed and adopted by by-law.

Now Therefore the Council of The Corporation of The Town of Tecumseh Enacts as follows:

1. **That** the actions of the Council of The Corporation of the Town of Tecumseh in respect of all recommendations in reports and minutes of committees, all motions and resolutions and all other action passed and taken by the Council of The Corporation of the Town of Tecumseh, inclusive of documents and transactions approved and/or entered into during the April 25, 2023, meeting of Council, are hereby adopted and confirmed, as if the same were expressly embodied in this By-law.
2. **That** the Mayor and proper officials of The Corporation of the Town of Tecumseh are hereby authorized and directed to do all the things necessary to give effect to the action of the Council of The Corporation of the Town of Tecumseh during the said April 25, 2023, meeting referred to in paragraph 1 of this By-law.
3. **That** the Mayor and the Clerk are hereby authorized and directed to execute all documents necessary to give effect to the action(s) taken by this Council as described in Section 1 of this By-law and to affix the Corporate Seal of The Corporation of the Town of Tecumseh to all documents referred to in said paragraph 1.

Read a first, second, third time and finally passed this 25th day of April, 2023.

Gary McNamara, Mayor

Robert Auger, Clerk