



## THE CORPORATION OF THE TOWN OF ERIN

### By-Law # 20-02

**A By-law provide for drainage works in the Corporation of the Town of Erin, known as the Ospringe Drain.**

**Whereas**, the Council of the Corporation of the Town of Erin in the County of Wellington in accordance with the provisions of the *Drainage Act, R.S.O. 1990*, Chapter D. 17, received one petition from landowners requesting improved drainage for Lots 13, Concession 2 and 3, in the Town of Erin and subsequently appointed an Engineer to prepare a Report under Section 4 and 8 of the *Drainage Act*.

**And Whereas** the Council of the Corporation of the Town of Erin has procured a report prepared by K. Smart Associates Limited, dated August 23, 2019, and the said report, known as the Ospringe Drain, forms part of this By-law as Schedule "A";

**And Whereas** the estimated total cost of the drainage works is \$481,980;

**And Whereas** the Council of the Corporation of the Town of Erin is of the opinion improved drainage in the area is desirable;

**Therefore be it resolved that the Council of the Corporation of the Town of Erin Enacts as Follows pursuant to *The Drainage Act, R.S.O. 1990*, Chapter D.17, enacts as follows:**

1. The report entitled Ospringe Drain, prepared by Neal Morris, P Eng. of K. Smart Associates Limited, dated August 23, 2019, attached hereto and forming part of this by-law as Schedule "A" is hereby adopted and the drainage works as therein indicated and set forth is hereby authorized and shall be completed in accordance therewith.
2. The Corporation of the Town of Erin may borrow on the credit of the Corporation in the amount of \$481,980, being the amount necessary for the construction for the drainage works.
3. As assessments are payable in the first year in which the assessment is imposed less the total amount of:
  - a) Grants received under Section 85 of the *Drainage Act, R.S.O. 1990*, Chapter D. 17;
  - b) Allowances received under Sections 29 to 33 of the *Drainage Act, R.S.O. 1990*, Chapter D. 17
4. The Schedule of Assessment from the report dated August 23, 2019 is set forth in Schedule "A" and forms part of this by-law.
5. This By-law shall come into force and effect upon third and final reading and may be cited as "Ospringe Drain By-law".

**Read a first and second time and provisionally adopted in Open Council on February 4<sup>th</sup>, 2020.**

**Mayor, Allan Alls**

**Clerk, Lisa Campion**

Read a third time and passed this\_\_\_\_\_ Day of \_\_\_\_\_ 2020

\_\_\_\_\_  
Mayor, Allan Alls

\_\_\_\_\_  
Clerk, Lisa Campion

ENGINEERING REPORT

For

**OSPRINGE DRAIN**

**Town of Erin**

County of Wellington

Date: August 23, 2019

File No. 18-074



K. SMART ASSOCIATES LIMITED

Kitchener

Sudbury

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APPENDIX A – CALCULATION OF ASSESSMENTS FOR SCHEDULE A

APPENDIX B – CALCULATION OF ASSESSMENTS FOR SCHEDULE B

## SPECIFICATIONS

- Section 200 – General Conditions
- Section 300 – Special Provisions (see Drawings 16 and 17)
- Section 400 – Standard Specifications for Construction of Drains
- Section 410 – Standard Specifications for Open Drains
- Section 420 – Standard Specifications for Tile Drains

## DRAWINGS 1 TO 17

### Definitions:

“Act” means The Drainage Act RSO 1990  
 “DFO” means Fisheries and Oceans Canada  
 “Drain” means Osprunge Drain  
 “Grant” means grant paid by Grants Ontario under OMAFRA’s Agricultural Drainage Infrastructure Program (ADIP) Policy  
 “GRCA” means Grand River Conservation Authority  
 “KSAL” means K. Smart Associates Limited  
 “MNRF” means Ministry of Natural Resources and Forestry  
 “MOECP” means Ministry of Environment, Conservation and Parks  
 “Municipality” means Town of Erin  
 “OMAFRA” means the Ontario Ministry of Agriculture, Food and Rural Affairs  
 “Tribunal” or “Drainage Tribunal” means Agriculture, Food and Rural Affairs Appeal Tribunal  
 “Twp” means Township

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August 23, 2019

File No. 18-074

## **OSPRINGE DRAIN**

### **TOWN OF ERIN**

#### **1 EXECUTIVE SUMMARY**

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

On December 12, 2017 the Municipality received a petition from Tom Krizsan (Thomasfield Homes Ltd.) for drainage for a proposed subdivision for the lands in Pt E½ and SW½ Lot 13, Concession 2 (Erin Twp). Pursuant to Section 8 of the Act, on July 19, 2018, Neal Morris, P. Eng., K. Smart Associates Limited was appointed by resolution of Council to prepare a report on the petition received.

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

- Improvement of 1,821m of open ditch and swale (1,241m ditch improvement on Main Drain, 122m swale incorporation on North Branch, 458m swale incorporation on South Branch)
- Incorporation of 241m of closed drain (24m in SWM Pond, 114m North Branch, 103m South Branch)
- Incorporation of a SWM Pond
- The estimated cost of this project is \$481,980.
- The watershed served is approximately 416 hectares (1,028 acres).

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

- Schedule A shows the assessment of the total estimated cost
- Schedule B will be used for prorating future maintenance cost
- Schedule C will be used for levying the final cost of the Drain
- Appendix A illustrates the calculation of the assessments outlined in Schedule A.
- Appendix B illustrates the calculation of the assessments outlined in Schedule B.

## **2 BACKGROUND**

In October 2017 GM BluePlan Engineering Limited had prepared Drawings for a proposed subdivision (Ospringe Subdivision) in N½ Lot 13, Concession 2. The Subdivision would consist of 60 residential lots (Lots 1 to 60), 11 blocks (Blocks 61 to 71) (including a block for parklands and a block for an SWM area (pond)) and 3 streets (Broughton Street, Charles Currie Crescent and McKinnon Street).

The landowner/developer Thomasfield Homes Ltd. submitted a petition to the Town on December 12, 2017. The petition was for part of E1/2 and SW1/2 Lot 13, Concession 2 in the Town of Erin that requires a sufficient outlet for a Draft Plan of Subdivision as approved by the County of Wellington. The owner of part E1/2 and SW1/2 Lot 13, Concession 2 in the Town of Erin requested that a municipal drain be created to provide adequate capacity to convey the storm drainage from the Draft Plan of Subdivision and Wellington Road 125 to a sufficient outlet.

Downstream of Wellington Road 125 the existing ditch runs along the property line to the north before turning to the west and entering an old 18" CSP culvert under an existing barn.

On July 19, 2018, K. Smart Associates Limited (Neal Morris, P.Eng.) was appointed by resolution of Council to prepare a report.

## **3 INVESTIGATION**

### **3.1 On-Site Meeting**

On October 2, 2018, an on-site meeting was held in accordance with S. 9(1) and 9(2) of the Act. Notice of the meeting was sent to the landowners most affected by the drain and the affected agencies.

The meeting was attended by the representatives of the petitioner, the petitioner's engineers for the subdivision, several landowners, Town staff, Wellington County staff, representatives from the agencies/utilities (Bell, Enbridge Gas and Hydro One) and Neal Morris, P. Eng. (K. Smart Associates Limited).

The following input was provided by those in attendance:

#### **W. Kline (005-06712)**

When this landowner bought the property, there was an 18" CSP culvert under the barn that takes existing water from the road. He asked KSAL to investigate taking water along the road to outlet into the Eramosa River. He could put in a pipe along the barn. He did not want an open ditch through their property. The lower part of the property can be very wet. He said his neighbour to the west, John Deere dealer, has tiled land to the northeast corner of his property using 6" tile. There is



an existing swale along the west property line. The watershed divide is between two properties to the east.

M. Schotsch (005-09001)

Installed culvert – services under culvert by the previous landowner. Flows typically are contained in the existing ditch.

GRCA owns the land on both sides of the property. The existing culvert has not been overtopped. Wanted ditch to be cleaned out.

Has one railway tie footbridge, a ditch is very small and water floods the east of the property.

He would like a new culvert.

There is no ditch to the Eramosa River from his property. He would like work to be on the west side of the drain.

T. McLaughlin (Thomasfield Homes Ltd.) (005-05900)

They would like the proposed SWM Pond, and several storm sewers and swales on private property to be made a part of the drain.

### **3.2 Site Examination and Survey**

The route of the proposed Main Drain was examined after the on-site meeting on October 13, 2018, and a topographic (GPS) survey was completed in October 2018, from the outlet in the Eramosa River to the upstream (south) side of Wellington Road 125 (Hwy 125). Several option routes were also surveyed. The information for the subdivision lots, blocks, streets, SWM Pond, North Branch and South Branch were taken from the subdivision drawings provided by GM BluePlan.

### **3.3 Watershed Description**

The perimeter watershed of the Drain has been established based on-site investigation, available topographic information and the proposed subdivision plans. There are no municipal drains that have common watershed with the proposed drain.

The watershed area currently is approximately 265.5 ha agricultural lands, 90.9 ha forested lands, 41.3 ha residential lands and 18.3 ha roads.

The watershed area will be approximately 247.6 ha agricultural lands, 90.9 ha forested lands, 55.8 ha residential lands and 21.7 ha roads. The subdivision will convert 17.9 ha of agricultural lands to 14.5 ha residential lands and 3.4 ha of roads.

#### **4 AUTHORITY FOR REPORT**

Section 4 of the Drainage Act provides for the construction of new drainage works for an area requiring drainage. As a result of the analysis of the petition and of discussions at the on-site meeting and on-site examination, the area requiring drainage was determined to be the proposed subdivision lands owned by Thomasfield Homes Ltd. in the N½ Lot 13, Concession 2 (Erin Twp). The petition was signed by Tom Krizsan, President of Thomasfield Homes Ltd., who has the “authority to bind the Corporation”. The signature on the petition represents all of the area requiring drainage thus the petition is valid in accordance with Sections 4(1)(a) and 4(1)(b) of the Drainage Act.

#### **5 DESIGN CONSIDERATIONS**

##### **5.1 Sufficient Outlet**

Section 15 of the Act requires that proposed work be continued downstream to a sufficient outlet. Section 1 of the Act defines sufficient outlet as “a point at which water can be discharged safely so that it will do no damage to lands or roads.” For this project, it was determined that the Eramosa River provides sufficient outlet and will allow the proposed works to function as intended.

##### **5.2 Drain Capacity**

The lower portion of the Main Drain from Eramosa River upstream for approximately 940m has been sized, due to the steeper grades, to convey the 2-year storm within the channel cross-section. It is customary for open municipal drains serving agricultural or rural lands to be sized for a 2-year storm. The upper portion of the Main Drain open ditch has been sized to provide adequate capacity for a 100-year storm from the proposed subdivision in the NPt Lot 13, Concession 2. This system is designed to flood undeveloped and unoccupied lands for short periods while protecting permanent structures.

Low flow culvert crossings are designed for the 2-year storm as to allow the free flow of low water levels through them. In the event of a flood, the water will flow over the top of the crossing as well as through them, thereby not providing a major blockage in the ditch at any time.

Laneway culverts are designed for the 5-year storm.

The County road crossing satisfies the 100-year storm.

This approach is in accordance with the “Guide for Engineers Working Under the Drainage Act in Ontario” OMAFRA Publication 852 and is in accordance with the Drainage Act.

Based on discussions with the Developer's engineer, the proposed closed (storm) drains and swales on this project to be incorporated have been designed, using the Rational Method, for a 5-year storm.

The proposed SWM Pond area was designed for the 100-year storm. This SWM area has been designed for both quantity and quality control.

### **5.3 Soil Conditions**

The Wellington County soils mapping for this area indicates that the soils adjacent to this drain are Guelph loam (loam till, good drainage, smooth moderately sloping, slightly stony), London loam (loam till, imperfect drainage, smooth very gently sloping and slightly stony) and Muck (very poor drainage, smooth basin, stone-free).

The Guelph loam soils are located in the N Pt Lot 13, Concession 2 and S Pt Lot 13, Concession 3, the London loam soils are located in the middle part of Lot 13, Concession 3 and the Muck soils are located in the N Pt Lot 13 along and for 270m± upstream of the Eramosa River.

The work in the Muck soils may require the use of mats. A portion of the Guelph loam soils in the S Pt Lot 13, Concession 3 may have possible underground springs. It is anticipated that flowing sands may be encountered in some portions.

If pockets of poor soils conditions are encountered, the contingency price from the form of the tender will be paid by the linear meter upon the engineer's approval. This contingency price is based on increased costs relating to the contractors time and materials.

### **5.4 Alternatives Investigated**

The option to put a pipe along the barn and on the east side of the Roll No. 005-06712 property would involve 189m of ditch excavation and 75m of 600mm dia. HDPE pipe, remove and re-erect 240m of fence and excavation of 68m of swale. This option is not being pursued due to much higher costs to the project and a highly restricted working corridor.

Another option that landowners wished to be investigated was for the drain to be along the north side of Wellington Road 125 to outlet into the Eramosa River. This would involve 1,430m± road ditch excavation with a deep section involving installing guard rails and replacement of 5 laneway culverts. This option is not being pursued due to much higher costs to the project and the road/public safety issues.

## **6 MEETING**

On February 28, 2019, a second meeting with landowners was held. Notice for the meeting was sent to all landowners in the watershed, affected agencies and the Municipality. 24 landowners had attended the meeting as well as the developer and his engineers and representatives from the Town. At the meeting, the Engineer explained the Drainage Act process and the results of the investigation to-date were presented along with a summary of the proposed work/design alternatives and preliminary cost estimates and assessments.

The following input was provided by those in attendance:

- One landowner had a question about taking the water east along Highway 125. The Engineer explained that the construction would be higher and may require guide rails due to a 3m deep ditch.
- One landowner questioned if this would cause increased flooding. The Engineer and developer's Engineer explained the pond on the developer's property would reduce the peak flow off the site. The ditch is designed for the 100-year at the top end and 2-year at the lower end. This system is designed to flood undeveloped and occupied lands for a small amount of time while protective permanent structures by draining into the Eramosa River more efficiently.
- Landowners were concerned about the cost of future maintenance. The Engineer explained that the proposal is designed to be low maintenance and only if work is done are costs assessed out. The Town has one drain which has not been maintained in the last 5 years.
- Landowners were concerned about the existing pond in the subdivision to the west of the drain. The proposed drain does account for water from this area. The proposed drain should have little negative effect on this system.
- The outlet from the 005-09001 property to Eramosa River there is approximately 1m of fall.

## **7 ENVIRONMENTAL CONSIDERATIONS**

### **7.1 Agency Notification**

Contact was made with the Grand River Conservation Authority, the Ministry of Natural Resources and Forestry (MNR) and Fisheries and Oceans Canada (DFO) during the process of preparing this report. It is to be noted that MNR is now part of the Ministry of Environment, Conservation and Parks (MOEC).

## **7.2 Agency Responses**

### **7.2.1 Grand River Conservation Authority (GRCA)**

The GRCA did not request an environmental appraisal under Section 6 of the Act. The GRCA received notice of public meetings conducted during the course of this project. In the fall of 2018, the engineer met GRCA at their office. GRCA approved the use of the rock riffle. They requested that a wide bottom swale into the Eramosa River be used as well as native seed. A project description and drawing package were provided to the Conservation Authority for their review on March 13, 2019. A response from the GRCA has not been received yet. The GRCA will receive a copy of this report for their review.

### **7.2.2 MOECP/MNRF**

A screening request for species at risk was submitted to MOECP/MNRF on March 13, 2019. There has been no response from the ministry to date. It is noted however that there are no known endangered or threatened species or their habitat along the proposed ditch.

### **7.2.3 DFO**

The Ospringe Drain is not rated under DFO's drain classification system.

A Request for Review was submitted to DFO along with a project description and drawing package on March 13, 2019. The response from DFO dated June 27, 2019, indicated the proposed works will not result in serious harm to fish or prohibited effected on listed aquatic species at risk. As such, an authorization under the Fisheries Act or a permit under the Species at Risk Act is not required. The work is to be done in the summer months in dry conditions and erosion and sediment control measures as shown in this report are to be undertaken.

## **8 RECOMMENDED WORK**

A description of the Drain for construction and future maintenance can be found in the Special Provisions and Drawings.

### **8.1 Culverts**

Table 8.1-1 - Summary of Culverts identifies culverts that are part of the Drain and specifies minimum sizes for future culverts, subject to the approval of the municipality as required by the maintenance section of this report.

**Table 8.1-1 - Summary of Culverts**

Roll Number or Road	Station	Existing Length, Size and Type	Proposed / Recommended	Responsibility
<b><u>i) Main Drain</u></b>				
005-09001	0+975 to 0+970	Timber/railway ties/footbridge	Twin (2) 5m lengths of 600mm dia. HDPE pipe low flow crossing	Drain
005-06716	0+800	14m of 1600mm dia. CSP laneway culvert	14m of 1600mm dia. CSP	Drain
005-06714	0+470 to 0+464	6m of 200mm dia. plastic pipe culvert	6m of 750mm dia. HDPE pipe	Drain
005-06712/ Wellington Road 125	0+062 to 0+037	20m of 450mm dia. CSP laneway culvert along N/S of road	Existing to remain and to be incorporated. 25m of 600mm dia. HDPE beside existing	Drain
Wellington Road 125	0+029 to 0+000	29m of 750mm dia. CSP	750mm dia. CSP	Road
<b><u>ii) North Branch</u></b>				
Access to Subd. Lot 54	0+138	None	12m of 400mm dia. CSP	Drain
Access to Subd. Lot 53	0+166	None	12m of 400mm dia. CSP	Drain
<b><u>Minimum Capacity for future culverts subject to municipality approval</u></b>				
005-09100	1+241 to 1+017	None	1200mm dia. HDPE	Drain
005-09100	0+903 to 0+875	None	1200mm dia. HDPE	Drain
005-06715	0+706 to 0+589	None	750mm dia. HDPE	Drain
005-06716	0+800	14m of 1600mm dia. CSP laneway culvert	1200mm dia. HDPE	Drain

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

- Drain – 50% to the listed roll number/subdivision lot number and 50% to the upstream watershed
- Road – special assessment to the road authority per Section 26
- Road/Utility – 50% to the affected utility and 50% to the road authority
- Owner – 100% to the listed roll number

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

## **8.2 Changes to the Drain After the Bylaw is Passed**

If a substantial addition, deletion, or change is made to the drain proposed in this report, a revised report can be prepared and processed through the Act, or an application can be made under the Act to the Drainage Tribunal to recognize the substantial addition, deletion or change. The application to the Tribunal must occur before final costs are levied.

# **9 CONSTRUCTION CONSIDERATIONS**

## **9.1 Pre-Construction Approvals**

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

Utilities exist along Wellington Road 125 (Hwy 125). There are overhead hydro lines along both sides of the road. Work at this road allowance is subject to approval and coordination with the County of Wellington roads department.

## **9.2 Construction Scheduling**

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

## **9.3 Minor Adjustments During Construction**

Minor changes to the drain may be made during construction if the changes are approved by the Engineer and the Municipality in accordance with the Specifications in this report. Such changes must occur before final costs are levied.

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

#### **9.4 Substantial Alterations to the Drain**

Any alterations that would affect the function of the drain which are requested by landowners, agencies or other authorities after the bylaw is passed cannot be undertaken unless the report is amended.

#### **9.5 Alignment of Drains**

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

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

### **10 DRAWINGS AND SPECIFICATIONS**

#### **10.1 Drawings**

The location of the drain, watershed boundary and the affected properties are shown on Drawings 1 to 3 included with this report. The numbers adjacent to the drain are station numbers which indicate in metres the distance along the drain from the outlet.

The profiles for the Drain are on Drawings 4 to 7. The profiles show the depth and grade for proposed/incorporated work and future maintenance.

Drawings No. 8 to 15 contain the details and cross-sections. Drawings 16 & 17 contain the Special Provisions. The information for the profiles and details for the SWM Pond, North Branch and South Branch were taken from the proposed subdivision drawings supplied by the Developer's engineer, GM BluePlan Limited, dated November 19, 2018.

#### **10.2 Specifications**

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

### **11 COST ESTIMATE**

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



## **11.1 Allowances**

Sections 29 to 33 of the Drainage Act provides for allowances (compensation) to owners affected by proposed drain construction. On this project, there are allowances for Section 29 (R-O-W), Section 30 (Damages) and Section 31 (Existing Drains).

### **11.1.1 Section 29 – Right of Way**

Section 29 provides for payment of an allowance to landowners for the right of way required for construction and maintenance of the new drain. This allowance compensates the owners for land to accommodate the drain, access routes to the drain and for a corridor along the drain for construction and maintenance purposes. Right of way corridors of 5m width exist along both sides of the drain for maintenance. Current municipal assessment rolls were reviewed to establish land values for computing right of way allowances. Section 29 allowances are based on the rates in the following Table.

**Table 11.1-1 - Section 29 Allowance Rates**

Land Use	Area Land Value
Cultivated Lands	\$ 7.55/m <sup>2</sup>
Bush Lands and Flood Plain	\$ 3.78/m <sup>2</sup>

There is a minimum Section 29 allowance of \$100.

### **11.1.2 Section 30 - Damages**

Section 30 provides for payment of an allowance to landowners along the drain for damages caused by the construction of the drain. Where separate access routes to the working area are specified in this report, Section 30 allowances also account for access route damage. In agricultural areas, crop damages are computed based on published crop values and declining productivity loss in the years following construction. For this project, Section 30 allowances are based on the following rates:

**Table 11.1-2 - Section 30 Allowance Rates**

Land Use	Area Land Value
Cultivated Lands	\$ 0.44/m <sup>2</sup>
Bush Lands and Flood Plain	\$ 0.22/m <sup>2</sup>

There is a minimum Section 30 allowance of \$100.

### **11.1.3 Section 31 – Existing Drains**

Section 31 provides for payment of an allowance to the owner of an existing drain that is to be incorporated as part of the new drain. On this project the Section 31

allowances are for the SWM Pond, North Branch and South Branch to be constructed by the developer on the Thomasfield Homes Ltd. (Roll No. 005-05900) in the proposed subdivision in Pt Lot 13, Concession 2. The items to be incorporated and their costs are as shown in Table 11.1-3 – Section 31 Allowance Calculations. These items and costs were supplied by GM BluePlan Limited and are estimated costs.

**Table 11.1-3 - Section 31 Allowance Calculations**

Stations	Description	Unit	Quantity	Unit Price	Cost
<b>i) SWM Pond</b>					
0+000	1200mm dia. precast concrete manhole (MH 5.3) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000
0+000 to -0+018	17.5m of 600mm dia. concrete CL-3 storm sewer	m	18	215	3,900
-0+018	1500mm dia. concrete double ditch inlet catchbasin manhole (DDICBMH 5.2) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000
-0+018 to -0+024	7m of 300mm dia. PVC SDR 35 pipe storm sewer	m	7	100	700
-0+024	1200 x 600mm concrete double ditch inlet catchbasin (DDICB 5.1) complete with 2:1 sloped top, benching, frame and grate and connections	L.S.	1	2,500	2,500
-0+024	Construction of pond with 150mm dia. orifice plate, seeding on 450mm of topsoil, riprap, asphalt overflow weir, grading and security fence	L.S.	1	53,300	53,300
Sub Total:					<b>68,400</b>
<b>ii) North Branch</b>					
0+000	Precast concrete headwall for 525mm pipe with rodent gate	each	1	2,500	2,500
0+000 to 0+025	25m of 525mm dia. concrete CL-3 storm sewer	m	25	200	5,000
0+025	1500mm dia. precast concrete manhole (MH 1.1) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000
0+025 to 0+096	71m of 525mm dia. concrete CL-3 storm sewer	m	71	200	14,200
0+096	1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 1.2) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000
0+096 to 0+114	18m of 450mm dia. concrete CL-3 storm sewer	m	18	150	2,700
0+114	1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 1.3) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000

Stations	Description	Unit	Quantity	Unit Price	Cost
0+114 to 0+178	64m of swale (road ditch) ("V" ditch with 3:1 side slopes)	m	64	6	400
0+138 & 0+166	12m of 400mm dia. CSP (2.0mm wall, 68 x 13mm corrugations) driveway/laneway crossing	each	2	3,000	6,000
0+178 to 0+228	50m of swale ("V" ditch with 3:1 side slopes)	m	50	6	300
0+228 to 0+236	8m of 300mm dia. CSP (2.0mm wall, 68 x 13mm corrugation) with 20m of 0.9m high earth berm	L.S.	1	3,000	3,000
Sub Total:					<b>46,100</b>
<b>iii) South Branch</b>					
0+000	Rodent gate at outlet	each	1	500	500
0+000	Precast concrete headwall for 825mm pipe with rodent gate	each	1	3,500	3,500
0+000 to 0+085	85m of 825mm dia. concrete CL-3 storm sewer	m	85	250	21,300
0+085	1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 2.1) complete with benching, frame and grate and connections	L.S.	1	4,000	4,000
0+085 to 0+103	18m of 675mm dia. concrete CL-3 storm sewer	m	18	230	4,100
0+103	1200 x 600mm concrete double ditch inlet catchbasin (DDICB 2.2) complete with benching, frame and grate and connections	L.S.	1	2,500	2,500
0+103 to 0+111	8m of swale (road ditch) ("V" ditch with 3:1 side slopes)	m	8	6	100
0+111 to 0+561	450m of swale ("V" ditch with 3:1 side slopes)	m	450	6	2,700
Sub Total:					<b>38,200</b>
<b>TOTAL VALUE OF ITEMS TO BE INCORPORATED:</b>					<b>\$152,700</b>

#### 11.1.4 Summary of Allowances

The table below summarizes the dimensions and amounts of the allowances to be provided under this report.

**Table 11.1-4 - Summary of Allowances**

Roll Number	R.O.W. Width (m)	(Sec 29) (\$)	Damages Width (m)	(Sec 30) (\$)	Existing Drain (Sec 31)	Total (\$)
<b>i) MAIN DRAIN</b>						
005-06712	5	16,100	10	1,800	0	17,900
005-06713	10	16,000	15	1,400	0	17,400
005-06714	10	21,900	20	2,400	0	24,300
005-06715	10	5,700	20	700	0	6,400
005-06716	10	3,500	20	400	0	3,900

Roll Number	R.O.W. Width (m)	(Sec 29) (\$)	Damages Width (m)	(Sec 30) (\$)	Existing Drain (Sec 31)	Total (\$)
005-09001	10	4,300	20	500	0	4,800
005-09100	15	15,400	25	1,500	0	16,900
SUB TOTAL:		82,900		8,700	0	91,600
<b><u>ii) SWM POND (005-05900 (SUBDIV.))</u></b>						
SWM Block 62		0		0	68,400	68,400
<b><u>iii) NORTH BRANCH (005-05900) (SUBDIV.)</u></b>						
005-05900 (Subdiv.)	0	0	0	0	46,100	46,100
Lot 55	9	3,300	0	0		3,300
Lot 52	6	2,400	0	0		2,400
Lot 53	3	1,200	0	0		1,200
SUB TOTAL:		6,900		0	46,100	53,000
<b><u>iv) SOUTH BRANCH (005-05900) (subdiv.)</u></b>						
005-05900 (Subdiv.)	0	0	0	0	38,200	38,200
Lot 59	6	2,900	0	0		2,900
Lot 60	3	1,400	0	0		1,400
Lot 1	9	6,200	0	0		6,200
Lot 2	9	2,300	0	0		2,300
Lot 3	9	2,300	0	0		2,300
Lot 4	9	2,300	0	0		2,300
Lot 5	9	2,300	0	0		2,300
Lot 6	9	2,300	0	0		2,300
Lot 7	9	2,400	0	0		2,400
Lot 8	9	2,400	0	0		2,400
Lot 9	9	2,500	0	0		2,500
Lot 10	9	4,400	0	0		4,400
Lot 11	9	1,300	0	0		1,300
SUB TOTAL:		35,000		0	38,200	73,200
<b>TOTAL:</b>		124,800		8,700	152,700	<b>286,200</b>

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

### **11.2 Construction Cost Estimate**

The estimated cost for Labour, Equipment and Materials to construct the proposed drain is outlined in detail in Estimated Costs Summary in Table 11.6-1 Estimated Cost Summary. The construction cost estimate is based on recent costs for

comparable work. A contingency amount is included to cover additional work that may be required due to field conditions or minor alterations to the project.

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

### **11.3 Engineering Cost Estimate**

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

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

The cost for report preparation is usually not altered at the conclusion of a project unless the report is referred back or the report is appealed to the Drainage Tribunal which would result in additional costs. The amount shown for meetings is an estimate. The final cost will be based on the actual time required for meetings. The estimate shown for construction phase services is based on past experience and assumes good construction conditions and a Contractor who completes the construction in an efficient manner. The final cost for the construction phase will vary as per the actual time spent during and following drain construction.

Engineering costs are summarized in Table 11.6-1 Estimated Cost Summary.

### **11.4 Estimate of Section 73 Costs**

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

The estimate of Section 73 costs is included to cover the above-referenced items from Section 73(1) and primarily provides for interest charges on financing the project until it is completed. This cost estimate may not be adequate to cover legal or engineering costs incurred by or assessed to the municipality should the project be appealed beyond the Court of Revision though such costs will form part of the final drain cost.

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

Section 73 costs are summarized in Table 11.6-1 Estimated Cost Summary.

### **11.5 Harmonized Sales Tax**

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

### **11.6 Estimated Cost Summary**

**Table 11.6-1 Estimated Cost Summary**

DESCRIPTION						TOTAL COST
<b>ALLOWANCES:</b>						<b>\$286,200</b>
<b>CONSTRUCTION COST ESTIMATE</b>						
Item	Stations	Description	Unit	Quantity	Unit Price	Cost
<b>i) Main Drain</b>						
1	1+200±	Construct temporary straw bale sediment trap	each	1	800	\$ 800
2	1+241 to 1+017	Power brushing 15m width	m <sup>2</sup>	3,360	2	6,700
3	1+200 to 0+975	225m of ditch clean-out (10m bottom, 2:1 side slopes). Level on east side.	m	225	15	3,400
4	1+200 to 0+975	Seeding (10m width) with native wetland seed	m <sup>2</sup>	2,250	3	6,800
5	1+017 to 0+903	Power brushing 15m width	m <sup>2</sup>	1,710	2	3,400
6	0+903 to 0+832	Power brushing 10m width	m <sup>2</sup>	710	2	1,400
7	0+975 to 0+875	100m of ditch clean-out (2m bottom, 2:1 side slopes). Level on east side.	m	100	15	1,500
8	0+975 to 0+875	Seeding (3m sides)	m <sup>2</sup>	300	1	300
9	0+975± to 0+970	Construct low flow crossing with twin (2) 5m lengths of 600mm dia. HDPE pipes and 45m <sup>2</sup> of riprap	L.S.	1	4,500	4,500
10	0+800	Existing 14m of 1600mm CSP laneway culvert to be incorporated. No work required.	m <sup>2</sup>	0	0	0
11	0+875 to 0+706	169m of debris removal and disposal	m	169	5	900
12	0+706 to 0+300	406m of ditch excavation (1m bottom, 2:1 side slopes). Level on west side.	m	406	15	6,100
13	0+706 to 0+300	Seeding (3m sides)	m <sup>2</sup>	1,218	1	1,300
14	0+600 to 0+475	Power brushing (10m width)	m <sup>2</sup>	1,250	2	2,500
15	0+470 to 0+464	Remove and dispose of existing culvert and construct new 6m of 750mm HDPE	L.S.	1	3,000	3,000

DESCRIPTION							TOTAL COST
		laneway crossing with 6m <sup>2</sup> riprap and laneway restoration					
16	0+300 to 0+088	212m of ditch excavation, 1m bottom, 2:1 side slopes. Level spoil on west side from Sta. 0+300 to 0+175	m	212	42	8,900	
17	0+175 to 0+088	Spoil to be hauled away to use for berm at Sta. 0+125 to 0+100	m	87	6	600	
18	0+300 to 0+088	Seeding (6m sides)	m <sup>2</sup>	1,272	1	1,300	
19	0+125 to 0+100	Construct 25m long x 0.6m wide x 0.8m high earth berm on east bank using spoil from 0+175 to 0+088	L.S.	1	500	500	
20	0+102 to 0+092	Construct rock riffle 10m <sup>3</sup> rocks (riprap)	L.S.	1	3,000	3,000	
21	0+088 to 0+062	26m of ditch excavation (1m bottom, 2:1 side slopes). Spoil to be hauled away	m	26	50	1,300	
22	0+088 to 0+062	Seeding (9m sides)	m <sup>2</sup>	234	1	300	
23	0+062 to 0+037	Construct 25m of 600mm dia. HDPE laneway crossing including 5m <sup>2</sup> of riprap at each end (10m <sup>2</sup> riprap total) and laneway restoration	L.S.	1	8,500	8,500	
24	0+037 to 0+029	8m of ditch excavation (1m bottom, 2:1 side slopes). Spoil to be hauled away.	m	8	50	400	
25	0+037 to 0+029	Seeding (9m sides)	m <sup>2</sup>	72	1	100	
26	0+029	Regrade 31m of ditch to the east along north side of road	m	31	20	600	
27	0+029	Construct 0.4m high earth berm 35m long along north bank	m	35	30	1,100	
28	0+029	Seed disturbed area (10m width)	m <sup>2</sup>	310	1	300	
29	0+029	Riprap on bends and berm	m <sup>2</sup>	25	50	1,300	
30	0+029 to 0+000	No work required. Existing 29m of 750mm dia. CSP road culvert to be incorporated.	L.S.	0	0	0	
Sub Total Part i)							<b>70,800</b>
<b>v) Contingencies</b>							
31		Lump sum contingency allowance	L.S.	1	7,100	7,100	
Net HST (1.76%)							1,370
<b>TOTAL CONSTRUCTION COST ESTIMATE:</b>							<b>\$79,270</b>
<b>ENGINEERING COST ESTIMATE</b>							
Report Preparation						75,000	
Consideration of Report Meeting						1,200	
Court of Revision						1,200	
Construction Phase Services						22,300	
Net HST (1.76%)						1,750	
<b>TOTAL ENGINEERING COST ESTIMATE:</b>							<b>101,450</b>
<b>SECTION 73 COSTS ESTIMATE</b>							
Printing (reports)						1,200	
Printing (tender)						200	

DESCRIPTION	TOTAL COST
Agencies Fees (GRCA/MOECF/DFO)	1,000
Interest estimate	6,700
Unforeseen costs	5,700
Net HST (1.76%)	260
<b>TOTAL SECTION 73 COSTS ESTIMATE:</b>	<b>15,060</b>
<b>TOTAL ESTIMATED COST:</b>	<b>\$481,980</b>

## 12 ASSESSMENTS

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

### 12.1 Calculation of Assessments

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

### 12.2 Benefit Assessments (Section 22 and 24)

Section 22 benefits were determined based on the estimated value the drain provides to the property and are not proportional to watershed area.

Section 24 special benefit is assessed to lands where additional work or features are requested that have no effect on the function of the drain. Special benefit examples include hauling spoil offsite, aesthetic features and installing lateral drains. Non-grantable benefits relate to work that is not eligible for Grant according to the current OMAFRA policy. Non-proratable benefits are not used to determine the actual cost factor for the final cost levy. Some examples would be lateral drains, culverts or hauling of spoil. Columns with non-grantable and non-proratable are used to complete the final assessment. Table 12.2-1 - Benefit Assessments provides a summary of the benefit assessments. The Special Benefit to Roll No. 005-09001 is for ½ of the cost of the new low flow crossing at Stn. 0+975±. The Special Benefit to Roll No. 005-09100 is for wetland native seed mix and other required environmental features and the Special Benefit to Roll No. 005-06714 is for ½ of the cost of the new culvert at Stn. 0+465±.



**Table 12.2-1 - Benefit Assessments**

Roll Number	Location	Section 22	Section 24	Total Benefit	Non-grantable	Non-proratable
005-06715	Main Dr, Int. 1	2,900		2,900		
005-06716	Main Dr, Int. 1	7,300		7,300		
005-09001	Main Dr, Int. 1	7,300	2,250	9,550		2,250
005-09100	Main Dr, Int. 1	25,200	11,800	37,000		
005-06712	Main Dr, Int. 2	19,100		19,100		
005-06713	Main Dr, Int. 2	25,100		25,100		
005-06714	Main Dr, Int. 2	24,800	1,500	26,300		1,500
005-06715	Main Dr, Int. 2	5,800		5,800		
Wellington Road 125 (Hwy 25) (County of Wellington)	Main Dr, Int. 2	12,600		12,600		
005-05900	Main Dr, Int. 2	20,600		20,600		
Wellington Road 125 (Hwy 25) (County of Wellington)	Main Dr, Int. 3	2,000		2,000		
005-05900	Main Dr, Int. 3	2,000		2,000		
005-06712	Main Dr, Int. 3	2,100		2,100		
005-05900 (subdiv.)	SWM Pond	84,200		84,200		
005-05900 (subdiv.)	North Br	50,900		50,900		
005-05900(subdiv.)	South Br	66,400		66,400		
<b>TOTALS:</b>		358,300	15,550	373,850		3,750

**12.3 Outlet Liability Assessments (Section 23)**

Section 23(3) of the Drainage Act states that outlet liability assessment is to be based on the volume and rate of flow of the water artificially caused to flow. To satisfy this requirement, the lands and roads in the watershed are assessed on a per hectare basis, with adjustments made to recognize the different amount of runoff generated by different land uses. The basis for the adjustments is 1 hectare of cleared agricultural land contributing both surface and subsurface water to the drain. Land uses with a different runoff rate are adjusted by the factors given in Table 12.3-1 - Runoff Factors Table.

**Table 12.3-1 - Runoff Factors Table**

Land Use	Runoff factor
Agricultural	1.0
Forest	0.5
Built-up	1.5
Gravel Road	2.0
Paved Road	3.0
Unopened Road	1.0

## **12.4 Assessment Schedules**

### **12.4.1 Schedule A- Schedule of Assessments**

The estimated cost for the drainage works in this report is distributed among lands, roads and utilities as shown in Schedule A, the Schedule of Assessments. In Schedule A each parcel of land assessed has been identified by the municipal assessment roll number at the time of the preparation of this report. The size of each parcel was established using the assessment roll information. For convenience only, each parcel is also identified by the owner name(s) from the last revised assessment roll.

### **12.4.2 Schedule B -Schedule of Assessments for Maintenance**

In accordance with Section 74 of the Act, the Drain shall be maintained by the municipality and the cost of maintenance shall be assessed to lands and roads upstream of the maintenance location, prorata with the amounts in Schedule B. The amounts in Schedule B are derived from the cost distribution shown in Appendix B, and will not be levied with the final cost of the drainage works.

Roll numbers are per the Municipality's last revised assessment roll, names included for convenience. Amounts are not payable at this time, they determine the share of future maintenance cost. Eligibility for grant will be confirmed by the municipality at the time the maintenance cost is levied.

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

A minimum assessment of 0.01% is to be applied to all future small lots in the watershed per interval.

### **12.4.3 Schedule C – Schedule for Actual Cost Bylaw**

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

### **13 GRANT**

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

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

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

### **14 PRIVACY OF LANDS**

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

### **15 MAINTENANCE**

#### **15.1 General**

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

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

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

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

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

It is recommended that each abutting owner work no closer than 1.2m (4 ft) to any ditch bank. Such area does not have to be grassed but it should not be cultivated.

### **15.2 Updating Future Maintenance Schedules**

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

### **15.3 Culvert Maintenance**

- The costs of cleaning through all culverts shall be assessed as drain maintenance to upstream lands and roads.
- The cost for future structural repair, extension or replacement of road culverts will be assessed fully to the road authority.
- When the responsibility for an access culvert is designated in Table 8.1-1 - Summary of Culverts as "Drain," the cost for repair or replacement shall be assessed 50% to the abutting landowner and the remainder to the upstream watershed. The cost of an additional culvert length is assessed to the owner.
- When the responsibility for an access culvert is designated as "Owner," the cost for installation, repair, replacement and removal are the responsibility of the roll number listed in Table 8.1-1 - Summary of Culverts.
- Culverts installed to service public utilities shall be assessed 50% to the utility and 50% to the affected land or road.
- Prior approval of the Municipality is required before a landowner installs a culvert not constructed under this report. The culvert shall be installed per sizing listed in Table 9.1-1 and design grade specified in this report. If culverts smaller than the minimum recommended size are installed, such culverts will be deemed an obstruction to the drain and removed at the landowner's expense.

**16 BYLAW**

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

All of which is respectfully submitted,

K. SMART ASSOCIATES LTD.

*Neal Morris*



N. Morris, P. Eng.

mw

August 23, 2019

**SCHEDULE A - SCHEDULE OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

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File No. 18-074

Con	Lot	Roll No.	Owner	MAIN DRAIN				SWM POND				NORTH BRANCH				SOUTH BRANCH				GROSS TOTAL
				Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	
2	Pt 14	005-03500	K. Thompson	2.10	0	134	134	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	134
2	Pt 15	005-03600	R. Young	5.30	0	395	395	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	395
2	Pt 17	005-03800	S. Jhaj	27.00	0	1,898	1,898	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	1,898
2	Pt 16	005-03900	R. Ysidron	4.40	0	239	239	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	239
2	Pt 16	005-04000	L. Dellamora	27.60	0	1,722	1,722	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	1,722
2	Pt 15	005-04100	953409 Ontario Limited	39.90	0	2,744	2,744	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	2,744
2	Pt 15	005-04105	Avalon Specialized Services	0.28	0	31	31	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	31
2	Pt 14	005-04200	A. McNaught	20.20	0	1,353	1,353	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	1,353
2	Pt 14	005-04300	M. Grundy	0.31	0	35	35	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	35
2	Pt 14	005-04400	S. Kinsey	0.20	0	22	22	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	22
2	Pt 14	005-04500	B. Klassen	14.40	0	813	813	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	813
2	Pt 14	005-04600	Datta Yoga Centre of Canada	2.40	0	179	179	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	179
2	Pt 14	005-04700	9522077 Canada Inc.	0.14	0	16	16	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	16
2	Pt 14	005-04800	W. Clark	0.13	0	15	15	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	15
2	Pt 14	005-04900	V. Stewart	0.17	0	19	19	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	19
2	Pt 14	005-05000	E. Rees	0.10	0	11	11	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	11
2	Pt 14	005-05100	J. Caswell	0.08	0	9	9	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	9
2	Pt 14	005-05200	M. Van Wisselingh	0.10	0	11	11	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	11
2	Pt 14	005-05300	C. Vandermeulen	0.07	0	8	8	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	8
2	Pt 14	005-05400	Ospringe Presbyterian Church	0.11	0	13	13	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	13
2	Pt 14	005-05405	J. Thring	0.13	0	15	15	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	15
2	Pt 14	005-05500	G. Adkin	0.70	0	78	78	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	78
2	Pt 13	005-05700	Thomasfield Homes Limited	0.04	0	67	67	0.04	0	10	10	0.00	0	0	0	0.01	0	105	105	182
2	Pt 13	005-05702	Thomasfield Homes Limited	0.80	0	1,156	1,156	0.80	0	167	167	0.00	0	0	0	0.00	0	0	0	1,323
2	Pt 13	005-05800	R. Grundy	0.08	0	115	115	0.08	0	17	17	0.08	0	401	401	0.00	0	0	0	533
2	Pt 14	005-05900	Thomasfield Homes Limited	3.40	0	257	257	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	257
2	Pt 13	005-05900	Thomasfield Homes Limited (Subdiv)	17.98	22,600	26,007	48,607	17.98	84,200	3,746	87,946	1.33	50,900	6,684	57,584	2.08	66,400	16,360	82,760	276,897
2	Pt 13	005-06000	R. Woodward	0.20	0	288	288	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	288
2	Pt 13	005-06001	P. Kent	0.25	0	366	366	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	366
3	Pt 12	005-06707	D. Ronca	1.20	0	576	576	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	576
3	Pt 13	005-06710	D. Evans	4.00	0	3,542	3,542	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	3,542
3	Pt 13	005-06711	C. Pierce	3.90	0	3,454	3,454	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	3,454
3	Pt 13	005-06712	W. Kline	3.90	21,200	3,454	24,654	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	24,654
3	Pt 13	005-06713	Elmira Farm Holdings Ltd.	3.90	25,100	3,454	28,554	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	28,554
3	Pt 13	005-06714	1581319 Ontario Inc.	4.03	26,300	3,383	29,683	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	29,683
3	Pt 13	005-06715	Grand River Conservation Authority	4.00	8,700	681	9,381	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	9,381
3	Pt 13	005-06716	B. Minor	3.60	7,300	358	7,658	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	7,658
3	Pt 14	005-06802	R. McEnery	2.30	0	257	257	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	257
3	Pt 14	005-06900	K. Takhar	0.60	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 14	005-06901	2025318 Ontario Inc.	0.47	0	53	53	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	53
3	Pt 14	005-06903	W. Pokocky	0.40	0	45	45	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	45
3	Pt 14	005-06905	D. Shay	0.40	0	45	45	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	45
3	Pt 14	005-07000	County of Wellington	0.04	0	4	4	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	4
3	Pt 14	005-07100	B. Gibson	0.52	0	58	58	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	58
3	Pt 14	005-07105	S. McLennan	0.30	0	34	34	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	34
3	Pt 14	005-07150	C. Steward	0.44	0	49	49	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	49
3	Pt 14	005-07155	M. Goel	0.42	0	47	47	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	47
3	Pt 14	005-07160	G. McCullagh	0.40	0	45	45	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	45
3	Pt 14	005-07165	W. Zou	0.48	0	54	54	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	54
3	Pt 14	005-07170	D. Gambacorta	0.48	0	54	54	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	54
3	Pt 15	005-07300	A. Naqvi	28.40	0	1,722	1,722	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	1,722
3	Pt 15	005-07304	C. Smillie	0.58	0	32	32	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	32
3	Pt 15	005-07310	E. Shiland	0.40	0	45	45	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	45
3	Pt 15	005-07400	C. Hansen	1.20	0	97	97	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	97
3	Pt 16	005-07500	H. Hollenbach	7.60	0	567	567	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	567
3	Pt 16	005-07600	C. MacGillivray	6.00	0	384	384	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	384
3	Pt 16	005-07602	A. Smith	4.40	0	254	254	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	254
3	Pt 16&17	005-07603	D. Brown	6.20	0	321	321	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	321
3	Pt 16	005-07610	K. Louza	0.50	0	52	52	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	52
3	Pt 17	005-07700	D. McLeod	4.80	0	306	306	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	306

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**SCHEDULE A - SCHEDULE OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

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Con	Lot	Roll No.	Owner	MAIN DRAIN				SWM POND				NORTH BRANCH				SOUTH BRANCH				GROSS TOTAL
				Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	
3	Pt 17	005-07701	C. Snow	5.50	0	391	391	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	391
3	Pt 17	005-07702	M. Iannucci	2.40	0	179	179	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	179
3	Pt 17	005-07703	D. Brace	4.10	0	224	224	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	224
3	Pt 17	005-07704	K. Williamson	3.60	0	246	246	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	246
3	Pt 17	005-07705	A. Da Silva	4.00	0	298	298	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	298
3	Pt 17	005-07725	J. Rego	0.24	0	27	27	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	27
3	Pt 14	005-08000	Grand River Conservation Authority	2.60	0	138	138	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	138
3	Pt 13	005-09001	M. Schotsch	2.50	9,550	168	9,718	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	9,718
3	Pt 13	005-09100	Grand River Conservation Authority	6.70	37,000	302	37,302	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	37,302
3	Pt 14	005-09312	M. Kwofie	0.60	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 14	005-09313	D. Sharp	0.60	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 14	005-09314	B. Jakubczak	0.60	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 14	005-09315	1944977 Ontario Ltd.	0.60	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 14	005-09316	1944977 Ontario Ltd.	1.30	0	145	145	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	145
3	Pt 16	005-13302	A. Hamill	0.85	0	95	95	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	95
3	Pt 14	005-13600	C. Bran	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13602	D. Patel	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13604	S. Philbert	0.42	0	47	47	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	47
3	Pt 14	005-13606	R. Bumbacco-Sodaro	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13608	D. Legrow	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13610	S. Predota	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13612	Y. Liu	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13614	D. Khatri	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13616	C. Briggs	0.42	0	47	47	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	47
3	Pt 14	005-13618	R. McCormack	0.51	0	57	57	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	57
3	Pt 14	005-13620	M. Downey	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13622	S. Appiah, R. Sasenarine	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13624	C. McDougall	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13626	B. Flanagan	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13628	A. Stephens	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13630	F. DeGazon	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13632	S. Dackiw, P. Ward	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13634	J. Whitten	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13636	J. Peuker	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13638	D. Uyeda	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13640	M. Bettonvil	0.52	0	58	58	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	58
3	Pt 14	005-13642	G. Legrand	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13644	J. Pimentel	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13646	A. Proussaefs	0.41	0	46	46	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	46
3	Pt 14	005-13648	J. Oxley	0.42	0	47	47	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	47
3	Pt 14	005-13650	C. Figueira	0.42	0	47	47	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	47
3	Pt 14	005-13652	A. Jakhar	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13654	T. & M. Owen	0.50	0	56	56	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	56
3	Pt 14	005-13656	L. Miklausic	0.47	0	53	53	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	53
3	Pt 14	005-13658	G. Brown	0.51	0	57	57	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	57
3	Pt 14	005-13660	R. Thompson	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13662	J. Ciuffreda	0.45	0	51	51	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	51
3	Pt 14	005-13664	A. Abadeen	0.45	0	51	51	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	51
3	Pt 14	005-13666	K. Stringer	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13668	C. Kummer	0.54	0	60	60	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	60
3	Pt 14	005-13670	H. Bhangu	0.39	0	44	44	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	44
3	Pt 14	005-13672	J. McTrusty	0.47	0	53	53	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	53
3	Pt 14	005-13674	F. Crane	0.63	0	71	71	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	71
3	Pt 14	005-13676	J. Pelitis	0.70	0	78	78	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	78
3	Pt 14	005-13678	C. Borg	0.46	0	51	51	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	51
3	Pt 14	005-13680	J. Gilby	0.46	0	51	51	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	51
3	Pt 14	005-13682	D. Hutchinson	0.43	0	48	48	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	48
3	Pt 14	005-13684	C. Leah	0.56	0	63	63	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	63
3	Pt 14	005-13686	Town of Erin	0.30	0	34	34	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	34
3	Pt 14	005-13688	Town of Erin	2.90	0	216	216	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	216

August 23, 2019

**SCHEDULE A - SCHEDULE OF ASSESSMENTS  
OSPRINGE DRAIN  
Town of Erin**

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File No. 18-074

Con	Lot	Roll No.	Owner	MAIN DRAIN				SWM POND				NORTH BRANCH				SOUTH BRANCH				GROSS TOTAL
				Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	Total Ha Affected	Benefit	Outlet	Total	
3	Pt 14	005-13788	D. Beament	11.00	0	496	496	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	496
2	Pt 18	006-08900	630033 Ontario Limited	14.20	0	958	958	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	958
3	Pt 18	006-09000	J. Bogart	3.40	0	134	134	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	134
3	Pt 18	006-09100	H. Dutoit	1.40	0	67	67	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	67
3	Pt 18	006-12700	L. Tugman	37.70	0	2,546	2,546	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	2,546
3	Pt 19	006-12725	J. Brownridge	6.90	0	515	515	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	515
Total on Lands				397.68	157,750	71,115	228,865	18.90	84,200	3,940	88,140	1.41	50,900	7,085	57,985	2.09	66,400	16,465	82,865	457,855
Highway 124				3.50	0	2,784	2,784	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	2,784
Highway 125				1.40	14,600	3,899	18,499	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	18,499
Second Line				7.10	0	1,588	1,588	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	1,588
Sideroad 17				1.60	0	358	358	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	358
Anderson Close				1.20	0	268	268	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	268
Stewart Drive				2.20	0	492	492	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	492
Grundy Court				0.24	0	54	54	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	54
Sideroad 15				1.10	0	82	82	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	82
Total on Roads				18.34	14,600	9,525	24,125	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	24,125
<b>TOTAL OSPRINGE DRAIN:</b>				<b>416.02</b>	<b>172,350</b>	<b>80,640</b>	<b>252,990</b>	<b>18.90</b>	<b>84,200</b>	<b>3,940</b>	<b>88,140</b>	<b>1.41</b>	<b>50,900</b>	<b>7,085</b>	<b>57,985</b>	<b>2.09</b>	<b>66,400</b>	<b>16,465</b>	<b>82,865</b>	<b>481,980</b>

## Notes:

1. Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each parcel of land and road affected. The affected parcels of land have been identified using the roll number from the last revised assessment roll for the Township. For convenience only, the owners' names as shown by the last revised assessment roll, has also been included.



August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE  
OSPRINGE DRAIN  
Town of Erin**

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File No. 18-074

Con	Lot	Roll No.	Owner	Interval 1		MAIN DRAIN Interval 2		Interval 3		MAIN DR TOTAL	SWM POND Interval 1	
				Sta.	1+241 to 0+706 \$ %	Sta.	0+706 to 0+029 \$ %	Sta.	0+029 to 0+000 \$ %		\$	%
2	Pt 14	005-03500	K. Thompson		23 0.29		0 0.00		0 0.00	23	0	0.00
2	Pt 15	005-03600	R. Young		66 0.83		0 0.00		0 0.00	66	0	0.00
2	Pt 17	005-03800	S. Jhaj		322 4.03		0 0.00		0 0.00	322	0	0.00
2	Pt 16	005-03900	R. Ysidron		41 0.51		0 0.00		0 0.00	41	0	0.00
2	Pt 16	005-04000	L. Dellamora		292 3.65		0 0.00		0 0.00	292	0	0.00
2	Pt 15	005-04100	953409 Ontario Limited		466 5.83		0 0.00		0 0.00	466	0	0.00
2	Pt 15	005-04105	Avalon Specialized Services		5 0.06		0 0.00		0 0.00	5	0	0.00
2	Pt 14	005-04200	A. McNaught		230 2.88		0 0.00		0 0.00	230	0	0.00
2	Pt 14	005-04300	M. Grundy		6 0.08		0 0.00		0 0.00	6	0	0.00
2	Pt 14	005-04400	S. Kinsey		4 0.05		0 0.00		0 0.00	4	0	0.00
2	Pt 14	005-04500	B. Klassen		137 1.71		0 0.00		0 0.00	137	0	0.00
2	Pt 14	005-04600	Datta Yoga Centre of Canada		30 0.38		0 0.00		0 0.00	30	0	0.00
2	Pt 14	005-04700	9522077 Canada Inc.		3 0.04		0 0.00		0 0.00	3	0	0.00
2	Pt 14	005-04800	W. Clark		3 0.04		0 0.00		0 0.00	3	0	0.00
2	Pt 14	005-04900	V. Stewart		3 0.04		0 0.00		0 0.00	3	0	0.00
2	Pt 14	005-05000	E. Rees		2 0.03		0 0.00		0 0.00	2	0	0.00
2	Pt 14	005-05100	J. Caswell		2 0.03		0 0.00		0 0.00	2	0	0.00
2	Pt 14	005-05200	M. Van Wisselingh		2 0.03		0 0.00		0 0.00	2	0	0.00
2	Pt 14	005-05300	C. Vandermeulen		1 0.01		0 0.00		0 0.00	1	0	0.00
2	Pt 14	005-05400	Ospringe Presbyterian Church		2 0.03		0 0.00		0 0.00	2	0	0.00
2	Pt 14	005-05405	J. Thring		3 0.04		0 0.00		0 0.00	3	0	0.00
2	Pt 14	005-05500	G. Adkin		13 0.16		0 0.00		0 0.00	13	0	0.00
2	Pt 13	005-05700	Thomasfield Homes Limited		1 0.01		6 0.06		1 0.06	8	4	0.04
2	Pt 13	005-05702	Thomasfield Homes Limited		15 0.19		96 0.96		24 1.41	135	66	0.66
2	Pt 13	005-05800	R. Grundy		2 0.03		10 0.10		2 0.12	14	7	0.07
2	Pt 14	005-05900	Thomasfield Homes Limited		54 0.68		64 0.64		16 0.94	134	44	0.44
2	Pt 13	005-05900-1	New Subdivision - Lot 1		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-2	New Subdivision - Lot 2		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-3	New Subdivision - Lot 3		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-4	New Subdivision - Lot 4		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-5	New Subdivision - Lot 5		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-6	New Subdivision - Lot 6		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-7	New Subdivision - Lot 7		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-8	New Subdivision - Lot 8		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-9	New Subdivision - Lot 9		4 0.05		25 0.25		6 0.35	35	17	0.17
2	Pt 13	005-05900-10	New Subdivision - Lot 10		4 0.05		26 0.26		6 0.35	36	18	0.18
2	Pt 13	005-05900-11	New Subdivision - Lot 11		5 0.06		32 0.32		8 0.47	45	22	0.22
2	Pt 13	005-05900-12	New Subdivision - Lot 12		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-13	New Subdivision - Lot 13		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-14	New Subdivision - Lot 14		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-15	New Subdivision - Lot 15		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-16	New Subdivision - Lot 16		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-17	New Subdivision - Lot 17		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-18	New Subdivision - Lot 18		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-19	New Subdivision - Lot 19		4 0.05		26 0.26		6 0.35	36	18	0.18
2	Pt 13	005-05900-20	New Subdivision - Lot 20		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-21	New Subdivision - Lot 21		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-22	New Subdivision - Lot 22		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-23	New Subdivision - Lot 23		4 0.05		26 0.26		6 0.35	36	18	0.18
2	Pt 13	005-05900-24	New Subdivision - Lot 24		4 0.05		26 0.26		6 0.35	36	18	0.18
2	Pt 13	005-05900-25	New Subdivision - Lot 25		4 0.05		26 0.26		6 0.35	36	18	0.18
2	Pt 13	005-05900-26	New Subdivision - Lot 26		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-27	New Subdivision - Lot 27		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-28	New Subdivision - Lot 28		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-29	New Subdivision - Lot 29		4 0.05		24 0.24		6 0.35	34	17	0.17
2	Pt 13	005-05900-30	New Subdivision - Lot 30		4 0.05		24 0.24		6 0.35	34	17	0.17

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE  
OSPRINGE DRAIN  
Town of Erin**

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File No. 18-074

				MAIN DRAIN						MAIN DR TOTAL	SWM POND		
				Interval 1		Interval 2		Interval 3			Interval 1		
Con	Lot	Roll No.	Owner	Sta.	1+241 \$ to 0+706 %	Sta.	0+706 to 0+029 \$ to %	Sta.	0+029 to 0+000 \$ to %		\$	%	
2	Pt 13	005-05900-31	New Subdivision - Lot 31		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-32	New Subdivision - Lot 32		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-33	New Subdivision - Lot 33		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-34	New Subdivision - Lot 34		4	0.05	27	0.27	7	0.41	38	18	0.18
2	Pt 13	005-05900-35	New Subdivision - Lot 35		4	0.05	27	0.27	7	0.41	38	18	0.18
2	Pt 13	005-05900-36	New Subdivision - Lot 36		4	0.05	27	0.27	7	0.41	38	18	0.18
2	Pt 13	005-05900-37	New Subdivision - Lot 37		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-38	New Subdivision - Lot 38		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-39	New Subdivision - Lot 39		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-40	New Subdivision - Lot 40		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-41	New Subdivision - Lot 41		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-42	New Subdivision - Lot 42		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-43	New Subdivision - Lot 43		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-44	New Subdivision - Lot 44		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-45	New Subdivision - Lot 45		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-46	New Subdivision - Lot 46		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-47	New Subdivision - Lot 47		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-48	New Subdivision - Lot 48		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-49	New Subdivision - Lot 49		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-50	New Subdivision - Lot 50		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-51	New Subdivision - Lot 51		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-52	New Subdivision - Lot 52		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-53	New Subdivision - Lot 53		5	0.06	34	0.34	9	0.53	48	23	0.23
2	Pt 13	005-05900-54	New Subdivision - Lot 54		4	0.05	28	0.28	7	0.41	39	19	0.19
2	Pt 13	005-05900-55	New Subdivision - Lot 55		4	0.05	26	0.26	6	0.35	36	18	0.18
2	Pt 13	005-05900-56	New Subdivision - Lot 56		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-57	New Subdivision - Lot 57		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-58	New Subdivision - Lot 58		4	0.05	25	0.25	6	0.35	35	17	0.17
2	Pt 13	005-05900-59	New Subdivision - Lot 59		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-60	New Subdivision - Lot 60		4	0.05	24	0.24	6	0.35	34	17	0.17
2	Pt 13	005-05900-61	Block 61 - Park		18	0.23	111	1.11	28	1.65	157	76	0.76
2	Pt 13	005-05900-62	Block 62 - SWM Pond		22	0.28	2,141	21.41	436	25.65	2,599	97	0.97
2	Pt 13	005-05900-63	Block 63		1	0.01	9	0.09	2	0.12	12	6	0.06
2	Pt 13	005-05900-64	Block 64		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-65	Block 65		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-66	Block 66		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-67	Block 67		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-68	Block 68		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-69	Block 69		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-70	Block 70		1	0.01	2	0.02	0	0.00	3	1	0.01
2	Pt 13	005-05900-71	Block 71		2	0.03	4	0.04	1	0.06	7	3	0.03
2	Pt 13	005-06000	R. Woodward		4	0.05	24	0.24	6	0.35	34	0	0.00
2	Pt 13	005-06001	P. Kent		5	0.06	31	0.31	8	0.47	44	0	0.00
3	Pt 12	005-06707	D. Ronca		15	0.19	48	0.48	0	0.00	63	0	0.00
3	Pt 13	005-06710	D. Evans		51	0.64	320	3.20	0	0.00	371	0	0.00
3	Pt 13	005-06711	C. Pierce		50	0.63	312	3.12	0	0.00	362	0	0.00
3	Pt 13	005-06712	W. Kline		50	0.63	712	7.12	100	5.88	862	0	0.00
3	Pt 13	005-06713	Elmira Farm Holdings Ltd.		50	0.63	512	5.12	0	0.00	562	0	0.00
3	Pt 13	005-06714	1581319 Ontario Inc.		49	0.61	806	8.06	0	0.00	855	0	0.00
3	Pt 13	005-06715	Grand River Conservation Authority		233	2.91	248	2.48	0	0.00	481	0	0.00
3	Pt 13	005-06716	B. Minor		460	5.75	0	0.00	0	0.00	460	0	0.00
3	Pt 14	005-06802	R. McEnery		44	0.55	0	0.00	0	0.00	44	0	0.00
3	Pt 14	005-06900	K. Takhar		11	0.14	0	0.00	0	0.00	11	0	0.00
3	Pt 14	005-06901	2025318 Ontario Inc.		9	0.11	0	0.00	0	0.00	9	0	0.00

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Con	Lot	Roll No.	Owner	Interval 1		MAIN DRAIN Interval 2		Interval 3		MAIN DR TOTAL	SWM POND Interval 1	
				Sta.	1+241 to 0+706 \$ %	Sta.	0+706 to 0+029 \$ %	Sta.	0+029 to 0+000 \$ %		\$	%
3	Pt 14	005-06903	W. Pokocky		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-06905	D. Shay		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-07000	County of Wellington		1 0.01		0 0.00		0 0.00	1	0	0.00
3	Pt 14	005-07100	B. Gibson		10 0.13		0 0.00		0 0.00	10	0	0.00
3	Pt 14	005-07105	S. McLennan		6 0.08		0 0.00		0 0.00	6	0	0.00
3	Pt 14	005-07150	C. Steward		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-07155	M. Goel		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-07160	G. McCullagh		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-07165	W. Zou		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-07170	D. Gambacorta		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 15	005-07300	A. Naqvi		292 3.65		0 0.00		0 0.00	292	0	0.00
3	Pt 15	005-07304	C. Smillie		5 0.06		0 0.00		0 0.00	5	0	0.00
3	Pt 15	005-07310	E. Shiland		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 15	005-07400	C. Hansen		17 0.21		0 0.00		0 0.00	17	0	0.00
3	Pt 16	005-07500	H. Hollenbach		96 1.20		0 0.00		0 0.00	96	0	0.00
3	Pt 16	005-07600	C. MacGillivray		64 0.80		0 0.00		0 0.00	64	0	0.00
3	Pt 16	005-07602	A. Smith		43 0.54		0 0.00		0 0.00	43	0	0.00
3	Pt 16&17	005-07603	D. Brown		55 0.69		0 0.00		0 0.00	55	0	0.00
3	Pt 16	005-07610	K. Louza		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 17	005-07700	D. McLeod		52 0.65		0 0.00		0 0.00	52	0	0.00
3	Pt 17	005-07701	C. Snow		66 0.83		0 0.00		0 0.00	66	0	0.00
3	Pt 17	005-07702	M. Iannucci		30 0.38		0 0.00		0 0.00	30	0	0.00
3	Pt 17	005-07703	D. Brace		38 0.48		0 0.00		0 0.00	38	0	0.00
3	Pt 17	005-07704	K. Williamson		42 0.53		0 0.00		0 0.00	42	0	0.00
3	Pt 17	005-07705	A. Da Silva		51 0.64		0 0.00		0 0.00	51	0	0.00
3	Pt 17	005-07725	J. Rego		5 0.06		0 0.00		0 0.00	5	0	0.00
3	Pt 14	005-08000	Grand River Conservation Authority		23 0.29		0 0.00		0 0.00	23	0	0.00
3	Pt 13	005-09001	M. Schotsch		529 6.61		0 0.00		0 0.00	529	0	0.00
3	Pt 13	005-09100	Grand River Conservation Authority		1,351 16.89		0 0.00		0 0.00	1,351	0	0.00
3	Pt 14	005-09312	M. Kwofie		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 14	005-09313	D. Sharp		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 14	005-09314	B. Jakubczak		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 14	005-09315	1944977 Ontario Ltd.		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 14	005-09316	1944977 Ontario Ltd.		25 0.31		0 0.00		0 0.00	25	0	0.00
3	Pt 16	005-13302	A. Hamill		16 0.20		0 0.00		0 0.00	16	0	0.00
3	Pt 14	005-13600	C. Bran		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13602	D. Patel		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13604	S. Philbert		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13606	R. Bumbacco-Sodaro		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13608	D. Legrow		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13610	S. Predota		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13612	Y. Liu		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13614	D. Khatri		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13616	C. Briggs		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13618	R. McCormack		10 0.13		0 0.00		0 0.00	10	0	0.00
3	Pt 14	005-13620	M. Downey		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13622	S. Appiah, R. Sasenarine		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13624	C. McDougall		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13626	B. Flanagan		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13628	A. Stephens		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13630	F. DeGazon		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13632	S. Dackiw, P. Ward		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13634	J. Whitten		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13636	J. Peuker		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13638	D. Uyeda		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13640	M. Bettonvil		10 0.13		0 0.00		0 0.00	10	0	0.00

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE  
OSPRINGE DRAIN  
Town of Erin**

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File No. 18-074

Con	Lot	Roll No.	Owner	Interval 1		MAIN DRAIN Interval 2		Interval 3		MAIN DR TOTAL	SWM POND Interval 1	
				Sta.	1+241 to 0+706 \$ %	Sta.	0+706 to 0+029 \$ %	Sta.	0+029 to 0+000 \$ %		\$	%
3	Pt 14	005-13642	G. Legrand		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13644	J. Pimentel		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13646	A. Proussaefs		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13648	J. Oxley		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13650	C. Figueira		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13652	A. Jakhar		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13654	T. & M. Owen		10 0.13		0 0.00		0 0.00	10	0	0.00
3	Pt 14	005-13656	L. Miklausic		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13658	G. Brown		10 0.13		0 0.00		0 0.00	10	0	0.00
3	Pt 14	005-13660	R. Thompson		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13662	J. Ciuffreda		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13664	A. Abadeen		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13666	K. Stringer		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13668	C. Kummer		10 0.13		0 0.00		0 0.00	10	0	0.00
3	Pt 14	005-13670	H. Bhangu		7 0.09		0 0.00		0 0.00	7	0	0.00
3	Pt 14	005-13672	J. McTrusty		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13674	F. Crane		12 0.15		0 0.00		0 0.00	12	0	0.00
3	Pt 14	005-13676	J. Pelitis		13 0.16		0 0.00		0 0.00	13	0	0.00
3	Pt 14	005-13678	C. Borg		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13680	J. Gilby		9 0.11		0 0.00		0 0.00	9	0	0.00
3	Pt 14	005-13682	D. Hutchinson		8 0.10		0 0.00		0 0.00	8	0	0.00
3	Pt 14	005-13684	C. Leah		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 14	005-13686	Town of Erin		6 0.08		0 0.00		0 0.00	6	0	0.00
3	Pt 14	005-13688	Town of Erin		37 0.46		0 0.00		0 0.00	37	0	0.00
3	Pt 14	005-13788	D. Beament		83 1.04		0 0.00		0 0.00	83	0	0.00
2	Pt 18	006-08900	630033 Ontario Limited		162 2.03		0 0.00		0 0.00	162	0	0.00
3	Pt 18	006-09000	J. Bogart		23 0.29		0 0.00		0 0.00	23	0	0.00
3	Pt 18	006-09100	H. Dutoit		11 0.14		0 0.00		0 0.00	11	0	0.00
3	Pt 18	006-12700	L. Tugman		433 5.41		0 0.00		0 0.00	433	0	0.00
3	Pt 19	006-12725	J. Brownridge		88 1.10		0 0.00		0 0.00	88	0	0.00
<b>Total on Lands</b>					<b>7,201 90.13</b>		<b>6,959 69.59</b>		<b>993 58.25</b>	<b>15,153</b>	<b>1,352</b>	<b>13.52</b>
Highway 124					131 1.64		181 1.81		46 2.71	358	0	0.00
Highway 125					53 0.63		2,040 20.40		454 26.86	2,547	0	0.00
Second Line					271 3.39		0 0.00		0 0.00	271	0	0.00
Sideroad 17					61 0.76		0 0.00		0 0.00	61	0	0.00
Anderson Close					46 0.58		0 0.00		0 0.00	46	0	0.00
Stewart Drive					84 1.05		0 0.00		0 0.00	84	0	0.00
Grundy Court					9 0.11		0 0.00		0 0.00	9	0	0.00
Sideroad 15					14 0.18		0 0.00		0 0.00	14	0	0.00
Broughton Street					8 0.10		48 0.48		12 0.71	68	2,733	27.33
Charles Currie Crescent					65 0.76		410 4.10		104 6.12	579	2,966	29.66
McKinnon Street					57 0.67		362 3.62		91 5.35	510	2,949	29.49
<b>Total on Roads</b>					<b>799 9.87</b>		<b>3,041 30.41</b>		<b>707 41.75</b>	<b>4,547</b>	<b>8,648</b>	<b>86.48</b>
<b>TOTAL OSPRINGE DRAIN:</b>					<b>8,000 100.00</b>		<b>10,000 100.00</b>		<b>1,700 100.00</b>	<b>19,700</b>	<b>10,000</b>	<b>100.00</b>

## Notes:

- Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each parcel of land and road affected. The affected parcels of land have been identified using the roll number from the last revised assessment roll for the Township. For convenience only, the owners' names as shown by the last revised assessment roll, has also been included.
- Amounts are not payable at this time. They determine share of future maintenance costs.

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Page 31  
File No. 18-074

				NORTH BRANCH				NORTH BRANCH TOTAL	SOUTH BRANCH				SOUTH BRANCH TOTAL	TOTAL		
				Interval 1		Interval 2			Interval 1		Interval 1					
				Sta.	0+000 to 0+114 \$ %	Sta.	0+114 to 0+236 \$ %		Sta.	0+000 to 0+103 \$ %	Sta.	0+103 to 0+561 \$ %		\$	%	
Con	Lot	Roll No.	Owner													
2	Pt 14	005-03500	K. Thompson	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	23	0.05
2	Pt 15	005-03600	R. Young	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	66	0.14
2	Pt 17	005-03800	S. Jhaj	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	322	0.70
2	Pt 16	005-03900	R. Ysidron	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	41	0.09
2	Pt 16	005-04000	L. Dellamora	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	292	0.63
2	Pt 15	005-04100	953409 Ontario Limited	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	466	1.01
2	Pt 15	005-04105	Avalon Specialized Services	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	5	0.01
2	Pt 14	005-04200	A. McNaught	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	230	0.50
2	Pt 14	005-04300	M. Grundy	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	6	0.01
2	Pt 14	005-04400	S. Kinsey	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	4	0.01
2	Pt 14	005-04500	B. Klassen	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	137	0.30
2	Pt 14	005-04600	Datta Yoga Centre of Canada	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	30	0.07
2	Pt 14	005-04700	9522077 Canada Inc.	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	3	0.01
2	Pt 14	005-04800	W. Clark	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	3	0.01
2	Pt 14	005-04900	V. Stewart	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	3	0.01
2	Pt 14	005-05000	E. Rees	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	2	0.00
2	Pt 14	005-05100	J. Caswell	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	2	0.00
2	Pt 14	005-05200	M. Van Wisselingh	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	2	0.00
2	Pt 14	005-05300	C. Vandermeulen	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	1	0.00
2	Pt 14	005-05400	Ospringle Presbyterian Church	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	2	0.00
2	Pt 14	005-05405	J. Thring	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	3	0.01
2	Pt 14	005-05500	G. Adkin	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	13	0.03
2	Pt 13	005-05700	Thomasfield Homes Limited	0	0.00	0	0.00	0	4	0.13	0	0.00	4	16	0.03	
2	Pt 13	005-05702	Thomasfield Homes Limited	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	201	0.44
2	Pt 13	005-05800	R. Grundy	49	1.07	230	12.78	279	0	0.00	0	0.00	0	0	300	0.65
2	Pt 14	005-05900	Thomasfield Homes Limited	0	0.00	0	0.00	0	0	0.00	0	0.00	0	0	178	0.39
2	Pt 13	005-05900-1	New Subdivision - Lot 1	0	0.00	0	0.00	0	58	1.87	625	9.06	683	734	1.59	
2	Pt 13	005-05900-2	New Subdivision - Lot 2	0	0.00	0	0.00	0	53	1.71	625	9.06	678	729	1.58	
2	Pt 13	005-05900-3	New Subdivision - Lot 3	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-4	New Subdivision - Lot 4	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-5	New Subdivision - Lot 5	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-6	New Subdivision - Lot 6	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-7	New Subdivision - Lot 7	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-8	New Subdivision - Lot 8	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-9	New Subdivision - Lot 9	0	0.00	0	0.00	0	39	1.26	625	9.06	664	716	1.55	
2	Pt 13	005-05900-10	New Subdivision - Lot 10	0	0.00	0	0.00	0	47	1.52	625	9.06	672	726	1.57	
2	Pt 13	005-05900-11	New Subdivision - Lot 11	0	0.00	0	0.00	0	62	2.00	625	9.06	687	754	1.64	
2	Pt 13	005-05900-12	New Subdivision - Lot 12	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-13	New Subdivision - Lot 13	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-14	New Subdivision - Lot 14	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-15	New Subdivision - Lot 15	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-16	New Subdivision - Lot 16	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-17	New Subdivision - Lot 17	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-18	New Subdivision - Lot 18	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-19	New Subdivision - Lot 19	0	0.00	0	0.00	0	0	0.00	0	0.00	0	54	0.12	
2	Pt 13	005-05900-20	New Subdivision - Lot 20	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-21	New Subdivision - Lot 21	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-22	New Subdivision - Lot 22	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-23	New Subdivision - Lot 23	0	0.00	0	0.00	0	0	0.00	0	0.00	0	54	0.12	
2	Pt 13	005-05900-24	New Subdivision - Lot 24	0	0.00	0	0.00	0	0	0.00	0	0.00	0	54	0.12	
2	Pt 13	005-05900-25	New Subdivision - Lot 25	0	0.00	0	0.00	0	0	0.00	0	0.00	0	54	0.12	
2	Pt 13	005-05900-26	New Subdivision - Lot 26	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-27	New Subdivision - Lot 27	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-28	New Subdivision - Lot 28	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-29	New Subdivision - Lot 29	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	
2	Pt 13	005-05900-30	New Subdivision - Lot 30	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11	

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Page 32  
File No. 18-074

				NORTH BRANCH				NORTH BRANCH TOTAL	SOUTH BRANCH				SOUTH BRANCH TOTAL	TOTAL	
				Interval 1		Interval 2			Interval 1		Interval 1				
				Sta.	0+000 to 0+114 \$ %	Sta.	0+114 to 0+236 \$ %		Sta.	0+000 to 0+103 \$ %	Sta.	0+103 to 0+561 \$ %		\$	%
Con	Lot	Roll No.	Owner												
2	Pt 13	005-05900-31	New Subdivision - Lot 31	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-32	New Subdivision - Lot 32	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-33	New Subdivision - Lot 33	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-34	New Subdivision - Lot 34	0	0.00	0	0.00	0	0	0.00	0	0.00	0	56	0.12
2	Pt 13	005-05900-35	New Subdivision - Lot 35	0	0.00	0	0.00	0	0	0.00	0	0.00	0	56	0.12
2	Pt 13	005-05900-36	New Subdivision - Lot 36	0	0.00	0	0.00	0	0	0.00	0	0.00	0	56	0.12
2	Pt 13	005-05900-37	New Subdivision - Lot 37	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-38	New Subdivision - Lot 38	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-39	New Subdivision - Lot 39	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-40	New Subdivision - Lot 40	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-41	New Subdivision - Lot 41	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-42	New Subdivision - Lot 42	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-43	New Subdivision - Lot 43	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-44	New Subdivision - Lot 44	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-45	New Subdivision - Lot 45	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-46	New Subdivision - Lot 46	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-47	New Subdivision - Lot 47	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-48	New Subdivision - Lot 48	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-49	New Subdivision - Lot 49	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-50	New Subdivision - Lot 50	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-51	New Subdivision - Lot 51	0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
2	Pt 13	005-05900-52	New Subdivision - Lot 52	122	2.65	230	12.78	352	0	0.00	0	0.00	0	403	0.87
2	Pt 13	005-05900-53	New Subdivision - Lot 53	171	3.72	230	12.78	401	0	0.00	0	0.00	0	472	1.02
2	Pt 13	005-05900-54	New Subdivision - Lot 54	143	3.11	230	12.78	373	0	0.00	0	0.00	0	431	0.93
2	Pt 13	005-05900-55	New Subdivision - Lot 55	161	3.50	0	0.00	161	0	0.00	0	0.00	0	215	0.47
2	Pt 13	005-05900-56	New Subdivision - Lot 56	61	1.33	0	0.00	61	0	0.00	0	0.00	0	112	0.24
2	Pt 13	005-05900-57	New Subdivision - Lot 57	61	1.33	0	0.00	61	0	0.00	0	0.00	0	112	0.24
2	Pt 13	005-05900-58	New Subdivision - Lot 58	0	0.00	0	0.00	0	10	0.32	0	0.00	10	62	0.13
2	Pt 13	005-05900-59	New Subdivision - Lot 59	0	0.00	0	0.00	0	89	2.87	0	0.00	89	140	0.30
2	Pt 13	005-05900-60	New Subdivision - Lot 60	0	0.00	0	0.00	0	78	2.52	0	0.00	78	129	0.28
2	Pt 13	005-05900-61	Block 61 - Park	0	0.00	0	0.00	0	0	0.00	0	0.00	0	233	0.51
2	Pt 13	005-05900-62	Block 62 - SWM Pond	24	0.52	0	0.00	24	10	0.32	0	0.00	10	2,730	5.92
2	Pt 13	005-05900-63	Block 63	0	0.00	0	0.00	0	0	0.00	0	0.00	0	18	0.04
2	Pt 13	005-05900-64	Block 64	8	0.17	0	0.00	8	0	0.00	0	0.00	0	12	0.03
2	Pt 13	005-05900-65	Block 65	8	0.17	0	0.00	8	0	0.00	0	0.00	0	12	0.03
2	Pt 13	005-05900-66	Block 66	8	0.17	0	0.00	8	0	0.00	0	0.00	0	12	0.03
2	Pt 13	005-05900-67	Block 67	0	0.00	0	0.00	0	0	0.00	0	0.00	0	4	0.01
2	Pt 13	005-05900-68	Block 68	8	0.17	0	0.00	8	0	0.00	0	0.00	0	12	0.03
2	Pt 13	005-05900-69	Block 69	8	0.17	0	0.00	8	0	0.00	0	0.00	0	12	0.03
2	Pt 13	005-05900-70	Block 70	0	0.00	0	0.00	0	0	0.00	0	0.00	0	4	0.01
2	Pt 13	005-05900-71	Block 71	20	0.43	0	0.00	20	0	0.00	0	0.00	0	30	0.07
2	Pt 13	005-06000	R. Woodward	0	0.00	0	0.00	0	0	0.00	0	0.00	0	34	0.07
2	Pt 13	005-06001	P. Kent	0	0.00	0	0.00	0	0	0.00	0	0.00	0	44	0.10
3	Pt 12	005-06707	D. Ronca	0	0.00	0	0.00	0	0	0.00	0	0.00	0	63	0.14
3	Pt 13	005-06710	D. Evans	0	0.00	0	0.00	0	0	0.00	0	0.00	0	371	0.80
3	Pt 13	005-06711	C. Pierce	0	0.00	0	0.00	0	0	0.00	0	0.00	0	362	0.79
3	Pt 13	005-06712	W. Kline	0	0.00	0	0.00	0	0	0.00	0	0.00	0	862	1.87
3	Pt 13	005-06713	Elmira Farm Holdings Ltd.	0	0.00	0	0.00	0	0	0.00	0	0.00	0	562	1.22
3	Pt 13	005-06714	1581319 Ontario Inc.	0	0.00	0	0.00	0	0	0.00	0	0.00	0	855	1.85
3	Pt 13	005-06715	Grand River Conservation Authority	0	0.00	0	0.00	0	0	0.00	0	0.00	0	481	1.04
3	Pt 13	005-06716	B. Minor	0	0.00	0	0.00	0	0	0.00	0	0.00	0	460	1.00
3	Pt 14	005-06802	R. McEnery	0	0.00	0	0.00	0	0	0.00	0	0.00	0	44	0.10
3	Pt 14	005-06900	K. Takhar	0	0.00	0	0.00	0	0	0.00	0	0.00	0	11	0.02
3	Pt 14	005-06901	2025318 Ontario Inc.	0	0.00	0	0.00	0	0	0.00	0	0.00	0	9	0.02

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Page 33  
File No. 18-074

				NORTH BRANCH				NORTH BRANCH TOTAL	SOUTH BRANCH				SOUTH BRANCH TOTAL	TOTAL		
				Interval 1		Interval 2			Interval 1		Interval 1					
Con	Lot	Roll No.	Owner	Sta.	0+000 to 0+114 \$ %	Sta.	0+114 to 0+236 \$ %		Sta.	0+000 to 0+103 \$ %	Sta.	0+103 to 0+561 \$ %		\$	%	
3	Pt 14	005-06903	W. Pokocky		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-06905	D. Shay		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-07000	County of Wellington		0	0.00	0	0.00	0	0	0.00	0	0.00	0	1	0.00
3	Pt 14	005-07100	B. Gibson		0	0.00	0	0.00	0	0	0.00	0	0.00	0	10	0.02
3	Pt 14	005-07105	S. McLennan		0	0.00	0	0.00	0	0	0.00	0	0.00	0	6	0.01
3	Pt 14	005-07150	C. Steward		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-07155	M. Goel		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-07160	G. McCullagh		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-07165	W. Zou		0	0.00	0	0.00	0	0	0.00	0	0.00	0	9	0.02
3	Pt 14	005-07170	D. Gambacorta		0	0.00	0	0.00	0	0	0.00	0	0.00	0	9	0.02
3	Pt 15	005-07300	A. Naqvi		0	0.00	0	0.00	0	0	0.00	0	0.00	0	292	0.63
3	Pt 15	005-07304	C. Smillie		0	0.00	0	0.00	0	0	0.00	0	0.00	0	5	0.01
3	Pt 15	005-07310	E. Shiland		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 15	005-07400	C. Hansen		0	0.00	0	0.00	0	0	0.00	0	0.00	0	17	0.04
3	Pt 16	005-07500	H. Hollenbach		0	0.00	0	0.00	0	0	0.00	0	0.00	0	96	0.21
3	Pt 16	005-07600	C. MacGillivray		0	0.00	0	0.00	0	0	0.00	0	0.00	0	64	0.14
3	Pt 16	005-07602	A. Smith		0	0.00	0	0.00	0	0	0.00	0	0.00	0	43	0.09
3	Pt 16&17	005-07603	D. Brown		0	0.00	0	0.00	0	0	0.00	0	0.00	0	55	0.12
3		005-07610	K. Louza		0	0.00	0	0.00	0	0	0.00	0	0.00	0	9	0.02
3	Pt 17	005-07700	D. McLeod		0	0.00	0	0.00	0	0	0.00	0	0.00	0	52	0.11
3	Pt 17	005-07701	C. Snow		0	0.00	0	0.00	0	0	0.00	0	0.00	0	66	0.14
3	Pt 17	005-07702	M. Iannucci		0	0.00	0	0.00	0	0	0.00	0	0.00	0	30	0.07
3	Pt 17	005-07703	D. Brace		0	0.00	0	0.00	0	0	0.00	0	0.00	0	38	0.08
3	Pt 17	005-07704	K. Williamson		0	0.00	0	0.00	0	0	0.00	0	0.00	0	42	0.09
3	Pt 17	005-07705	A. Da Silva		0	0.00	0	0.00	0	0	0.00	0	0.00	0	51	0.11
3	Pt 17	005-07725	J. Rego		0	0.00	0	0.00	0	0	0.00	0	0.00	0	5	0.01
3	Pt 14	005-08000	Grand River Conservation Authority		0	0.00	0	0.00	0	0	0.00	0	0.00	0	23	0.05
3	Pt 13	005-09001	M. Schotsch		0	0.00	0	0.00	0	0	0.00	0	0.00	0	529	1.15
3	Pt 13	005-09100	Grand River Conservation Authority		0	0.00	0	0.00	0	0	0.00	0	0.00	0	1,351	2.93
3	Pt 14	005-09312	M. Kwofie		0	0.00	0	0.00	0	0	0.00	0	0.00	0	11	0.02
3	Pt 14	005-09313	D. Sharp		0	0.00	0	0.00	0	0	0.00	0	0.00	0	11	0.02
3	Pt 14	005-09314	B. Jakubczak		0	0.00	0	0.00	0	0	0.00	0	0.00	0	11	0.02
3	Pt 14	005-09315	1944977 Ontario Ltd.		0	0.00	0	0.00	0	0	0.00	0	0.00	0	11	0.02
3	Pt 14	005-09316	1944977 Ontario Ltd.		0	0.00	0	0.00	0	0	0.00	0	0.00	0	25	0.05
3	Pt 16	005-13302	A. Hamill		0	0.00	0	0.00	0	0	0.00	0	0.00	0	16	0.03
3	Pt 14	005-13600	C. Bran		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13602	D. Patel		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13604	S. Philbert		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13606	R. Bumbacco-Sodaro		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13608	D. Legrow		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13610	S. Predota		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13612	Y. Liu		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13614	D. Khatri		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13616	C. Briggs		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13618	R. McCormack		0	0.00	0	0.00	0	0	0.00	0	0.00	0	10	0.02
3	Pt 14	005-13620	M. Downey		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13622	S. Appiah, R. Sasenarine		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13624	C. McDougall		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13626	B. Flanagan		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13628	A. Stephens		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13630	F. DeGazon		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13632	S. Dackiw, P. Ward		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13634	J. Whitten		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13636	J. Peuker		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13638	D. Uyeda		0	0.00	0	0.00	0	0	0.00	0	0.00	0	8	0.02
3	Pt 14	005-13640	M. Bettonvil		0	0.00	0	0.00	0	0	0.00	0	0.00	0	10	0.02

August 23, 2019

**SCHEDULE B - SCHEDULE OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

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File No. 18-074

				NORTH BRANCH				NORTH BRANCH TOTAL	SOUTH BRANCH				SOUTH BRANCH TOTAL	TOTAL				
				Interval 1		Interval 2			Interval 1			Interval 1						
Con	Lot	Roll No.	Owner	Sta.	0+000 \$	to 0+114 %	Sta.		0+114 \$	to 0+236 %	Sta.	0+000 \$		to 0+103 %	Sta.	0+103 \$	to 0+561 %	\$
3	Pt 14	005-13642	G. Legrand		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13644	J. Pimentel		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13646	A. Proussaefs		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13648	J. Oxley		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13650	C. Figueira		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13652	A. Jakhar		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13654	T. & M. Owen		0	0.00		0	0.00	0	0	0.00		0	0.00	0	10	0.02
3	Pt 14	005-13656	L. Miklausic		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13658	G. Brown		0	0.00		0	0.00	0	0	0.00		0	0.00	0	10	0.02
3	Pt 14	005-13660	R. Thompson		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13662	J. Ciuffreda		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13664	A. Abadeen		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13666	K. Stringer		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13668	C. Kummer		0	0.00		0	0.00	0	0	0.00		0	0.00	0	10	0.02
3	Pt 14	005-13670	H. Bhangu		0	0.00		0	0.00	0	0	0.00		0	0.00	0	7	0.02
3	Pt 14	005-13672	J. McTrusty		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13674	F. Crane		0	0.00		0	0.00	0	0	0.00		0	0.00	0	12	0.03
3	Pt 14	005-13676	J. Pelitis		0	0.00		0	0.00	0	0	0.00		0	0.00	0	13	0.03
3	Pt 14	005-13678	C. Borg		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13680	J. Gilby		0	0.00		0	0.00	0	0	0.00		0	0.00	0	9	0.02
3	Pt 14	005-13682	D. Hutchinson		0	0.00		0	0.00	0	0	0.00		0	0.00	0	8	0.02
3	Pt 14	005-13684	C. Leah		0	0.00		0	0.00	0	0	0.00		0	0.00	0	11	0.02
3	Pt 14	005-13686	Town of Erin		0	0.00		0	0.00	0	0	0.00		0	0.00	0	6	0.01
3	Pt 14	005-13688	Town of Erin		0	0.00		0	0.00	0	0	0.00		0	0.00	0	37	0.08
3	Pt 14	005-13788	D. Beament		0	0.00		0	0.00	0	0	0.00		0	0.00	0	83	0.18
2	Pt 18	006-08900	630033 Ontario Limited		0	0.00		0	0.00	0	0	0.00		0	0.00	0	162	0.35
3	Pt 18	006-09000	J. Bogart		0	0.00		0	0.00	0	0	0.00		0	0.00	0	23	0.05
3	Pt 18	006-09100	H. Dutoit		0	0.00		0	0.00	0	0	0.00		0	0.00	0	11	0.02
3	Pt 18	006-12700	L. Tugman		0	0.00		0	0.00	0	0	0.00		0	0.00	0	433	0.94
3	Pt 19	006-12725	J. Brownridge		0	0.00		0	0.00	0	0	0.00		0	0.00	0	88	0.19
Total on Lands					852	18.51		920	51.12	1,772		684	22.08		6,875	99.66	7,559	25,836 56.06
Highway 124					0	0.00		0	0.00	0		0	0.00		0	0.00	0	358 0.82
Highway 125					0	0.00		0	0.00	0		0	0.00		0	0.00	0	2,547 5.56
Second Line					0	0.00		0	0.00	0		0	0.00		0	0.00	0	271 0.59
Sideroad 17					0	0.00		0	0.00	0		0	0.00		0	0.00	0	61 0.13
Anderson Close					0	0.00		0	0.00	0		0	0.00		0	0.00	0	46 0.10
Stewart Drive					0	0.00		0	0.00	0		0	0.00		0	0.00	0	84 0.18
Grundy Court					0	0.00		0	0.00	0		0	0.00		0	0.00	0	9 0.02
Sideroad 15					0	0.00		0	0.00	0		0	0.00		0	0.00	0	14 0.03
Broughton Street					3,748	81.49		880	48.88	4,628		0	0.00		0	0.00	0	7,429 16.15
Charles Currie Crescent					0	0.00		0	0.00	0		0	0.00		0	0.00	0	3,545 7.73
McKinnon Street					0	0.00		0	0.00	0		2,416	77.92		25	0.34	2,441	5,900 12.85
Total on Roads					3,748	81.49		880	48.88	4,628		2,416	77.92		25	0.34	2,441	20,264 44.16
TOTAL OSPRINGE DRAIN:					4,600	100.00		1,800	100.00	6,400		3,100	100.00		6,900	100.00	10,000	46,100 100.22

## Notes:

- Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each p of land and road affected. The affected parcels of land have been identified using the roll numb the last revised assessment roll for the Township. For convenience only, the owners' names as by the last revised assessment roll, has also been included.
- Amounts are not payable at this time. They determine share of future maintenance costs.



August 23, 2019

**SCHEDULE C - SCHEDULE FOR ACTUAL COST BYLAW****OSPRINGE DRAIN****Town of Erin**Page 35  
File No. 18-074

Con	Lot	Roll No.	Owner	Estimated				
				Gross Total	Grant	Allowances	Developer Grant	Net
F	2	Pt 14	005-03500 K. Thompson	134	45	0	89	0
F	2	Pt 15	005-03600 R. Young	395	132	0	263	0
	2	Pt 17	005-03800 S. Jhaj	1,898	0	0	1,898	0
	2	Pt 16	005-03900 R. Ysidron	239	0	0	239	0
F	2	Pt 16	005-04000 L. Dellamora	1,722	574	0	1,148	0
F	2	Pt 15	005-04100 953409 Ontario Limited	2,744	915	0	1,829	0
	2	Pt 15	005-04105 Avalon Specialized Services	31	0	0	31	0
F	2	Pt 14	005-04200 A. McNaught	1,353	451	0	902	0
	2	Pt 14	005-04300 M. Grundy	35	0	0	35	0
	2	Pt 14	005-04400 S. Kinsey	22	0	0	22	0
F	2	Pt 14	005-04500 B. Klassen	813	271	0	542	0
	2	Pt 14	005-04600 Datta Yoga Centre of Canada	179	0	0	179	0
	2	Pt 14	005-04700 9522077 Canada Inc.	16	0	0	16	0
	2	Pt 14	005-04800 W. Clark	15	0	0	15	0
	2	Pt 14	005-04900 V. Stewart	19	0	0	19	0
	2	Pt 14	005-05000 E. Rees	11	0	0	11	0
	2	Pt 14	005-05100 J. Caswell	9	0	0	9	0
	2	Pt 14	005-05200 M. Van Wisselingh	11	0	0	11	0
	2	Pt 14	005-05300 C. Vandermeulen	8	0	0	8	0
	2	Pt 14	005-05400 Ospringe Presbyterian Church	13	0	0	13	0
	2	Pt 14	005-05405 J. Thring	15	0	0	15	0
	2	Pt 14	005-05500 G. Adkin	78	0	0	78	0
	2	Pt 13	005-05700 Thomasfield Homes Limited	182	0	0	182	0
	2	Pt 13	005-05702 Thomasfield Homes Limited	1,323	0	0	1,323	0
	2	Pt 13	005-05800 R. Grundy	533	0	0	533	0
	2	Pt 14	005-05900 Thomasfield Homes Limited	257	0	0	257	0
	2	Pt 13	005-05900 Thomasfield Homes Limited (Subdiv)	276,897	0	194,600	82,297	178,065
	2	Pt 13	005-06000 R. Woodward	288	0	0	288	0
	2	Pt 13	005-06001 P. Kent	366	0	0	366	0
F	3	Pt 12	005-06707 D. Ronca	576	192	0	384	0
F	3	Pt 13	005-06710 D. Evans	3,542	1,181	0	2,361	0
	3	Pt 13	005-06711 C. Pierce	3,454	0	0	3,454	0
	3	Pt 13	005-06712 W. Kline	24,654	0	17,900	6,754	0
	3	Pt 13	005-06713 Elmira Farm Holdings Ltd.	28,554	0	17,400	11,154	0
	3	Pt 13	005-06714 1581319 Ontario Inc.	29,683	0	24,300	5,383	0
	3	Pt 13	005-06715 Grand River Conservation Authority	9,381	0	6,400	2,981	0
	3	Pt 13	005-06716 B. Minor	7,658	0	3,900	3,758	0
	3	Pt 14	005-06802 R. McEnery	257	0	0	257	0
	3	Pt 14	005-06900 K. Takhar	67	0	0	67	0
	3	Pt 14	005-06901 2025318 Ontario Inc.	53	0	0	53	0
	3	Pt 14	005-06903 W. Pokocky	45	0	0	45	0
	3	Pt 14	005-06905 D. Shay	45	0	0	45	0
	3	Pt 14	005-07000 County of Wellington	4	0	0	4	0
	3	Pt 14	005-07100 B. Gibson	58	0	0	58	0
	3	Pt 14	005-07105 S. McLennan	34	0	0	34	0
	3	Pt 14	005-07150 C. Steward	49	0	0	49	0
	3	Pt 14	005-07155 M. Goel	47	0	0	47	0
	3	Pt 14	005-07160 G. McCullagh	45	0	0	45	0
	3	Pt 14	005-07165 W. Zou	54	0	0	54	0
	3	Pt 14	005-07170 D. Gambacorta	54	0	0	54	0
F	3	Pt 15	005-07300 A. Naqvi	1,722	574	0	1,148	0
	3	Pt 15	005-07304 C. Smillie	32	0	0	32	0
	3	Pt 15	005-07310 E. Shiland	45	0	0	45	0
F	3	Pt 15	005-07400 C. Hansen	97	32	0	65	0
F	3	Pt 16	005-07500 H. Hollenbach	567	189	0	378	0
F	3	Pt 16	005-07600 C. MacGillivray	384	128	0	256	0
	3	Pt 16	005-07602 A. Smith	254	0	0	254	0
	3	Pt 16&17	005-07603 D. Brown	321	0	0	321	0
	3	Pt 16	005-07610 K. Louza	52	0	0	52	0
	3	Pt 17	005-07700 D. McLeod	306	0	0	306	0
	3	Pt 17	005-07701 C. Snow	391	0	0	391	0
F	3	Pt 17	005-07702 M. Iannucci	179	60	0	119	0
	3	Pt 17	005-07703 D. Brace	224	0	0	224	0
	3	Pt 17	005-07704 K. Williamson	246	0	0	246	0

August 23, 2019

**SCHEDULE C - SCHEDULE FOR ACTUAL COST BYLAW**  
**OSPRINGE DRAIN**  
**Town of Erin**

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File No. 18-074

Con	Lot	Roll No.	Owner	Estimated				
				Gross Total	Grant	Allowances	Developer Grant	Net
3	Pt 17	005-07705	A. Da Silva	298	0	0	298	0
3	Pt 17	005-07725	J. Rego	27	0	0	27	0
F 3	Pt 14	005-08000	Grand River Conservation Authority	138	46	0	92	0
3	Pt 13	005-09001	M. Schotsch	9,718	0	4,800	4,918	0
F 3	Pt 13	005-09100	Grand River Conservation Authority	37,302	12,434	16,900	7,968	0
3	Pt 14	005-09312	M. Kwofie	67	0	0	67	0
3	Pt 14	005-09313	D. Sharp	67	0	0	67	0
3	Pt 14	005-09314	B. Jakubczak	67	0	0	67	0
3	Pt 14	005-09315	1944977 Ontario Ltd.	67	0	0	67	0
3	Pt 14	005-09316	1944977 Ontario Ltd.	145	0	0	145	0
3	Pt 16	005-13302	A. Hamill	95	0	0	95	0
3	Pt 14	005-13600	C. Bran	46	0	0	46	0
3	Pt 14	005-13602	D. Patel	46	0	0	46	0
3	Pt 14	005-13604	S. Philbert	47	0	0	47	0
3	Pt 14	005-13606	R. Bumbacco-Sodaro	46	0	0	46	0
3	Pt 14	005-13608	D. Legrow	46	0	0	46	0
3	Pt 14	005-13610	S. Predota	46	0	0	46	0
3	Pt 14	005-13612	Y. Liu	46	0	0	46	0
3	Pt 14	005-13614	D. Khatri	46	0	0	46	0
3	Pt 14	005-13616	C. Briggs	47	0	0	47	0
3	Pt 14	005-13618	R. McCormack	57	0	0	57	0
3	Pt 14	005-13620	M. Downey	46	0	0	46	0
3	Pt 14	005-13622	S. Appiah, R. Sasenarine	46	0	0	46	0
3	Pt 14	005-13624	C. McDougall	46	0	0	46	0
3	Pt 14	005-13626	B. Flanagan	46	0	0	46	0
3	Pt 14	005-13628	A. Stephens	46	0	0	46	0
3	Pt 14	005-13630	F. DeGazon	46	0	0	46	0
3	Pt 14	005-13632	S. Dackiw, P. Ward	46	0	0	46	0
3	Pt 14	005-13634	J. Whitten	46	0	0	46	0
3	Pt 14	005-13636	J. Peuker	46	0	0	46	0
3	Pt 14	005-13638	D. Uyeda	48	0	0	48	0
3	Pt 14	005-13640	M. Bettonvil	58	0	0	58	0
3	Pt 14	005-13642	G. Legrand	48	0	0	48	0
3	Pt 14	005-13644	J. Pimentel	46	0	0	46	0
3	Pt 14	005-13646	A. Proussaefs	46	0	0	46	0
3	Pt 14	005-13648	J. Oxley	47	0	0	47	0
3	Pt 14	005-13650	C. Figueira	47	0	0	47	0
3	Pt 14	005-13652	A. Jakhar	48	0	0	48	0
3	Pt 14	005-13654	T. & M. Owen	56	0	0	56	0
3	Pt 14	005-13656	L. Miklausic	53	0	0	53	0
3	Pt 14	005-13658	G. Brown	57	0	0	57	0
3	Pt 14	005-13660	R. Thompson	48	0	0	48	0
3	Pt 14	005-13662	J. Ciuffreda	51	0	0	51	0
3	Pt 14	005-13664	A. Abadeen	51	0	0	51	0
3	Pt 14	005-13666	K. Stringer	48	0	0	48	0
3	Pt 14	005-13668	C. Kummer	60	0	0	60	0
3	Pt 14	005-13670	H. Bhangu	44	0	0	44	0
3	Pt 14	005-13672	J. McTrusty	53	0	0	53	0
3	Pt 14	005-13674	F. Crane	71	0	0	71	0
3	Pt 14	005-13676	J. Pelitis	78	0	0	78	0
3	Pt 14	005-13678	C. Borg	51	0	0	51	0
3	Pt 14	005-13680	J. Gilby	51	0	0	51	0
3	Pt 14	005-13682	D. Hutchinson	48	0	0	48	0
3	Pt 14	005-13684	C. Leah	63	0	0	63	0
3	Pt 14	005-13686	Town of Erin	34	0	0	34	0
3	Pt 14	005-13688	Town of Erin	216	0	0	216	0
3	Pt 14	005-13788	D. Beament	496	0	0	496	0
F 2	Pt 18	006-08900	630033 Ontario Limited	958	319	0	639	0
3	Pt 18	006-09000	J. Bogart	134	0	0	134	0
3	Pt 18	006-09100	H. Dutoit	67	0	0	67	0
3	Pt 18	006-12700	L. Tugman	2,546	0	0	2,546	0
F 3	Pt 19	006-12725	J. Brownridge	515	172	0	343	0
Total on Lands				457,855	17,715	286,200	153,940	178,065

August 23, 2019

**SCHEDULE C - SCHEDULE FOR ACTUAL COST BYLAW**  
**OSPRINGE DRAIN**  
**Town of Erin**

Page 37  
File No. 18-074

Con	Lot	Roll No.	Owner	Estimated				
				Gross Total	Grant	Allowances	Developer Grant	Net
			Highway 124	2,784	0	0	2,784	0
			Highway 125	18,499	0	0	18,499	0
			Second Line	1,588	0	0	1,588	0
			Sideroad 17	358	0	0	358	0
			Anderson Close	268	0	0	268	0
			Stewart Drive	492	0	0	492	0
			Grundy Court	54	0	0	54	0
			Sideroad 15	82	0	0	82	0
Total on Roads				24,125	0	0	24,125	0
<b>TOTAL OSPRINGE DRAIN:</b>				<b>481,980</b>	<b>17,715</b>	<b>286,200</b>	<b>178,065</b>	<b>178,065</b>

## Notes:

1. The above lands marked "F" are currently classified as agricultural according to OMAFRA and are therefore entitled to a 1/3 grant.
2. Section 21 of the Drainage Act, RSO 1990 requires that assessments be shown opposite each parcel of land and road affected. The affected parcels of land have been identified using the roll number from the last revised assessment roll for the Township. For convenience only, the owners' names as shown by the last revised assessment roll, has also been included.
3. The value of the assessments identified in this schedule are estimates only, and should not be considered final.

**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

ESTIMATED COST		MAIN DRAIN															
		Interval 1			Interval 2			Interval 3			MAIN DR						
		1+241	to	0+706	0+706	to	0+029	0+029	to	0+000	TOTAL						
		27,100			62,300			2,200			91,600						
Allowances																	79,270
Construction																	76,115
Engineering																	6,005
Section 73 Costs																	252,990
TOTAL																	
Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Interval 1			Interval 2			Interval 3			Total Benefits	Total Outlets	TOTAL		
				Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet					
005-03500	K. Thompson	2.10	1.80		1.80	134		0.00	0		0.00	0	0	134	134		
005-03600	R. Young	5.30	5.30		5.30	395		0.00	0		0.00	0	0	395	395		
005-03800	S. Jhaj	27.00	25.45		25.45	1,898		0.00	0		0.00	0	0	1,898	1,898		
005-03900	R. Ysidron	4.40	3.20		3.20	239		0.00	0		0.00	0	0	239	239		
005-04000	L. Dellamora	27.60	23.10		23.10	1,722		0.00	0		0.00	0	0	1,722	1,722		
005-04100	953409 Ontario Limited	39.90	36.80		36.80	2,744		0.00	0		0.00	0	0	2,744	2,744		
005-04105	Avalon Specialized Services	0.28	0.42		0.42	31		0.00	0		0.00	0	0	31	31		
005-04200	A. McNaught	20.20	18.15		18.15	1,353		0.00	0		0.00	0	0	1,353	1,353		
005-04300	M. Grundy	0.31	0.47		0.47	35		0.00	0		0.00	0	0	35	35		
005-04400	S. Kinsey	0.20	0.30		0.30	22		0.00	0		0.00	0	0	22	22		
005-04500	B. Klassen	14.40	10.90		10.90	813		0.00	0		0.00	0	0	813	813		
005-04600	Datta Yoga Centre of Canada	2.40	2.40		2.40	179		0.00	0		0.00	0	0	179	179		
005-04700	9522077 Canada Inc.	0.14	0.21		0.21	16		0.00	0		0.00	0	0	16	16		
005-04800	W. Clark	0.13	0.20		0.20	15		0.00	0		0.00	0	0	15	15		
005-04900	V. Stewart	0.17	0.26		0.26	19		0.00	0		0.00	0	0	19	19		
005-05000	E. Rees	0.10	0.15		0.15	11		0.00	0		0.00	0	0	11	11		
005-05100	J. Caswell	0.08	0.12		0.12	9		0.00	0		0.00	0	0	9	9		
005-05200	M. Van Wisselingh	0.10	0.15		0.15	11		0.00	0		0.00	0	0	11	11		
005-05300	C. Vandermeulen	0.07	0.11		0.11	8		0.00	0		0.00	0	0	8	8		
005-05400	Ospringe Presbyterian Church	0.11	0.17		0.17	13		0.00	0		0.00	0	0	13	13		
005-05405	J. Thring	0.13	0.20		0.20	15		0.00	0		0.00	0	0	15	15		
005-05500	G. Adkin	0.70	1.05		1.05	78		0.00	0		0.00	0	0	78	78		
005-05700	Thomasfield Homes Limited	0.04	0.07		0.07	5		0.07	57		0.07	5	0	67	67		
005-05702	Thomasfield Homes Limited	0.80	1.20		1.20	89		1.20	973		1.20	94	0	1,156	1,156		
005-05800	R. Grundy	0.08	0.12		0.12	9		0.12	97		0.12	9	0	115	115		
005-05900	Thomasfield Homes Limited	3.40	3.45		3.45	257		0.00	0		0.00	0	0	257	257		
005-05900	Thomasfield Homes Limited (Subdiv)	17.98	26.98		26.98	2,012	20,600	26.98	21,883	2,000	26.98	2,112	22,600	26,007	48,607		
005-06000	R. Woodward	0.20	0.30		0.30	22		0.30	243		0.30	23	0	288	288		
005-06001	P. Kent	0.25	0.38		0.38	28		0.38	308		0.38	30	0	366	366		
005-06707	D. Ronca	1.20	1.20		1.20	89		0.60	487		0.00	0	0	576	576		
005-06710	D. Evans	4.00	4.00		4.00	298		4.00	3,244		0.00	0	0	3,542	3,542		
005-06711	C. Pierce	3.90	3.90		3.90	291		3.90	3,163		0.00	0	0	3,454	3,454		
005-06712	W. Kline	3.90	3.90		3.90	291	19,100	3.90	3,163	2,100	0.00	0	21,200	3,454	24,654		
005-06713	Elmira Farm Holdings Ltd.	3.90	3.90		3.90	291	25,100	3.90	3,163		0.00	0	25,100	3,454	28,554		
005-06714	1581319 Ontario Inc.	4.03	3.82		3.82	285	26,300	3.82	3,098		0.00	0	26,300	3,383	29,683		
005-06715	Grand River Conservation Authority	4.00	2.60	2,900	2.60	194	5,800	0.60	487		0.00	0	8,700	681	9,381		
005-06716	B. Minor	3.60	4.80	7,300	4.80	358		0.00	0		0.00	0	7,300	358	7,658		
005-06802	R. McEnery	2.30	3.45		3.45	257		0.00	0		0.00	0	0	257	257		
005-06900	K. Takhar	0.60	0.90		0.90	67		0.00	0		0.00	0	0	67	67		
005-06901	2025318 Ontario Inc.	0.47	0.71		0.71	53		0.00	0		0.00	0	0	53	53		
005-06903	W. Pokocky	0.40	0.60		0.60	45		0.00	0		0.00	0	0	45	45		
005-06905	D. Shay	0.40	0.60		0.60	45		0.00	0		0.00	0	0	45	45		
005-07000	County of Wellington	0.04	0.06		0.06	4		0.00	0		0.00	0	0	4	4		
005-07100	B. Gibson	0.52	0.78		0.78	58		0.00	0		0.00	0	0	58	58		
005-07105	S. McLennan	0.30	0.45		0.45	34		0.00	0		0.00	0	0	34	34		
005-07150	C. Steward	0.44	0.66		0.66	49		0.00	0		0.00	0	0	49	49		
005-07155	M. Goel	0.42	0.63		0.63	47		0.00	0		0.00	0	0	47	47		
005-07160	G. McCullagh	0.40	0.60		0.60	45		0.00	0		0.00	0	0	45	45		
005-07165	W. Zou	0.48	0.72		0.72	54		0.00	0		0.00	0	0	54	54		
005-07170	D. Gambacorta	0.48	0.72		0.72	54		0.00	0		0.00	0	0	54	54		

**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Interval 1			Interval 2			Interval 3			Total Benefits	Total Outlets	TOTAL
				Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet			
005-07300	A. Naqvi	28.40	23.10		23.10	1,722		0.00	0		0.00	0	0	1,722	1,722
005-07304	C. Smillie	0.58	0.43		0.43	32		0.00	0		0.00	0	0	32	32
005-07310	E. Shiland	0.40	0.60		0.60	45		0.00	0		0.00	0	0	45	45
005-07400	C. Hansen	1.20	1.30		1.30	97		0.00	0		0.00	0	0	97	97
005-07500	H. Hollenbach	7.60	7.60		7.60	567		0.00	0		0.00	0	0	567	567
005-07600	C. MacGillivray	6.00	5.15		5.15	384		0.00	0		0.00	0	0	384	384
005-07602	A. Smith	4.40	3.40		3.40	254		0.00	0		0.00	0	0	254	254
005-07603	D. Brown	6.20	4.30		4.30	321		0.00	0		0.00	0	0	321	321
005-07610	K. Louza	0.50	0.70		0.70	52		0.00	0		0.00	0	0	52	52
005-07700	D. McLeod	4.80	4.10		4.10	306		0.00	0		0.00	0	0	306	306
005-07701	C. Snow	5.50	5.25		5.25	391		0.00	0		0.00	0	0	391	391
005-07702	M. Iannucci	2.40	2.40		2.40	179		0.00	0		0.00	0	0	179	179
005-07703	D. Brace	4.10	3.00		3.00	224		0.00	0		0.00	0	0	224	224
005-07704	K. Williamson	3.60	3.30		3.30	246		0.00	0		0.00	0	0	246	246
005-07705	A. Da Silva	4.00	4.00		4.00	298		0.00	0		0.00	0	0	298	298
005-07725	J. Rego	0.24	0.36		0.36	27		0.00	0		0.00	0	0	27	27
005-08000	Grand River Conservation Authority	2.60	1.85		1.85	138		0.00	0		0.00	0	0	138	138
005-09001	M. Schotsch	2.50	2.25	9,550	2.25	168		0.00	0		0.00	0	9,550	168	9,718
005-09100	Grand River Conservation Authority	6.70	4.05	37,000	4.05	302		0.00	0		0.00	0	37,000	302	37,302
005-09312	M. Kwofie	0.60	0.90		0.90	67		0.00	0		0.00	0	0	67	67
005-09313	D. Sharp	0.60	0.90		0.90	67		0.00	0		0.00	0	0	67	67
005-09314	B. Jakubczak	0.60	0.90		0.90	67		0.00	0		0.00	0	0	67	67
005-09315	1944977 Ontario Ltd.	0.60	0.90		0.90	67		0.00	0		0.00	0	0	67	67
005-09316	1944977 Ontario Ltd.	1.30	1.95		1.95	145		0.00	0		0.00	0	0	145	145
005-13302	A. Hamill	0.85	1.28		1.28	95		0.00	0		0.00	0	0	95	95
005-13600	C. Bran	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13602	D. Patel	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13604	S. Philbert	0.42	0.63		0.63	47		0.00	0		0.00	0	0	47	47
005-13606	R. Bumbacco-Sodaro	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13608	D. Legrow	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13610	S. Predota	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13612	Y. Liu	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13614	D. Khatri	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13616	C. Briggs	0.42	0.63		0.63	47		0.00	0		0.00	0	0	47	47
005-13618	R. McCormack	0.51	0.77		0.77	57		0.00	0		0.00	0	0	57	57
005-13620	M. Downey	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13622	S. Appiah, R. Sasenarine	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13624	C. McDougall	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13626	B. Flanagan	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13628	A. Stephens	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13630	F. DeGazon	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13632	S. Dackiw, P. Ward	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13634	J. Whitten	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13636	J. Peuker	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13638	D. Uyeda	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48
005-13640	M. Bettonvil	0.52	0.78		0.78	58		0.00	0		0.00	0	0	58	58
005-13642	G. Legrand	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48
005-13644	J. Pimentel	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13646	A. Proussaefs	0.41	0.62		0.62	46		0.00	0		0.00	0	0	46	46
005-13648	J. Oxley	0.42	0.63		0.63	47		0.00	0		0.00	0	0	47	47
005-13650	C. Figueira	0.42	0.63		0.63	47		0.00	0		0.00	0	0	47	47
005-13652	A. Jakhar	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48
005-13654	T. & M. Owen	0.50	0.75		0.75	56		0.00	0		0.00	0	0	56	56
005-13656	L. Miklausic	0.47	0.71		0.71	53		0.00	0		0.00	0	0	53	53
005-13658	G. Brown	0.51	0.77		0.77	57		0.00	0		0.00	0	0	57	57
005-13660	R. Thompson	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48
005-13662	J. Ciuffreda	0.45	0.68		0.68	51		0.00	0		0.00	0	0	51	51
005-13664	A. Abadeen	0.45	0.68		0.68	51		0.00	0		0.00	0	0	51	51
005-13666	K. Stringer	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48

**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Interval 1 Benefit	Interval 1 Adj. Ha	Interval 1 Outlet	Interval 2 Benefit	Interval 2 Adj. Ha	Interval 2 Outlet	Interval 3 Benefit	Interval 3 Adj. Ha	Interval 3 Outlet	Total Benefits	Total Outlets	TOTAL
005-13668	C. Kummer	0.54	0.81		0.81	60		0.00	0		0.00	0	0	60	60
005-13670	H. Bhangu	0.39	0.59		0.59	44		0.00	0		0.00	0	0	44	44
005-13672	J. McTrusty	0.47	0.71		0.71	53		0.00	0		0.00	0	0	53	53
005-13674	F. Crane	0.63	0.95		0.95	71		0.00	0		0.00	0	0	71	71
005-13676	J. Pelitis	0.70	1.05		1.05	78		0.00	0		0.00	0	0	78	78
005-13678	C. Borg	0.46	0.69		0.69	51		0.00	0		0.00	0	0	51	51
005-13680	J. Gilby	0.46	0.69		0.69	51		0.00	0		0.00	0	0	51	51
005-13682	D. Hutchinson	0.43	0.65		0.65	48		0.00	0		0.00	0	0	48	48
005-13684	C. Leah	0.56	0.84		0.84	63		0.00	0		0.00	0	0	63	63
005-13686	Town of Erin	0.30	0.45		0.45	34		0.00	0		0.00	0	0	34	34
005-13688	Town of Erin	2.90	2.90		2.90	216		0.00	0		0.00	0	0	216	216
005-13788	D. Beament	11.00	6.65		6.65	496		0.00	0		0.00	0	0	496	496
006-08900	630033 Ontario Limited	14.20	12.85		12.85	958		0.00	0		0.00	0	0	958	958
006-09000	J. Bogart	3.40	1.80		1.80	134		0.00	0		0.00	0	0	134	134
006-09100	H. Dutoit	1.40	0.90		0.90	67		0.00	0		0.00	0	0	67	67
006-12700	L. Tugman	37.70	34.15		34.15	2,546		0.00	0		0.00	0	0	2,546	2,546
006-12725	J. Brownridge	6.90	6.90		6.90	515		0.00	0		0.00	0	0	515	515
Sub Total Lands:		397.68	382.03		56,750	382.03		96,900	49.77		4,100	29.05		157,750	228,865
Highway 124	County of Wellington	3.50	10.50		10.50	783		2.25	1,825		2.25	176	0	2,784	2,784
Highway 125	County of Wellington	1.40	4.20		4.20	324	12,600	4.20	3,409	2,000	2.10	166	14,600	3,899	18,499
Second Line	Town of Erin	7.10	21.30		21.30	1,588		0.00	0		0.00	0	0	1,588	1,588
Sideroad 17	Town of Erin	1.60	4.80		4.80	358		0.00	0		0.00	0	0	358	358
Anderson Close	Town of Erin	1.20	3.60		3.60	268		0.00	0		0.00	0	0	268	268
Stewart Drive	Town of Erin	2.20	6.60		6.60	492		0.00	0		0.00	0	0	492	492
Grundy Court	Town of Erin	0.24	0.72		0.72	54		0.00	0		0.00	0	0	54	54
Sideroad 15	Town of Erin	1.10	1.10		1.10	82		0.00	0		0.00	0	0	82	82
Sub Total Roads:		18.34	52.82	0	52.82	3,949	12,600	6.45	5,234	2,000	4.35	342	14,600	9,525	24,125
<b>TOTAL OSPRINGE DRAIN:</b>		416.02	434.85		56,750	434.85		109,500	56.22		6,100	33.4		172,350	252,990
					0			0			0				

**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

ESTIMATED COST		SWM POND			NORTH BRANCH			SOUTH BRANCH			TOTAL		
		Interval 1			Interval 1			Interval 1					
					0+000 to 0+236			0+000 to 0+567					
		68,400			53,000			73,200			286,200		
		0			0			0			79,270		
		15,975			2,340			7,020			101,450		
		3,765			2,645			2,645			15,060		
		88,140			57,985			82,865			481,980		
Roll No.	Owner	Interval 1			Interval 1			Interval 1			Total Benefits	Total Outlets	TOTAL
		Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet			
005-03500	K. Thompson	0.00		0	0.00		0	0.00		0	0	134	134
005-03600	R. Young	0.00		0	0.00		0	0.00		0	0	395	395
005-03800	S. Jhaj	0.00		0	0.00		0	0.00		0	0	1,898	1,898
005-03900	R. Ysidron	0.00		0	0.00		0	0.00		0	0	239	239
005-04000	L. Dellamora	0.00		0	0.00		0	0.00		0	0	1,722	1,722
005-04100	953409 Ontario Limited	0.00		0	0.00		0	0.00		0	0	2,744	2,744
005-04105	Avalon Specialized Services	0.00		0	0.00		0	0.00		0	0	31	31
005-04200	A. McNaught	0.00		0	0.00		0	0.00		0	0	1,353	1,353
005-04300	M. Grundy	0.00		0	0.00		0	0.00		0	0	35	35
005-04400	S. Kinsey	0.00		0	0.00		0	0.00		0	0	22	22
005-04500	B. Klassen	0.00		0	0.00		0	0.00		0	0	813	813
005-04600	Datta Yoga Centre of Canada	0.00		0	0.00		0	0.00		0	0	179	179
005-04700	9522077 Canada Inc.	0.00		0	0.00		0	0.00		0	0	16	16
005-04800	W. Clark	0.00		0	0.00		0	0.00		0	0	15	15
005-04900	V. Stewart	0.00		0	0.00		0	0.00		0	0	19	19
005-05000	E. Rees	0.00		0	0.00		0	0.00		0	0	11	11
005-05100	J. Caswell	0.00		0	0.00		0	0.00		0	0	9	9
005-05200	M. Van Wisselingh	0.00		0	0.00		0	0.00		0	0	11	11
005-05300	C. Vandermeulen	0.00		0	0.00		0	0.00		0	0	8	8
005-05400	Osprings Presbyterian Church	0.00		0	0.00		0	0.00		0	0	13	13
005-05405	J. Thring	0.00		0	0.00		0	0.00		0	0	15	15
005-05500	G. Adkin	0.00		0	0.00		0	0.00		0	0	78	78
005-05700	Thomasfield Homes Limited	0.07		10	0.00		0	0.02		105	0	182	182
005-05702	Thomasfield Homes Limited	1.20		167	0.00		0	0.00		0	0	1,323	1,323
005-05800	R. Grundy	0.12		17	0.12		401	0.00		0	0	533	533
005-05900	Thomasfield Homes Limited	0.00		0	0.00		0	0.00		0	0	257	257
005-05900	Thomasfield Homes Limited (Subdiv)	84,200	26.98	3,746	50,900	2.00	6,684	66,400	3.12	16,360	224,100	52,797	276,897
005-06000	R. Woodward	0.00		0	0.00		0	0.00		0	0	288	288
005-06001	P. Kent	0.00		0	0.00		0	0.00		0	0	366	366
005-06707	D. Ronca	0.00		0	0.00		0	0.00		0	0	576	576
005-06710	D. Evans	0.00		0	0.00		0	0.00		0	0	3,542	3,542
005-06711	C. Pierce	0.00		0	0.00		0	0.00		0	0	3,454	3,454
005-06712	W. Kline	0.00		0	0.00		0	0.00		0	21,200	3,454	24,654
005-06713	Elmira Farm Holdings Ltd.	0.00		0	0.00		0	0.00		0	25,100	3,454	28,554
005-06714	1581319 Ontario Inc.	0.00		0	0.00		0	0.00		0	26,300	3,383	29,683
005-06715	Grand River Conservation Authority	0.00		0	0.00		0	0.00		0	8,700	681	9,381
005-06716	B. Minor	0.00		0	0.00		0	0.00		0	7,300	358	7,658
005-06802	R. McEnery	0.00		0	0.00		0	0.00		0	0	257	257
005-06900	K. Takhar	0.00		0	0.00		0	0.00		0	0	67	67
005-06901	2025318 Ontario Inc.	0.00		0	0.00		0	0.00		0	0	53	53
005-06903	W. Pokocky	0.00		0	0.00		0	0.00		0	0	45	45
005-06905	D. Shay	0.00		0	0.00		0	0.00		0	0	45	45
005-07000	County of Wellington	0.00		0	0.00		0	0.00		0	0	4	4
005-07100	B. Gibson	0.00		0	0.00		0	0.00		0	0	58	58
005-07105	S. McLennan	0.00		0	0.00		0	0.00		0	0	34	34
005-07150	C. Steward	0.00		0	0.00		0	0.00		0	0	49	49
005-07155	M. Goel	0.00		0	0.00		0	0.00		0	0	47	47
005-07160	G. McCullagh	0.00		0	0.00		0	0.00		0	0	45	45
005-07165	W. Zou	0.00		0	0.00		0	0.00		0	0	54	54
005-07170	D. Gambacorta	0.00		0	0.00		0	0.00		0	0	54	54

**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1			Interval 1			Interval 1			Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefits	Outlets	
005-07300	A. Naqvi		0.00	0		0.00	0		0.00	0	0	1,722	1,722
005-07304	C. Smillie		0.00	0		0.00	0		0.00	0	0	32	32
005-07310	E. Shiland		0.00	0		0.00	0		0.00	0	0	45	45
005-07400	C. Hansen		0.00	0		0.00	0		0.00	0	0	97	97
005-07500	H. Hollenbach		0.00	0		0.00	0		0.00	0	0	567	567
005-07600	C. MacGillivray		0.00	0		0.00	0		0.00	0	0	384	384
005-07602	A. Smith		0.00	0		0.00	0		0.00	0	0	254	254
005-07603	D. Brown		0.00	0		0.00	0		0.00	0	0	321	321
005-07610	K. Louza		0.00	0		0.00	0		0.00	0	0	52	52
005-07700	D. McLeod		0.00	0		0.00	0		0.00	0	0	306	306
005-07701	C. Snow		0.00	0		0.00	0		0.00	0	0	391	391
005-07702	M. Iannucci		0.00	0		0.00	0		0.00	0	0	179	179
005-07703	D. Brace		0.00	0		0.00	0		0.00	0	0	224	224
005-07704	K. Williamson		0.00	0		0.00	0		0.00	0	0	246	246
005-07705	A. Da Silva		0.00	0		0.00	0		0.00	0	0	298	298
005-07725	J. Rego		0.00	0		0.00	0		0.00	0	0	27	27
005-08000	Grand River Conservation Authority		0.00	0		0.00	0		0.00	0	0	138	138
005-09001	M. Schotsch		0.00	0		0.00	0		0.00	0	9,550	168	9,718
005-09100	Grand River Conservation Authority		0.00	0		0.00	0		0.00	0	37,000	302	37,302
005-09312	M. Kwofie		0.00	0		0.00	0		0.00	0	0	67	67
005-09313	D. Sharp		0.00	0		0.00	0		0.00	0	0	67	67
005-09314	B. Jakubczak		0.00	0		0.00	0		0.00	0	0	67	67
005-09315	1944977 Ontario Ltd.		0.00	0		0.00	0		0.00	0	0	67	67
005-09316	1944977 Ontario Ltd.		0.00	0		0.00	0		0.00	0	0	145	145
005-13302	A. Hamill		0.00	0		0.00	0		0.00	0	0	95	95
005-13600	C. Bran		0.00	0		0.00	0		0.00	0	0	46	46
005-13602	D. Patel		0.00	0		0.00	0		0.00	0	0	46	46
005-13604	S. Philbert		0.00	0		0.00	0		0.00	0	0	47	47
005-13606	R. Bumbacco-Sodaro		0.00	0		0.00	0		0.00	0	0	46	46
005-13608	D. Legrow		0.00	0		0.00	0		0.00	0	0	46	46
005-13610	S. Predota		0.00	0		0.00	0		0.00	0	0	46	46
005-13612	Y. Liu		0.00	0		0.00	0		0.00	0	0	46	46
005-13614	D. Khatri		0.00	0		0.00	0		0.00	0	0	46	46
005-13616	C. Briggs		0.00	0		0.00	0		0.00	0	0	47	47
005-13618	R. McCormack		0.00	0		0.00	0		0.00	0	0	57	57
005-13620	M. Downey		0.00	0		0.00	0		0.00	0	0	46	46
005-13622	S. Appiah, R. Sasenarine		0.00	0		0.00	0		0.00	0	0	46	46
005-13624	C. McDougall		0.00	0		0.00	0		0.00	0	0	46	46
005-13626	B. Flanagan		0.00	0		0.00	0		0.00	0	0	46	46
005-13628	A. Stephens		0.00	0		0.00	0		0.00	0	0	46	46
005-13630	F. DeGazon		0.00	0		0.00	0		0.00	0	0	46	46
005-13632	S. Dackiw, P. Ward		0.00	0		0.00	0		0.00	0	0	46	46
005-13634	J. Whitten		0.00	0		0.00	0		0.00	0	0	46	46
005-13636	J. Peuker		0.00	0		0.00	0		0.00	0	0	46	46
005-13638	D. Uyeda		0.00	0		0.00	0		0.00	0	0	48	48
005-13640	M. Bettonvil		0.00	0		0.00	0		0.00	0	0	58	58
005-13642	G. Legrand		0.00	0		0.00	0		0.00	0	0	48	48
005-13644	J. Pimentel		0.00	0		0.00	0		0.00	0	0	46	46
005-13646	A. Proussaefs		0.00	0		0.00	0		0.00	0	0	46	46
005-13648	J. Oxley		0.00	0		0.00	0		0.00	0	0	47	47
005-13650	C. Figueira		0.00	0		0.00	0		0.00	0	0	47	47
005-13652	A. Jakhar		0.00	0		0.00	0		0.00	0	0	48	48
005-13654	T. & M. Owen		0.00	0		0.00	0		0.00	0	0	56	56
005-13656	L. Miklausic		0.00	0		0.00	0		0.00	0	0	53	53
005-13658	G. Brown		0.00	0		0.00	0		0.00	0	0	57	57
005-13660	R. Thompson		0.00	0		0.00	0		0.00	0	0	48	48
005-13662	J. Ciuffreda		0.00	0		0.00	0		0.00	0	0	51	51
005-13664	A. Abadeen		0.00	0		0.00	0		0.00	0	0	51	51
005-13666	K. Stringer		0.00	0		0.00	0		0.00	0	0	48	48



**APPENDIX A - CALCULATION OF ASSESSMENTS**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1			Interval 1			Interval 1			Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefit	Adj. Ha	Outlet	Benefits	Outlets	
005-13668	C. Kummer		0.00	0		0.00	0		0.00	0	0	60	60
005-13670	H. Bhangu		0.00	0		0.00	0		0.00	0	0	44	44
005-13672	J. McTrusty		0.00	0		0.00	0		0.00	0	0	53	53
005-13674	F. Crane		0.00	0		0.00	0		0.00	0	0	71	71
005-13676	J. Pelitis		0.00	0		0.00	0		0.00	0	0	78	78
005-13678	C. Borg		0.00	0		0.00	0		0.00	0	0	51	51
005-13680	J. Gilby		0.00	0		0.00	0		0.00	0	0	51	51
005-13682	D. Hutchinson		0.00	0		0.00	0		0.00	0	0	48	48
005-13684	C. Leah		0.00	0		0.00	0		0.00	0	0	63	63
005-13686	Town of Erin		0.00	0		0.00	0		0.00	0	0	34	34
005-13688	Town of Erin		0.00	0		0.00	0		0.00	0	0	216	216
005-13788	D. Beament		0.00	0		0.00	0		0.00	0	0	496	496
006-08900	630033 Ontario Limited		0.00	0		0.00	0		0.00	0	0	958	958
006-09000	J. Bogart		0.00	0		0.00	0		0.00	0	0	134	134
006-09100	H. Dutoit		0.00	0		0.00	0		0.00	0	0	67	67
006-12700	L. Tugman		0.00	0		0.00	0		0.00	0	0	2,546	2,546
006-12725	J. Brownridge		0.00	0		0.00	0		0.00	0	0	515	515
Sub Total Lands:		84,200	28.37	3,940	50,900	2.12	7,085	66,400	3.14	16,465	359,250	98,605	457,855
Highway 124	County of Wellington		0.00	0		0.00	0		0.00	0	0	2,784	2,784
Highway 125	County of Wellington		0.00	0		0.00	0		0.00	0	14,600	3,899	18,499
Second Line	Town of Erin		0.00	0		0.00	0		0.00	0	0	1,588	1,588
Sideroad 17	Town of Erin		0.00	0		0.00	0		0.00	0	0	358	358
Anderson Close	Town of Erin		0.00	0		0.00	0		0.00	0	0	268	268
Stewart Drive	Town of Erin		0.00	0		0.00	0		0.00	0	0	492	492
Grundy Court	Town of Erin		0.00	0		0.00	0		0.00	0	0	54	54
Sideroad 15	Town of Erin		0.00	0		0.00	0		0.00	0	0	82	82
Sub Total Roads:		0	0.00	0	0	0.00	0	0	0.00	0	14,600	9,525	24,125
<b>TOTAL OSPRINGE DRAIN:</b>		84,200	28.37	3,940	50,900	2.12	7,085	66,400	3.14	16,465	373,850	108,130	481,980
				0			0			0			

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE  
OSPRINGE DRAIN  
Town of Erin**

		MAIN DRAIN																MAIN DR TOTAL	
		Interval 1 1+241 to 0+706						Interval 2 0+706 to 0+029				Interval 3 0+029 to 0+000							
		535 m 8,000						677 m 10,000				29 m 1,700				19,700			
		Interval 1						Interval 2				Interval 3				Total Benefits	Total Outlets	TOTAL	
Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%				
005-03500	K. Thompson	2.10	1.80	1.80	23	0.29		0.00	0	0.00		0.00	0	0.00		0	23	23	
005-03600	R. Young	5.30	5.30	5.30	66	0.83		0.00	0	0.00		0.00	0	0.00		0	66	66	
005-03800	S. Jhaj	27.00	25.45	25.45	322	4.03		0.00	0	0.00		0.00	0	0.00		0	322	322	
005-03900	R. Ysidron	4.40	3.20	3.20	41	0.51		0.00	0	0.00		0.00	0	0.00		0	41	41	
005-04000	L. Dellamora	27.60	23.10	23.10	292	3.65		0.00	0	0.00		0.00	0	0.00		0	292	292	
005-04100	953409 Ontario Limited	39.90	36.80	36.80	466	5.83		0.00	0	0.00		0.00	0	0.00		0	466	466	
005-04105	Avalon Specialized Services	0.28	0.42	0.42	5	0.06		0.00	0	0.00		0.00	0	0.00		0	5	5	
005-04200	A. McNaught	20.20	18.15	18.15	230	2.88		0.00	0	0.00		0.00	0	0.00		0	230	230	
005-04300	M. Grundy	0.31	0.47	0.47	6	0.08		0.00	0	0.00		0.00	0	0.00		0	6	6	
005-04400	S. Kinsey	0.20	0.30	0.30	4	0.05		0.00	0	0.00		0.00	0	0.00		0	4	4	
005-04500	B. Klassen	14.40	10.90	10.90	137	1.71		0.00	0	0.00		0.00	0	0.00		0	137	137	
005-04600	Datta Yoga Centre of Canada	2.40	2.40	2.40	30	0.38		0.00	0	0.00		0.00	0	0.00		0	30	30	
005-04700	9522077 Canada Inc.	0.14	0.21	0.21	3	0.04		0.00	0	0.00		0.00	0	0.00		0	3	3	
005-04800	W. Clark	0.13	0.20	0.20	3	0.04		0.00	0	0.00		0.00	0	0.00		0	3	3	
005-04900	V. Stewart	0.17	0.26	0.26	3	0.04		0.00	0	0.00		0.00	0	0.00		0	3	3	
005-05000	E. Rees	0.10	0.15	0.15	2	0.03		0.00	0	0.00		0.00	0	0.00		0	2	2	
005-05100	J. Caswell	0.08	0.12	0.12	2	0.03		0.00	0	0.00		0.00	0	0.00		0	2	2	
005-05200	M. Van Wisselingh	0.10	0.15	0.15	2	0.03		0.00	0	0.00		0.00	0	0.00		0	2	2	
005-05300	C. Vandermeulen	0.07	0.11	0.11	1	0.01		0.00	0	0.00		0.00	0	0.00		0	1	1	
005-05400	Ospringe Presbyterian Church	0.11	0.17	0.17	2	0.03		0.00	0	0.00		0.00	0	0.00		0	2	2	
005-05405	J. Thring	0.13	0.20	0.20	3	0.04		0.00	0	0.00		0.00	0	0.00		0	3	3	
005-05500	G. Adkin	0.70	1.05	1.05	13	0.16		0.00	0	0.00		0.00	0	0.00		0	13	13	
005-05700	Thomasfield Homes Limited	0.03	0.05	0.07	1	0.01		0.07	6	0.06		0.07	1	0.06		0	8	8	
005-05702	Thomasfield Homes Limited	0.80	1.20	1.20	15	0.19		1.20	96	0.96		1.20	24	1.41		0	135	135	
005-05800	R. Grundy	0.00	0.00	0.12	2	0.03		0.12	10	0.10		0.12	2	0.12		0	14	14	
005-05900	Thomasfield Homes Limited	3.40	3.45	4.25	54	0.68		0.80	64	0.64		0.80	16	0.94		0	134	134	
005-05900-1	New Subdivision - Lot 1	0.00	0.00	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-2	New Subdivision - Lot 2	0.02	0.03	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-3	New Subdivision - Lot 3	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-4	New Subdivision - Lot 4	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-5	New Subdivision - Lot 5	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-6	New Subdivision - Lot 6	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-7	New Subdivision - Lot 7	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-8	New Subdivision - Lot 8	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-9	New Subdivision - Lot 9	0.07	0.11	0.31	4	0.05		0.31	25	0.25		0.31	6	0.35		0	35	35	
005-05900-10	New Subdivision - Lot 10	0.05	0.08	0.32	4	0.05		0.32	26	0.26		0.32	6	0.35		0	36	36	
005-05900-11	New Subdivision - Lot 11	0.05	0.08	0.40	5	0.06		0.40	32	0.32		0.40	8	0.47		0	45	45	
005-05900-12	New Subdivision - Lot 12	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-13	New Subdivision - Lot 13	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-14	New Subdivision - Lot 14	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-15	New Subdivision - Lot 15	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-16	New Subdivision - Lot 16	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-17	New Subdivision - Lot 17	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-18	New Subdivision - Lot 18	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-19	New Subdivision - Lot 19	0.21	0.32	0.32	4	0.05		0.32	26	0.26		0.32	6	0.35		0	36	36	
005-05900-20	New Subdivision - Lot 20	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-21	New Subdivision - Lot 21	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-22	New Subdivision - Lot 22	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-23	New Subdivision - Lot 23	0.21	0.32	0.32	4	0.05		0.32	26	0.26		0.32	6	0.35		0	36	36	
005-05900-24	New Subdivision - Lot 24	0.21	0.32	0.32	4	0.05		0.32	26	0.26		0.32	6	0.35		0	36	36	
005-05900-25	New Subdivision - Lot 25	0.21	0.32	0.32	4	0.05		0.32	26	0.26		0.32	6	0.35		0	36	36	
005-05900-26	New Subdivision - Lot 26	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-27	New Subdivision - Lot 27	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-28	New Subdivision - Lot 28	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-29	New Subdivision - Lot 29	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-30	New Subdivision - Lot 30	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-31	New Subdivision - Lot 31	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-32	New Subdivision - Lot 32	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-33	New Subdivision - Lot 33	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-34	New Subdivision - Lot 34	0.22	0.33	0.33	4	0.05		0.33	27	0.27		0.33	7	0.41		0	38	38	
005-05900-35	New Subdivision - Lot 35	0.22	0.33	0.33	4	0.05		0.33	27	0.27		0.33	7	0.41		0	38	38	
005-05900-36	New Subdivision - Lot 36	0.22	0.33	0.33	4	0.05		0.33	27	0.27		0.33	7	0.41		0	38	38	
005-05900-37	New Subdivision - Lot 37	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-38	New Subdivision - Lot 38	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-39	New Subdivision - Lot 39	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-40	New Subdivision - Lot 40	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	
005-05900-41	New Subdivision - Lot 41	0.20	0.30	0.30	4	0.05		0.30	24	0.24		0.30	6	0.35		0	34	34	

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Interval 1				Interval 2				Interval 3				Total Benefits	Total Outlets	TOTAL
				Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%			
005-05900-42	New Subdivision - Lot 42	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-43	New Subdivision - Lot 43	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-44	New Subdivision - Lot 44	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-45	New Subdivision - Lot 45	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-46	New Subdivision - Lot 46	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-47	New Subdivision - Lot 47	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-48	New Subdivision - Lot 48	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-49	New Subdivision - Lot 49	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-50	New Subdivision - Lot 50	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-51	New Subdivision - Lot 51	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-52	New Subdivision - Lot 52	0.00	0.00		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-53	New Subdivision - Lot 53	0.00	0.00		0.42	5	0.06		0.42	34	0.34		0.42	9	0.53	0	48	48
005-05900-54	New Subdivision - Lot 54	0.00	0.00		0.35	4	0.05		0.35	28	0.28		0.35	7	0.41	0	39	39
005-05900-55	New Subdivision - Lot 55	0.21	0.32		0.32	4	0.05		0.32	26	0.26		0.32	6	0.35	0	36	36
005-05900-56	New Subdivision - Lot 56	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-57	New Subdivision - Lot 57	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-58	New Subdivision - Lot 58	0.20	0.31		0.31	4	0.05		0.31	25	0.25		0.31	6	0.35	0	35	35
005-05900-59	New Subdivision - Lot 59	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-60	New Subdivision - Lot 60	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-05900-61	Block 61 - Park	0.92	1.38		1.38	18	0.23		1.38	111	1.11		1.38	28	1.65	0	157	157
005-05900-62	Block 62 - SWM Pond	1.16	1.75		1.75	22	0.28	2,000	1.75	141	21.41	400	1.75	36	25.65	2,400	199	2,599
005-05900-63	Block 63	0.07	0.11		0.11	1	0.01		0.11	9	0.09		0.11	2	0.12	0	12	12
005-05900-64	Block 64	0.00	0.00		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-65	Block 65	0.00	0.00		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-66	Block 66	0.01	0.02		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-67	Block 67	0.01	0.02		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-68	Block 68	0.01	0.02		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-69	Block 69	0.00	0.00		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-70	Block 70	0.01	0.02		0.02	1	0.01		0.02	2	0.02		0.02	0	0.00	0	3	3
005-05900-71	Block 71	0.00	0.00		0.05	2	0.03		0.05	4	0.04		0.05	1	0.06	0	7	7
005-06000	R. Woodward	0.20	0.30		0.30	4	0.05		0.30	24	0.24		0.30	6	0.35	0	34	34
005-06001	P. Kent	0.25	0.38		0.38	5	0.06		0.38	31	0.31		0.38	8	0.47	0	44	44
005-06707	D. Ronca	1.20	1.20		1.20	15	0.19		0.60	48	0.48		0.00	0	0.00	0	63	63
005-06710	D. Evans	4.00	4.00		4.00	51	0.64		4.00	320	3.20		0.00	0	0.00	0	371	371
005-06711	C. Pierce	3.90	3.90		3.90	50	0.63		3.90	312	3.12		0.00	0	0.00	0	362	362
005-06712	W. Kline	3.90	3.90		3.90	50	0.63	400	3.90	312	7.12	100	0.00	0	5.88	500	362	862
005-06713	Elmira Farm Holdings Ltd.	3.90	3.90		3.90	50	0.63	200	3.90	312	5.12		0.00	0	0.00	200	362	562
005-06714	1581319 Ontario Inc.	4.03	3.82		3.82	49	0.61	500	3.82	306	8.06		0.00	0	0.00	500	355	855
005-06715	Grand River Conservation Authority	4.00	2.60	200	2.60	33	2.91	200	0.60	48	2.48		0.00	0	0.00	400	81	481
005-06716	B. Minor	3.60	4.80	400	4.80	60	5.75		0.00	0	0.00		0.00	0	0.00	400	60	460
005-06802	R. McEnery	2.30	3.45		3.45	44	0.55		0.00	0	0.00		0.00	0	0.00	0	44	44
005-06900	K. Takhar	0.60	0.90		0.90	11	0.14		0.00	0	0.00		0.00	0	0.00	0	11	11
005-06901	2025318 Ontario Inc.	0.47	0.71		0.71	9	0.11		0.00	0	0.00		0.00	0	0.00	0	9	9
005-06903	W. Pokocky	0.40	0.60		0.60	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-06905	D. Shay	0.40	0.60		0.60	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-07000	County of Wellington	0.04	0.06		0.06	1	0.01		0.00	0	0.00		0.00	0	0.00	0	1	1
005-07100	B. Gibson	0.52	0.78		0.78	10	0.13		0.00	0	0.00		0.00	0	0.00	0	10	10
005-07105	S. McLennan	0.30	0.45		0.45	6	0.08		0.00	0	0.00		0.00	0	0.00	0	6	6
005-07150	C. Steward	0.44	0.66		0.66	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-07155	M. Goel	0.42	0.63		0.63	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-07160	G. McCullagh	0.40	0.60		0.60	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-07165	W. Zou	0.48	0.72		0.72	9	0.11		0.00	0	0.00		0.00	0	0.00	0	9	9
005-07170	D. Gambacorta	0.48	0.72		0.72	9	0.11		0.00	0	0.00		0.00	0	0.00	0	9	9
005-07300	A. Naqvi	28.40	23.10		23.10	292	3.65		0.00	0	0.00		0.00	0	0.00	0	292	292
005-07304	C. Smillie	0.58	0.43		0.43	5	0.06		0.00	0	0.00		0.00	0	0.00	0	5	5
005-07310	E. Shiland	0.40	0.60		0.60	8	0.10		0.00	0	0.00		0.00	0	0.00	0	8	8
005-07400	C. Hansen	1.20	1.30		1.30	17	0.21		0.00	0	0.00		0.00	0	0.00	0	17	17
005-07500	H. Hollenbach	7.60	7.60		7.60	96	1.20		0.00	0	0.00		0.00	0	0.00	0	96	96
005-07600	C. MacGillivray	6.00	5.15		5.15	64	0.80		0.00	0	0.00		0.00	0	0.00	0	64	64
005-07602	A. Smith	4.40	3.40		3.40	43	0.54		0.00	0	0.00		0.00	0	0.00	0	43	43
005-07603	D. Brown	6.20	4.30		4.30	55	0.69		0.00	0	0.00		0.00	0	0.00	0	55	55
005-07610	K. Louza	0.50	0.70		0.70	9	0.11		0.00	0	0.00		0.00	0	0.00	0	9	9
005-07700	D. McLeod	4.80	4.10		4.10	52	0.65		0.00	0	0.00		0.00	0	0.00	0	52	52
005-07701	C. Snow	5.50	5.25		5.25	66	0.83		0.00	0	0.00		0.00	0	0.00	0	66	66
005-07702	M. Iannucci	2.40	2.40		2.40	30	0.38		0.00	0	0.00		0.00	0	0.00	0	30	30
005-07703	D. Brace	4.10	3.00		3.00	38	0.48		0.00	0	0.00		0.00	0	0.00	0	38	38
005-07704	K. Williamson	3.60	3.30		3.30	42	0.53		0.00	0	0.00		0.00	0	0.00	0	42	42
005-07705	A. Da Silva	4.00	4.00		4.00	51	0.64		0.00	0	0.00		0.00	0	0.00	0	51	51
005-07725	J. Rego	0.24	0.36		0.36	5	0.06		0.00	0	0.00		0.00	0	0.00	0	5	5
005-08000	Grand River Conservation Authority	2.60	1.85		1.85	23	0.29		0.00	0	0.00		0.00	0	0.00	0	23	23
005-09001	M. Schotsch	2.50	2.25	500	2.25	29	6.61		0.00	0	0.00		0.00	0	0.00	500	29	529
005-09100	Grand River Conservation Authority	6.70	4.05	1,300	4.05	51	16.89		0.00	0	0.00		0.00	0	0.00	1,300	51	1,351
005-09312	M. Kwofie	0.60	0.90		0.90	11	0.14		0.00	0	0.00		0.00	0	0.00	0	11	11

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Total Ha Affected	Total ha Adjusted	Interval 1				Interval 2				Interval 3				Total Benefits	Total Outlets	TOTAL
				Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%			
005-09313	D. Sharp	0.60	0.90	0.90	11	0.14		0.00	0	0.00		0.00	0	0.00		0	11	11
005-09314	B. Jakubczak	0.60	0.90	0.90	11	0.14		0.00	0	0.00		0.00	0	0.00		0	11	11
005-09315	1944977 Ontario Ltd.	0.60	0.90	0.90	11	0.14		0.00	0	0.00		0.00	0	0.00		0	11	11
005-09316	1944977 Ontario Ltd.	1.30	1.95	1.95	25	0.31		0.00	0	0.00		0.00	0	0.00		0	25	25
005-13302	A. Hamill	0.85	1.28	1.28	16	0.20		0.00	0	0.00		0.00	0	0.00		0	16	16
005-13600	C. Bran	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13602	D. Patel	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13604	S. Philbert	0.42	0.63	0.63	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13606	R. Bumbacco-Sodaro	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13608	D. Legrow	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13610	S. Predota	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13612	Y. Liu	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13614	D. Khatri	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13616	C. Briggs	0.42	0.63	0.63	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13618	R. McCormack	0.51	0.77	0.77	10	0.13		0.00	0	0.00		0.00	0	0.00		0	10	10
005-13620	M. Downey	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13622	S. Appiah, R. Sasenarine	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13624	C. McDougall	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13626	B. Flanagan	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13628	A. Stephens	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13630	F. DeGazon	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13632	S. Dackiw, P. Ward	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13634	J. Whitten	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13636	J. Peuker	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13638	D. Uyeda	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13640	M. Bettonvil	0.52	0.78	0.78	10	0.13		0.00	0	0.00		0.00	0	0.00		0	10	10
005-13642	G. Legrand	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13644	J. Pimentel	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13646	A. Proussaefs	0.41	0.62	0.62	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13648	J. Oxley	0.42	0.63	0.63	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13650	C. Figueira	0.42	0.63	0.63	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13652	A. Jakhar	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13654	T. & M. Owen	0.50	0.75	0.75	10	0.13		0.00	0	0.00		0.00	0	0.00		0	10	10
005-13656	L. Miklausic	0.47	0.71	0.71	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13658	G. Brown	0.51	0.77	0.77	10	0.13		0.00	0	0.00		0.00	0	0.00		0	10	10
005-13660	R. Thompson	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13662	J. Ciuffreda	0.45	0.68	0.68	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13664	A. Abadeen	0.45	0.68	0.68	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13666	K. Stringer	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13668	C. Kummer	0.54	0.81	0.81	10	0.13		0.00	0	0.00		0.00	0	0.00		0	10	10
005-13670	H. Bhangu	0.39	0.59	0.59	7	0.09		0.00	0	0.00		0.00	0	0.00		0	7	7
005-13672	J. McTrusty	0.47	0.71	0.71	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13674	F. Crane	0.63	0.95	0.95	12	0.15		0.00	0	0.00		0.00	0	0.00		0	12	12
005-13676	J. Pelitis	0.70	1.05	1.05	13	0.16		0.00	0	0.00		0.00	0	0.00		0	13	13
005-13678	C. Borg	0.46	0.69	0.69	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13680	J. Gilby	0.46	0.69	0.69	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
005-13682	D. Hutchinson	0.43	0.65	0.65	8	0.10		0.00	0	0.00		0.00	0	0.00		0	8	8
005-13684	C. Leah	0.56	0.84	0.84	11	0.14		0.00	0	0.00		0.00	0	0.00		0	11	11
005-13686	Town of Erin	0.30	0.45	0.45	6	0.08		0.00	0	0.00		0.00	0	0.00		0	6	6
005-13688	Town of Erin	2.90	2.90	2.90	37	0.46		0.00	0	0.00		0.00	0	0.00		0	37	37
005-13788	D. Beament	11.00	6.65	6.65	83	1.04		0.00	0	0.00		0.00	0	0.00		0	83	83
006-08900	630033 Ontario Limited	14.20	12.85	12.85	162	2.03		0.00	0	0.00		0.00	0	0.00		0	162	162
006-09000	J. Bogart	3.40	1.80	1.80	23	0.29		0.00	0	0.00		0.00	0	0.00		0	23	23
006-09100	H. Dutoit	1.40	0.90	0.90	11	0.14		0.00	0	0.00		0.00	0	0.00		0	11	11
006-12700	L. Tugman	37.70	34.15	34.15	433	5.41		0.00	0	0.00		0.00	0	0.00		0	433	433
006-12725	J. Brownridge	6.90	6.90	6.90	88	1.10		0.00	0	0.00		0.00	0	0.00		0	88	88
Sub Total Lands:		391.72	373.19	2,400	377.84	4,801	90.13	3,300	45.58	3,659	69.59	500	24.86	493	58.25	6,200	8,953	15,153
Highway 124	County of Wellington	3.50	10.50	10.50	131	1.64		2.25	181	1.81		2.25	46	2.71		0	358	358
Highway 125	County of Wellington	1.40	4.20	4.20	53	0.63		1,700	4.20	340	20.40	400	2.10	54	26.86	2,100	447	2,547
Second Line	Town of Erin	7.10	21.30	21.30	271	3.39		0.00	0	0.00		0.00	0	0.00		0	271	271
Sideroad 17	Town of Erin	1.60	4.80	4.80	61	0.76		0.00	0	0.00		0.00	0	0.00		0	61	61
Anderson Close	Town of Erin	1.20	3.60	3.60	46	0.58		0.00	0	0.00		0.00	0	0.00		0	46	46
Stewart Drive	Town of Erin	2.20	6.60	6.60	84	1.05		0.00	0	0.00		0.00	0	0.00		0	84	84
Grundy Court	Town of Erin	0.24	0.72	0.72	9	0.11		0.00	0	0.00		0.00	0	0.00		0	9	9
Sideroad 15	Town of Erin	1.10	1.10	1.10	14	0.18		0.00	0	0.00		0.00	0	0.00		0	14	14
Broughton Street	Town of Erin	0.10	0.30	0.60	8	0.10		0.60	48	0.48		0.60	12	0.71		0	68	68
Charles Currie Cre	Town of Erin	1.70	5.10	5.10	65	0.76		5.10	410	4.10		5.10	104	6.12		0	579	579
McKinnon Street	Town of Erin	1.50	4.50	4.50	57	0.67		4.50	362	3.62		4.50	91	5.35		0	510	510
Sub Total Roads:		21.64	62.72	0	63.02	799	9.87	1,700	16.65	1,341	30.41	400	14.55	307	41.75	2,100	2,447	4,547
<b>TOTAL OSPRINGE DRAIN:</b>		<b>413.36</b>	<b>435.91</b>	<b>2,400</b>	<b>440.86</b>	<b>5,600</b>	<b>100.00</b>	<b>5,000</b>	<b>62.23</b>	<b>5,000</b>	<b>100.00</b>	<b>900</b>	<b>39.41</b>	<b>800</b>	<b>100.00</b>	<b>8,300</b>	<b>11,400</b>	<b>19,700</b>

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

		SWM POND				NORTH BRANCH											
		Interval 1				Interval 1				Interval 2				NORTH BR			
						0+000 to 0+114				0+114 to 0+236				TOTAL			
		10,000				114 m				122 m				6,400			
		Interval 1				Interval 1				Interval 1				Total			
Roll No.	Owner	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefits	Outlets	TOTAL	
005-03500	K. Thompson		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-03600	R. Young		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-03800	S. Jhaj		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-03900	R. Ysidron		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04000	L. Dellamora		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04100	953409 Ontario Limited		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04105	Avalon Specialized Services		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04200	A. McNaught		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04300	M. Grundy		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04400	S. Kinsey		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04500	B. Klassen		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04600	Datta Yoga Centre of Canada		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04700	9522077 Canada Inc.		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04800	W. Clark		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-04900	V. Stewart		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05000	E. Rees		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05100	J. Caswell		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05200	M. Van Wisselingh		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05300	C. Vandermeulen		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05400	Ospringe Presbyterian Church		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05405	J. Thring		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05500	G. Adkin		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05700	Thomasfield Homes Limited		0.07	4	0.04		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05702	Thomasfield Homes Limited		1.20	66	0.66		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05800	R. Grundy	0	0.12	7	0.07		0.12	49	1.07	230	0.12	0	12.78	230	49	279	
005-05900	Thomasfield Homes Limited	0	0.80	44	0.44		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-1	New Subdivision - Lot 1	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-2	New Subdivision - Lot 2	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-3	New Subdivision - Lot 3	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-4	New Subdivision - Lot 4	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-5	New Subdivision - Lot 5	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-6	New Subdivision - Lot 6	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-7	New Subdivision - Lot 7	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-8	New Subdivision - Lot 8	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-9	New Subdivision - Lot 9	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-10	New Subdivision - Lot 10	0	0.32	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-11	New Subdivision - Lot 11	0	0.40	22	0.22		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-12	New Subdivision - Lot 12	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-13	New Subdivision - Lot 13	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-14	New Subdivision - Lot 14	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-15	New Subdivision - Lot 15	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-16	New Subdivision - Lot 16	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-17	New Subdivision - Lot 17	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-18	New Subdivision - Lot 18	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-19	New Subdivision - Lot 19	0	0.32	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-20	New Subdivision - Lot 20	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-21	New Subdivision - Lot 21	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-22	New Subdivision - Lot 22	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-23	New Subdivision - Lot 23	0	0.32	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-24	New Subdivision - Lot 24	0	0.32	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-25	New Subdivision - Lot 25	0	0.32	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-26	New Subdivision - Lot 26	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-27	New Subdivision - Lot 27	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-28	New Subdivision - Lot 28	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-29	New Subdivision - Lot 29	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-30	New Subdivision - Lot 30	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-31	New Subdivision - Lot 31	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-32	New Subdivision - Lot 32	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-33	New Subdivision - Lot 33	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-34	New Subdivision - Lot 34	0	0.33	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-35	New Subdivision - Lot 35	0	0.33	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-36	New Subdivision - Lot 36	0	0.33	18	0.18		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-37	New Subdivision - Lot 37	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-38	New Subdivision - Lot 38	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-39	New Subdivision - Lot 39	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-40	New Subdivision - Lot 40	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	
005-05900-41	New Subdivision - Lot 41	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0	

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1				Interval 1				Interval 1				Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefits	Outlets	
005-05900-42	New Subdivision - Lot 42	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-43	New Subdivision - Lot 43	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-44	New Subdivision - Lot 44	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-45	New Subdivision - Lot 45	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-46	New Subdivision - Lot 46	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-47	New Subdivision - Lot 47	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-48	New Subdivision - Lot 48	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-49	New Subdivision - Lot 49	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-50	New Subdivision - Lot 50	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-51	New Subdivision - Lot 51	0	0.30	17	0.17	0.00	0	0.00		0.00	0	0.00		0	0	0
005-05900-52	New Subdivision - Lot 52	0	0.30	17	0.17	0.30	122	2.65		230	0.30	0	12.78	230	122	352
005-05900-53	New Subdivision - Lot 53	0	0.42	23	0.23	0.42	171	3.72		230	0.42	0	12.78	230	171	401
005-05900-54	New Subdivision - Lot 54	0	0.35	19	0.19	0.35	143	3.11		230	0.35	0	12.78	230	143	373
005-05900-55	New Subdivision - Lot 55	0	0.32	18	0.18	100	0.15	61	3.50		0.00	0	0.00	100	61	161
005-05900-56	New Subdivision - Lot 56	0	0.30	17	0.17		0.15	61	1.33		0.00	0	0.00	0	61	61
005-05900-57	New Subdivision - Lot 57	0	0.30	17	0.17		0.15	61	1.33		0.00	0	0.00	0	61	61
005-05900-58	New Subdivision - Lot 58	0	0.31	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-59	New Subdivision - Lot 59	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-60	New Subdivision - Lot 60	0	0.30	17	0.17		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-61	Block 61 - Park	0	1.38	76	0.76		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-62	Block 62 - SWM Pond		1.75	97	0.97		0.06	24	0.52		0.00	0	0.00	0	24	24
005-05900-63	Block 63		0.11	6	0.06		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-64	Block 64		0.02	1	0.01		0.02	8	0.17		0.02	0	0.00	0	8	8
005-05900-65	Block 65		0.02	1	0.01		0.02	8	0.17		0.02	0	0.00	0	8	8
005-05900-66	Block 66		0.02	1	0.01		0.02	8	0.17		0.00	0	0.00	0	8	8
005-05900-67	Block 67		0.02	1	0.01		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-68	Block 68		0.02	1	0.01		0.02	8	0.17		0.00	0	0.00	0	8	8
005-05900-69	Block 69		0.02	1	0.01		0.02	8	0.17		0.02	0	0.00	0	8	8
005-05900-70	Block 70		0.02	1	0.01		0.00	0	0.00		0.00	0	0.00	0	0	0
005-05900-71	Block 71		0.05	3	0.03		0.05	20	0.43		0.05	0	0.00	0	20	20
005-06000	R. Woodward		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06001	P. Kent		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06707	D. Ronca		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06710	D. Evans		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06711	C. Pierce		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06712	W. Kline		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06713	Elmira Farm Holdings Ltd.		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06714	1581319 Ontario Inc.		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06715	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06716	B. Minor		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06802	R. McEnery		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06900	K. Takhar		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06901	2025318 Ontario Inc.		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06903	W. Pokocky		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-06905	D. Shay		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07000	County of Wellington		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07100	B. Gibson		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07105	S. McLennan		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07150	C. Steward		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07155	M. Goel		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07160	G. McCullagh		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07165	W. Zou		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07170	D. Gambacorta		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07300	A. Naqvi		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07304	C. Smillie		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07310	E. Shiland		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07400	C. Hansen		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07500	H. Hollenbach		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07600	C. MacGillivray		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07602	A. Smith		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07603	D. Brown		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07610	K. Louza		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07700	D. McLeod		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07701	C. Snow		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07702	M. Iannucci		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07703	D. Brace		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07704	K. Williamson		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07705	A. Da Silva		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-07725	J. Rego		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-08000	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-09001	M. Schotsch		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-09100	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0
005-09312	M. Kwofie		0.00	0	0.00		0.00	0	0.00		0.00	0	0.00	0	0	0

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1				Interval 1				Interval 1				Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefits	Outlets	
005-09313	D. Sharp	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-09314	B. Jakubczak	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-09315	1944977 Ontario Ltd.	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-09316	1944977 Ontario Ltd.	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13302	A. Hamill	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13600	C. Bran	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13602	D. Patel	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13604	S. Philbert	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13606	R. Bumbacco-Sodaro	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13608	D. Legrow	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13610	S. Predota	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13612	Y. Liu	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13614	D. Khatri	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13616	C. Briggs	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13618	R. McCormack	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13620	M. Downey	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13622	S. Appiah, R. Sasenarine	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13624	C. McDougall	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13626	B. Flanagan	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13628	A. Stephens	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13630	F. DeGazon	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13632	S. Dackiw, P. Ward	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13634	J. Whitten	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13636	J. Peuker	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13638	D. Uyeda	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13640	M. Bettonvil	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13642	G. Legrand	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13644	J. Pimentel	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13646	A. Proussaefs	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13648	J. Oxley	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13650	C. Figueira	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13652	A. Jakhar	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13654	T. & M. Owen	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13656	L. Miklausic	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13658	G. Brown	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13660	R. Thompson	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13662	J. Ciuffreda	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13664	A. Abadeen	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13666	K. Stringer	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13668	C. Kummer	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13670	H. Bhangu	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13672	J. McTrusty	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13674	F. Crane	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13676	J. Pelitis	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13678	C. Borg	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13680	J. Gilby	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13682	D. Hutchinson	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13684	C. Leah	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13686	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13688	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
005-13788	D. Beament	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
006-08900	630033 Ontario Limited	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
006-09000	J. Bogart	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
006-09100	H. Dutoit	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
006-12700	L. Tugman	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
006-12725	J. Brownridge	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
<b>Sub Total Lands:</b>		<b>0</b>	<b>24.18</b>	<b>1,352</b>	<b>13.52</b>	<b>100</b>	<b>1.85</b>	<b>752</b>	<b>18.51</b>	<b>920</b>	<b>1.30</b>	<b>0</b>	<b>51.12</b>	<b>1,020</b>	<b>752</b>	<b>1,772</b>
Highway 124	County of Wellington	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Highway 125	County of Wellington	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Second Line	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Sideroad 17	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Anderson Close	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Stewart Drive	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Grundy Court	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Sideroad 15	Town of Erin	0.00		0	0.00	0.00		0	0.00	0.00		0	0.00	0	0	0
Broughton Street	Town of Erin	2,700	0.60	33	27.33	3,500	0.60	248	81.49	880	0.30	0	48.88	4,380	248	4,628
Charles Currie Cre	Town of Erin	2,700	5.10	266	29.66	0.00		0	0.00	0.00		0	0.00	0	0	0
McKinnon Street	Town of Erin	2,700	4.50	249	29.49	0.00		0	0.00	0.00		0	0.00	0	0	0
<b>Sub Total Roads:</b>		<b>8,100</b>	<b>10.20</b>	<b>548</b>	<b>86.48</b>	<b>3,500</b>	<b>0.60</b>	<b>248</b>	<b>81.49</b>	<b>880</b>	<b>0.30</b>	<b>0</b>	<b>48.88</b>	<b>4,380</b>	<b>248</b>	<b>4,628</b>
<b>TOTAL OSPRINGE DRAIN:</b>		<b>8,100</b>	<b>34.38</b>	<b>1,900</b>	<b>100.00</b>	<b>3,600</b>	<b>2.45</b>	<b>1,000</b>	<b>100.00</b>	<b>1,800</b>	<b>1.60</b>	<b>0</b>	<b>100.00</b>	<b>5,400</b>	<b>1,000</b>	<b>6,400</b>

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.		Owner		SOUTH BRANCH										TOTAL		
				Interval 1				Interval 2				SOUTH BR		TOTAL		
				0+000 to 0+103				0+103 to 0+561				TOTAL				
				103 m				458 m				10,000		62,500		
		Interval 1				Interval 1										
Benefit	Adj.	Ha	Outlet	%	Benefit	Adj.	Ha	Outlet	%	Total Benefits	Total Outlets	TOTAL	Total Benefits	Total Outlets	TOTAL	
005-03500	K. Thompson	0.00	0	0.00		0.00	0	0.00		0	0	0	0	23	23	
005-03600	R. Young	0.00	0	0.00		0.00	0	0.00		0	0	0	0	66	66	
005-03800	S. Jhaj	0.00	0	0.00		0.00	0	0.00		0	0	0	0	322	322	
005-03900	R. Ysidron	0.00	0	0.00		0.00	0	0.00		0	0	0	0	41	41	
005-04000	L. Dellamora	0.00	0	0.00		0.00	0	0.00		0	0	0	0	292	292	
005-04100	953409 Ontario Limited	0.00	0	0.00		0.00	0	0.00		0	0	0	0	466	466	
005-04105	Avalon Specialized Services	0.00	0	0.00		0.00	0	0.00		0	0	0	0	5	5	
005-04200	A. McNaught	0.00	0	0.00		0.00	0	0.00		0	0	0	0	230	230	
005-04300	M. Grundy	0.00	0	0.00		0.00	0	0.00		0	0	0	0	6	6	
005-04400	S. Kinsey	0.00	0	0.00		0.00	0	0.00		0	0	0	0	4	4	
005-04500	B. Klassen	0.00	0	0.00		0.00	0	0.00		0	0	0	0	137	137	
005-04600	Datta Yoga Centre of Canada	0.00	0	0.00		0.00	0	0.00		0	0	0	0	30	30	
005-04700	9522077 Canada Inc.	0.00	0	0.00		0.00	0	0.00		0	0	0	0	3	3	
005-04800	W. Clark	0.00	0	0.00		0.00	0	0.00		0	0	0	0	3	3	
005-04900	V. Stewart	0.00	0	0.00		0.00	0	0.00		0	0	0	0	3	3	
005-05000	E. Rees	0.00	0	0.00		0.00	0	0.00		0	0	0	0	2	2	
005-05100	J. Caswell	0.00	0	0.00		0.00	0	0.00		0	0	0	0	2	2	
005-05200	M. Van Wisselingh	0.00	0	0.00		0.00	0	0.00		0	0	0	0	2	2	
005-05300	C. Vandermeulen	0.00	0	0.00		0.00	0	0.00		0	0	0	0	1	1	
005-05400	Ospringe Presbyterian Church	0.00	0	0.00		0.00	0	0.00		0	0	0	0	2	2	
005-05405	J. Thring	0.00	0	0.00		0.00	0	0.00		0	0	0	0	3	3	
005-05500	G. Adkin	0.00	0	0.00		0.00	0	0.00		0	0	0	0	13	13	
005-05700	Thomasfield Homes Limited	0.02	4	0.13		0.02	0	0.00		0	4	4	0	16	16	
005-05702	Thomasfield Homes Limited	0.00	0	0.00		0.00	0	0.00		0	0	0	0	201	201	
005-05800	R. Grundy	0.00	0	0.00		0.00	0	0.00		0	0	0	0	70	70	
005-05900	Thomasfield Homes Limited	0.00	0	0.00		0.00	0	0.00		0	0	0	0	178	178	
005-05900-1	New Subdivision - Lot 1	0.30	58	1.87		625	0.30	0	9.06	625	58	683	0	109	109	
005-05900-2	New Subdivision - Lot 2	0.27	53	1.71		625	0.27	0	9.06	625	53	678	0	104	104	
005-05900-3	New Subdivision - Lot 3	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-4	New Subdivision - Lot 4	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-5	New Subdivision - Lot 5	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-6	New Subdivision - Lot 6	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-7	New Subdivision - Lot 7	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-8	New Subdivision - Lot 8	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-9	New Subdivision - Lot 9	0.20	39	1.26		625	0.20	0	9.06	625	39	664	0	91	91	
005-05900-10	New Subdivision - Lot 10	0.24	47	1.52		625	0.24	0	9.06	625	47	672	0	101	101	
005-05900-11	New Subdivision - Lot 11	0.32	62	2.00		625	0.32	0	9.06	625	62	687	0	129	129	
005-05900-12	New Subdivision - Lot 12	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-13	New Subdivision - Lot 13	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-14	New Subdivision - Lot 14	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-15	New Subdivision - Lot 15	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-16	New Subdivision - Lot 16	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-17	New Subdivision - Lot 17	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-18	New Subdivision - Lot 18	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-19	New Subdivision - Lot 19	0.00	0	0.00		0.00	0	0.00		0	0	0	0	54	54	
005-05900-20	New Subdivision - Lot 20	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-21	New Subdivision - Lot 21	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-22	New Subdivision - Lot 22	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-23	New Subdivision - Lot 23	0.00	0	0.00		0.00	0	0.00		0	0	0	0	54	54	
005-05900-24	New Subdivision - Lot 24	0.00	0	0.00		0.00	0	0.00		0	0	0	0	54	54	
005-05900-25	New Subdivision - Lot 25	0.00	0	0.00		0.00	0	0.00		0	0	0	0	54	54	
005-05900-26	New Subdivision - Lot 26	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-27	New Subdivision - Lot 27	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-28	New Subdivision - Lot 28	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-29	New Subdivision - Lot 29	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-30	New Subdivision - Lot 30	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-31	New Subdivision - Lot 31	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-32	New Subdivision - Lot 32	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-33	New Subdivision - Lot 33	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-34	New Subdivision - Lot 34	0.00	0	0.00		0.00	0	0.00		0	0	0	0	56	56	
005-05900-35	New Subdivision - Lot 35	0.00	0	0.00		0.00	0	0.00		0	0	0	0	56	56	
005-05900-36	New Subdivision - Lot 36	0.00	0	0.00		0.00	0	0.00		0	0	0	0	56	56	
005-05900-37	New Subdivision - Lot 37	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-38	New Subdivision - Lot 38	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-39	New Subdivision - Lot 39	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-40	New Subdivision - Lot 40	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	
005-05900-41	New Subdivision - Lot 41	0.00	0	0.00		0.00	0	0.00		0	0	0	0	51	51	



**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1				Interval 1				Total	Total	TOTAL	Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefits	Outlets		Benefits	Outlets	
005-05900-42	New Subdivision - Lot 42		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-43	New Subdivision - Lot 43		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-44	New Subdivision - Lot 44		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-45	New Subdivision - Lot 45		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-46	New Subdivision - Lot 46		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-47	New Subdivision - Lot 47		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-48	New Subdivision - Lot 48		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-49	New Subdivision - Lot 49		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-50	New Subdivision - Lot 50		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-51	New Subdivision - Lot 51		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-05900-52	New Subdivision - Lot 52		0.00	0	0.00		0.00	0	0.00	0	0	0	0	173	173
005-05900-53	New Subdivision - Lot 53		0.00	0	0.00		0.00	0	0.00	0	0	0	0	242	242
005-05900-54	New Subdivision - Lot 54		0.00	0	0.00		0.00	0	0.00	0	0	0	0	201	201
005-05900-55	New Subdivision - Lot 55		0.00	0	0.00		0.00	0	0.00	0	0	0	100	115	215
005-05900-56	New Subdivision - Lot 56		0.00	0	0.00		0.00	0	0.00	0	0	0	0	112	112
005-05900-57	New Subdivision - Lot 57		0.00	0	0.00		0.00	0	0.00	0	0	0	0	112	112
005-05900-58	New Subdivision - Lot 58		0.05	10	0.32		0.00	0	0.00	0	10	10	0	62	62
005-05900-59	New Subdivision - Lot 59	60	0.15	29	2.87		0.00	0	0.00	60	29	89	60	80	140
005-05900-60	New Subdivision - Lot 60	60	0.09	18	2.52		0.00	0	0.00	60	18	78	60	69	129
005-05900-61	Block 61 - Park		0.00	0	0.00		0.00	0	0.00	0	0	0	0	233	233
005-05900-62	Block 62 - SWM Pond		0.05	10	0.32		0.00	0	0.00	0	10	10	2,400	330	2,730
005-05900-63	Block 63		0.00	0	0.00		0.00	0	0.00	0	0	0	0	18	18
005-05900-64	Block 64		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-05900-65	Block 65		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-05900-66	Block 66		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-05900-67	Block 67		0.00	0	0.00		0.00	0	0.00	0	0	0	0	4	4
005-05900-68	Block 68		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-05900-69	Block 69		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-05900-70	Block 70		0.00	0	0.00		0.00	0	0.00	0	0	0	0	4	4
005-05900-71	Block 71		0.00	0	0.00		0.00	0	0.00	0	0	0	0	30	30
005-06000	R. Woodward		0.00	0	0.00		0.00	0	0.00	0	0	0	0	34	34
005-06001	P. Kent		0.00	0	0.00		0.00	0	0.00	0	0	0	0	44	44
005-06707	D. Ronca		0.00	0	0.00		0.00	0	0.00	0	0	0	0	63	63
005-06710	D. Evans		0.00	0	0.00		0.00	0	0.00	0	0	0	0	371	371
005-06711	C. Pierce		0.00	0	0.00		0.00	0	0.00	0	0	0	0	362	362
005-06712	W. Kline		0.00	0	0.00		0.00	0	0.00	0	0	0	500	362	862
005-06713	Elmira Farm Holdings Ltd.		0.00	0	0.00		0.00	0	0.00	0	0	0	200	362	562
005-06714	1581319 Ontario Inc.		0.00	0	0.00		0.00	0	0.00	0	0	0	500	355	855
005-06715	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00	0	0	0	400	81	481
005-06716	B. Minor		0.00	0	0.00		0.00	0	0.00	0	0	0	400	60	460
005-06802	R. McEnery		0.00	0	0.00		0.00	0	0.00	0	0	0	0	44	44
005-06900	K. Takhar		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
005-06901	2025318 Ontario Inc.		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-06903	W. Pokocky		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-06905	D. Shay		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-07000	County of Wellington		0.00	0	0.00		0.00	0	0.00	0	0	0	0	1	1
005-07100	B. Gibson		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-07105	S. McLennan		0.00	0	0.00		0.00	0	0.00	0	0	0	0	6	6
005-07150	C. Steward		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-07155	M. Goel		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-07160	G. McCullagh		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-07165	W. Zou		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-07170	D. Gambacorta		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-07300	A. Naqvi		0.00	0	0.00		0.00	0	0.00	0	0	0	0	292	292
005-07304	C. Smillie		0.00	0	0.00		0.00	0	0.00	0	0	0	0	5	5
005-07310	E. Shiland		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-07400	C. Hansen		0.00	0	0.00		0.00	0	0.00	0	0	0	0	17	17
005-07500	H. Hollenbach		0.00	0	0.00		0.00	0	0.00	0	0	0	0	96	96
005-07600	C. MacGillivray		0.00	0	0.00		0.00	0	0.00	0	0	0	0	64	64
005-07602	A. Smith		0.00	0	0.00		0.00	0	0.00	0	0	0	0	43	43
005-07603	D. Brown		0.00	0	0.00		0.00	0	0.00	0	0	0	0	55	55
005-07610	K. Louza		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-07700	D. McLeod		0.00	0	0.00		0.00	0	0.00	0	0	0	0	52	52
005-07701	C. Snow		0.00	0	0.00		0.00	0	0.00	0	0	0	0	66	66
005-07702	M. Iannucci		0.00	0	0.00		0.00	0	0.00	0	0	0	0	30	30
005-07703	D. Brace		0.00	0	0.00		0.00	0	0.00	0	0	0	0	38	38
005-07704	K. Williamson		0.00	0	0.00		0.00	0	0.00	0	0	0	0	42	42
005-07705	A. Da Silva		0.00	0	0.00		0.00	0	0.00	0	0	0	0	51	51
005-07725	J. Rego		0.00	0	0.00		0.00	0	0.00	0	0	0	0	5	5
005-08000	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00	0	0	0	0	23	23
005-09001	M. Schotsch		0.00	0	0.00		0.00	0	0.00	0	0	0	500	29	529
005-09100	Grand River Conservation Authority		0.00	0	0.00		0.00	0	0.00	0	0	0	1,300	51	1,351
005-09312	M. Kwofie		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11

**APPENDIX B - CALCULATION OF ASSESSMENTS FOR FUTURE MAINTENANCE**  
**OSPRINGE DRAIN**  
**Town of Erin**

Roll No.	Owner	Interval 1				Interval 1				Total	Total	TOTAL	Total	Total	TOTAL
		Benefit	Adj. Ha	Outlet	%	Benefit	Adj. Ha	Outlet	%	Benefits	Outlets		Benefits	Outlets	
005-09313	D. Sharp		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
005-09314	B. Jakubczak		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
005-09315	1944977 Ontario Ltd.		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
005-09316	1944977 Ontario Ltd.		0.00	0	0.00		0.00	0	0.00	0	0	0	0	25	25
005-13302	A. Hamill		0.00	0	0.00		0.00	0	0.00	0	0	0	0	16	16
005-13600	C. Bran		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13602	D. Patel		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13604	S. Philbert		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13606	R. Bumbacco-Sodaro		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13608	D. Legrow		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13610	S. Predota		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13612	Y. Liu		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13614	D. Khatri		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13616	C. Briggs		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13618	R. McCormack		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-13620	M. Downey		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13622	S. Appiah, R. Sasenarine		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13624	C. McDougall		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13626	B. Flanagan		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13628	A. Stephens		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13630	F. DeGazon		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13632	S. Dackiw, P. Ward		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13634	J. Whitten		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13636	J. Peuker		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13638	D. Uyeda		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13640	M. Bettonvil		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-13642	G. Legrand		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13644	J. Pimentel		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13646	A. Proussaefs		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13648	J. Oxley		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13650	C. Figueira		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13652	A. Jakhar		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13654	T. & M. Owen		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-13656	L. Miklausic		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13658	G. Brown		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-13660	R. Thompson		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13662	J. Cluffreda		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13664	A. Abadeen		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13666	K. Stringer		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13668	C. Kummer		0.00	0	0.00		0.00	0	0.00	0	0	0	0	10	10
005-13670	H. Bhangu		0.00	0	0.00		0.00	0	0.00	0	0	0	0	7	7
005-13672	J. McTrusty		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13674	F. Crane		0.00	0	0.00		0.00	0	0.00	0	0	0	0	12	12
005-13676	J. Pelitis		0.00	0	0.00		0.00	0	0.00	0	0	0	0	13	13
005-13678	C. Borg		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13680	J. Gilby		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
005-13682	D. Hutchinson		0.00	0	0.00		0.00	0	0.00	0	0	0	0	8	8
005-13684	C. Leah		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
005-13686	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	6	6
005-13688	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	37	37
005-13788	D. Beament		0.00	0	0.00		0.00	0	0.00	0	0	0	0	83	83
006-08900	630033 Ontario Limited		0.00	0	0.00		0.00	0	0.00	0	0	0	0	162	162
006-09000	J. Bogart		0.00	0	0.00		0.00	0	0.00	0	0	0	0	23	23
006-09100	H. Dutoit		0.00	0	0.00		0.00	0	0.00	0	0	0	0	11	11
006-12700	L. Tugman		0.00	0	0.00		0.00	0	0.00	0	0	0	0	433	433
006-12725	J. Brownridge		0.00	0	0.00		0.00	0	0.00	0	0	0	0	88	88
Sub Total Lands:		120	2.89	564	22.08	6,875	2.55	0	99.66	6,995	564	7,559	6,420	11,621	18,041
Highway 124	County of Wellington		0.00	0	0.00		0.00	0	0.00	0	0	0	0	358	358
Highway 125	County of Wellington		0.00	0	0.00		0.00	0	0.00	0	0	0	2,100	447	2,547
Second Line	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	271	271
Sideroad 17	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	61	61
Anderson Close	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	46	46
Stewart Drive	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	84	84
Grundy Court	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	9	9
Sideroad 15	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	0	14	14
Broughton Street	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	6,200	349	6,549
Charles Currie Cre	Town of Erin		0.00	0	0.00		0.00	0	0.00	0	0	0	2,700	845	3,545
McKinnon Street	Town of Erin	2,300	0.60	116	77.92	25	0.00	0	0.34	2,325	116	2,441	5,000	875	5,875
Sub Total Roads:		2,300	0.60	116	77.92	25	0.00	0	0.34	2,325	116	2,441	16,000	3,359	19,359
<b>TOTAL OSPRINGE DRAIN:</b>		2,420	3.49	680	100.00	6,900	2.55	0	100.00	9,320	680	10,000	22,420	14,980	37,400

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**200                    GENERAL CONDITIONS****200.1                SCOPE**

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

**200.2                ORDER OF PRECEDENCE**

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

**200.3                MUNICIPALITY**

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

**200.4                TENDERS**

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

**200.5                EXAMINATION OF SITE, PLANS AND SPECIFICATIONS**

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

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

## **200.6 COMMENCEMENT AND COMPLETION OF WORK**

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

## **200.7 NOTICES RE COMMENCEMENT OF WORK**

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

## **200.8 PERMITS, NOTICES, LAWS AND RULES**

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

## **200.9 HEALTH AND SAFETY**

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

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

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

## **200.10 LIMITATIONS OF OPERATIONS**

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

**200.11 SUPERVISION**

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

**200.12 CHARACTER AND EMPLOYMENT OF WORKERS**

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

**200.13 SUB-CONTRACTORS**

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

**200.14 PAYMENT**

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

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

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

**200.15 TERMINATION OF CONTRACT BY THE MUNICIPALITY**

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

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

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

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

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

#### **200.16 LIQUIDATED DAMAGES**

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

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

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

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

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

#### **200.17 CONTRACTOR'S LIABILITY**

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

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

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

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

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

#### **200.18 LIABILITY INSURANCE**

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

#### **200.19 LOSSES DUE TO ACTS OF NATURE, ETC.**

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



## 400      STANDARD SPECIFICATIONS FOR CONSTRUCTION OF DRAINS

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## **400 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF DRAINS**

### **400.1 ABBREVIATIONS**

- i) M.T.O. means the Ministry of Transportation of Ontario.
- ii) A.S.T.M. means the American Society for Testing Materials.
- iii) C.S.A. means the Canadian Standard Association.
- iv) O.P.S.D. means Ontario Provincial Standard Drawings
- v) O.P.S.S. means Ontario Provincial Standard Specifications
- vi) DFO means Fisheries and Oceans Canada
- vii) MNRF means Ministry of Natural Resources and Forestry
- viii) MOECC means Ministry of Environment and Climate Change

### **400.2 PRE CONSTRUCTION MEETING**

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

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

### **400.3 COLD WEATHER**

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

### **400.4 WORKING AREA**

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

### **400.5 ACCESS**

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

**400.6 ACCESS TO PROPERTIES ADJOINING THE WORK**

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

**400.7 DRAINAGE SUPERINTENDENT**

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

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

**400.8 ALTERATIONS TO WORK**

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

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

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

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

**400.9 ERRORS AND UNUSUAL CONDITIONS**

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

**400.10 TESTS**

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

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

#### **400.11 BENCHMARKS AND STAKES**

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

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

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

#### **400.12 OPENING UP OF FINISHED WORK**

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

#### **400.13 FINAL INSPECTION**

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

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

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

#### **400.14 WARRANTY**

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

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

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

**400.15 MATERIALS****400.15.1 Concrete Drain Tile**

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

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

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

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

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

**400.15.2 Corrugated Plastic Tubing**

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

**400.15.3 Corrugated Steel Pipe**

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

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

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

**400.15.4 Plastic Pipe**

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

A minimum stiffness of 320 KPa at 5% deflection

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

**400.15.5 Concrete Sewer Pipe**

Concrete sewer pipe shall be in accordance with OPSS 1820.

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

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

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

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

#### **400.16 RIPRAP**

All riprap is to be placed on a geotextile underlay (Terrafix 360R or equal) unless directed otherwise in the specific construction notes. The riprap is to be graded heavy angular stone (quarry stone is recommended) with particles averaging in size from 225mm to 300mm and is to be placed at 300mm thickness. Fine particles may be included to fill voids. Along upstream edges of riprap, where surface water will enter, underlay is to extend a minimum of 300mm upstream from riprap and then be keyed down a minimum of 300mm. Wherever riprap is placed, the area is to be over-dug so that finished top of riprap is at design cross-section, at design elevation or flush with existing ground.

#### **400.17 GEOTEXTILE**

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

#### **400.18 DISPOSAL OF MATERIALS**

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

#### **400.19 NOTIFICATION OF RAILROADS, ROAD AUTHORITIES AND UTILITIES**

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

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

**400.20 WORKING IN ROAD ALLOWANCES****400.20.1 General**

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

**400.20.2 Road Crossings**

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

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

**400.20.3 Maintenance of Traffic**

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

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

**400.21 LOCATIONS OF EXISTING UTILITIES**

The position of pole lines, conduits, watermain, sewers and other underground and overhead utilities are not necessarily shown on the Contract Drawings, and, where shown, the accuracy of the position

of such utilities and structures is not guaranteed. Before starting work, the Contractor shall have all utilities located in accordance with the Ontario Underground Infrastructure Notification System Act.

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

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

#### **400.22 LANEWAYS**

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

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

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

#### **400.23 EXISTING CROSSING CLEANOUT**

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

#### **400.24 FENCES**

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

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

Any fences paralleling an open drain, that are not line fences, that hinder the proper working of the excavating machinery for drain construction or maintenance shall be removed and rebuilt by the



landowner at their own expense. If such parallel fences are line fences they shall be removed and reinstalled by the Contractor.

No excavated or cleared material shall be placed against fences.

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

#### **400.25 LIVESTOCK**

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

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

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

#### **400.26 STANDING CROPS**

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

#### **400.27 CLEARING VEGETATION**

##### **400.27.1 General**

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

##### **400.27.2 Trees to Remain**

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

##### **400.27.3 Incidental Clearing**

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

##### **400.27.4 Power Brushing**

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

##### **400.27.5 Close-Cut Clearing**

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

**400.27.6 Clearing And Grubbing**

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

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

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

**400.27.7.2 In Field Areas**

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

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

**400.27.8 Landowner Requested Salvage**

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

**400.27.9 Clearing by Landowner**

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

**400.28 ROCK REMOVAL****400.28.1 General**

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

**400.28.2 Blasting Requirements**

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

**400.28.3 Typical Sections and Pay Limits**

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

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

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

#### **400.28.4 Disposal of Rock**

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

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

### **400.29 SEEDING**

#### **400.29.1 General**

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

#### **400.29.2 Drainage Works and Road Allowances**

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

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

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

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

#### **400.29.3 Hydroseeding**

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

#### **400.29.4 Seeding Lawns**

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

#### **400.29.5 Sod**

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

#### **400.30 EROSION CONTROL BLANKETS**

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

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

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

#### **400.31 SEDIMENT CONTROL**

##### **400.31.1 General**

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

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

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

##### **400.31.2 Flow Check Dams**

###### **400.31.2.1 Temporary Straw Bale Flow Check Dam**

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

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

###### **400.31.2.2 Temporary Rock Flow Check Dam**

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

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

###### **400.31.2.3 Permanent Rock Flow Check Dam**

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

### **400.31.3 Sediment Traps**

#### **400.31.3.1 General**

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

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

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

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

#### **400.31.3.2 Sediment Trap with Flow Check Dam**

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

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

### **400.31.4 Turbidity Curtains**

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

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

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

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

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

### **400.31.5 Silt Fence**

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

## **400.32 GRASSED WATERWAYS AND OVERFLOW SWALES**

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

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

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

Overflow swales may be cropped using conventional farming practice.

#### **400.33            BUFFER STRIPS**

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

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

#### **400.34            MAINTENANCE CORRIDOR**

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

#### **400.35            POLLUTION**

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

#### **400.36            SPECIES AT RISK**

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

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**STANDARD SPECIFICATIONS****FOR****OPEN DRAINS****TABLE OF CONTENTS**

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**410.1 DESCRIPTION**

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

**410.2 MATERIALS**

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

**410.3 CONSTRUCTION****410.3.1 Excavation**

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

**410.3.2 Low Flow Channels**

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

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

**410.3.3 Line**

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

**410.3.4 Grade Control**

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

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



**410.3.5 Variation from Design Grade**

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

**410.3.6 Excavated Material**

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

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

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

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

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

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

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

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

**410.3.7 Excavation at Existing Bridge and Culvert Sites**

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

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

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

**410.3.8 Bridges and Culverts**

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

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

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

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

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

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

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

**410.3.9 Obstructions**

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

**410.3.10 Tile Outlets**

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

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

**410.3.11 Completion**

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



420

**STANDARD SPECIFICATIONS**

**FOR**

**TILE DRAINS**

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

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

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

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

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

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

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

**420.2                MATERIALS**

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

**420.3                CONSTRUCTION****420.3.1            Outlet**

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

**420.3.2            Line**

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

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

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

#### **420.3.3 Grade Control**

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

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

#### **420.3.4 Variation from Design Grade**

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

#### **420.3.5 Installation**

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

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

##### **420.3.5.1 Installation of Concrete Tile**

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

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

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

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

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

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

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

#### **420.3.5.2**      *Installation of Corrugated Plastic Tubing*

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

For all installation methods:

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

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

#### **420.3.5.3**      *Installation of Concrete Sewer Pipe or Plastic Pipe*

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

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

### **420.3.6**      **Backfilling**

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

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

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

### **420.3.7**      **Tile Connections**

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



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

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

#### **420.3.8 Stones and Rock**

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

#### **420.3.9 Brush, Trees and Debris**

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

#### **420.3.10 Subsoil Instability**

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

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

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

#### **420.3.11 Broken or Damaged Tile**

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

#### **420.3.12 Excess Tile**

All excess tile shall be removed from the job site.

**420.3.13 Catchbasins***420.3.13.1 General*

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

*420.3.13.2 Materials*

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

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

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

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

*420.3.13.3 Installation*

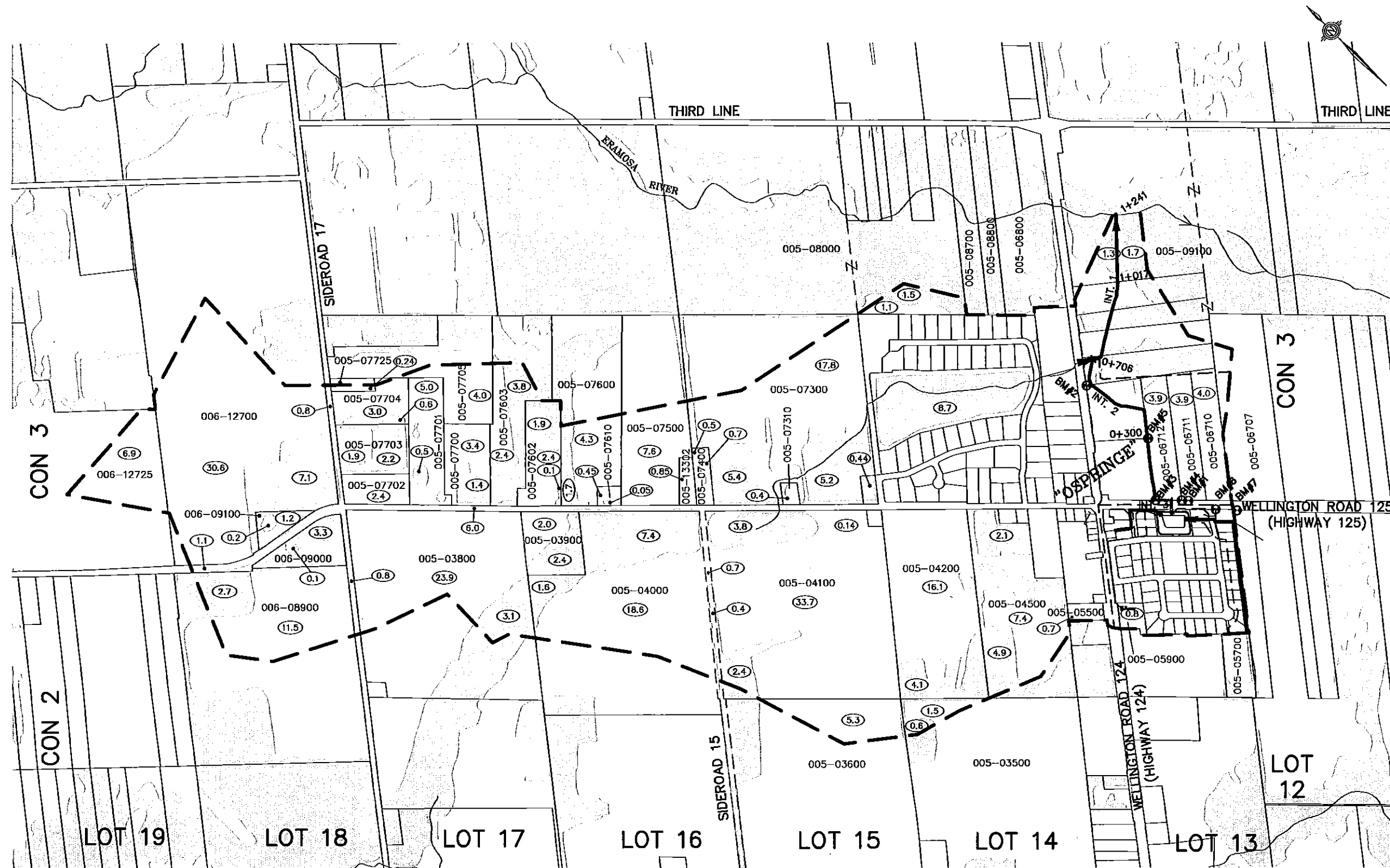
All tile or pipe connected to concrete catchbasins shall be mortared or secured in place so that no gaps remain at the connection. Mortar is to be applied on both the inside and outside wall surfaces.

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

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

**420.3.14 Junction Boxes**

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

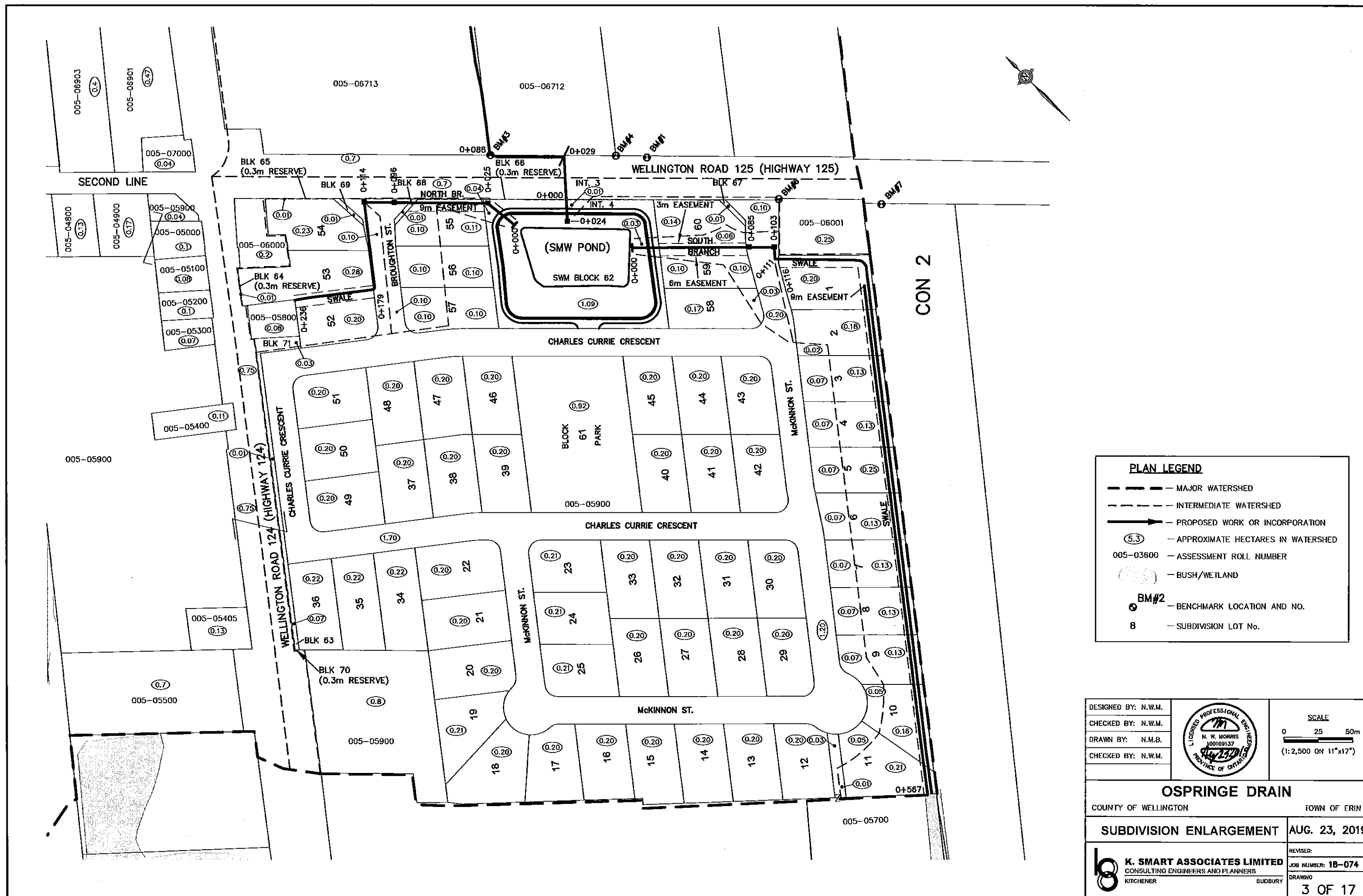


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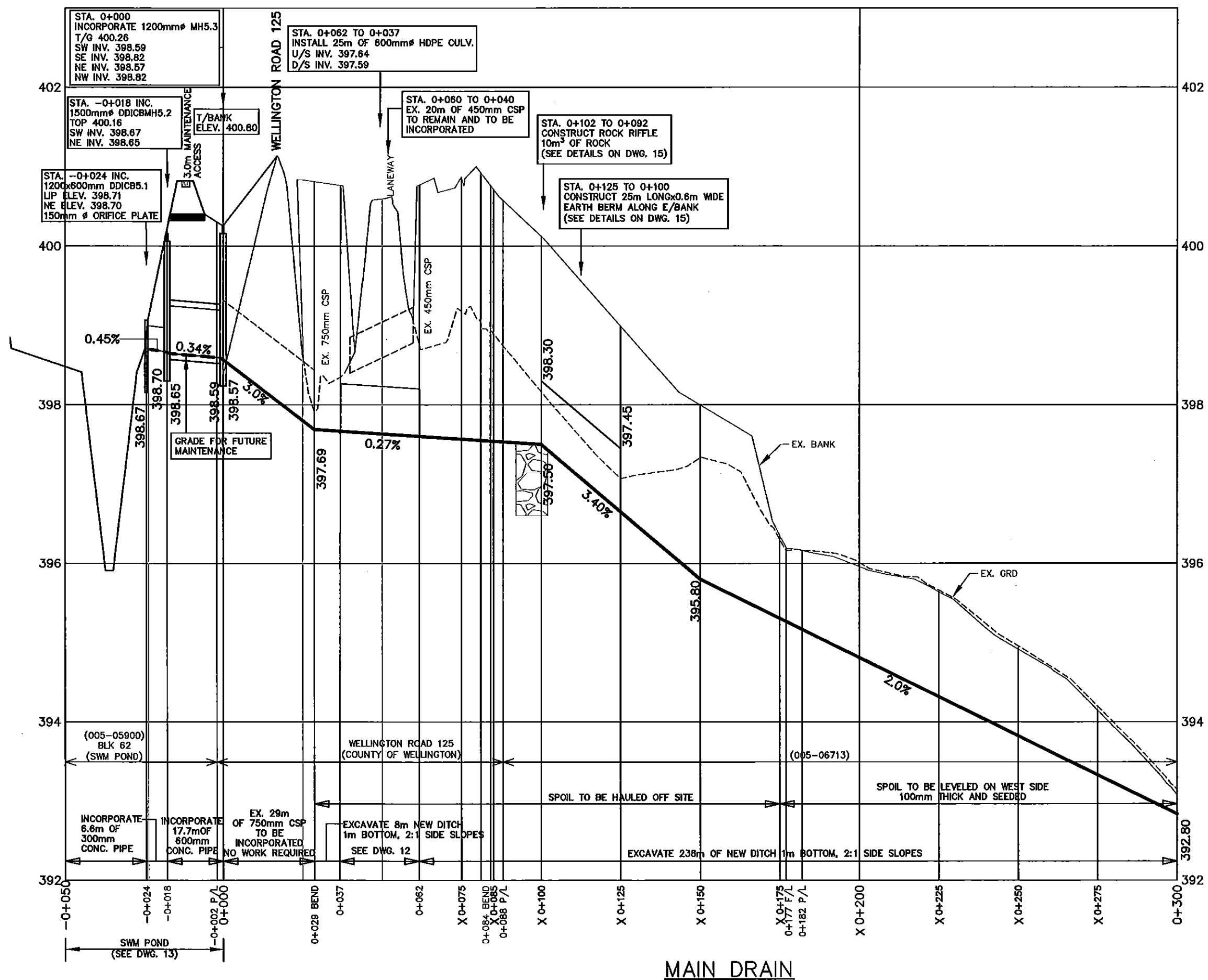
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CHECKED BY: N.W.M.		TOWN OF ERIN	
DRAWN BY: N.M.B.		<b>WATERSHED PLAN</b>	
CHECKED BY: N.W.M.		AUG. 23, 2019	
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<b>K. SMART ASSOCIATES LIMITED</b> CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY		<b>1 OF 17</b>	

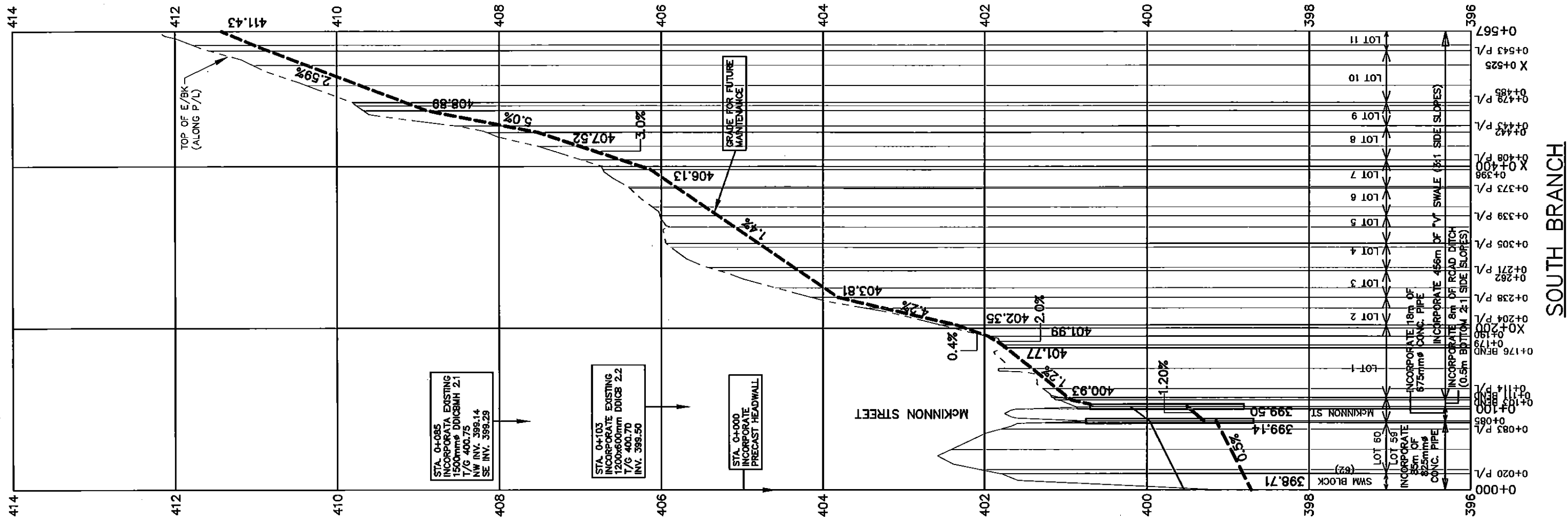






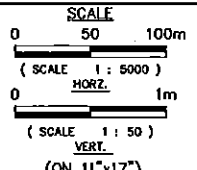
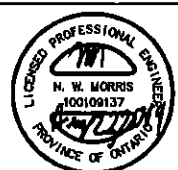


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COUNTY OF WELLINGTON		TOWN OF ERIN
<b>MAIN DRAIN PROFILE ENLARGEMENT</b>		<b>AUG. 23, 2019</b>
<b>K. SMART ASSOCIATES LIMITED</b> CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY		REVISED: JOB NUMBER: <b>18-074</b> DRAWING <b>5 OF 17</b>



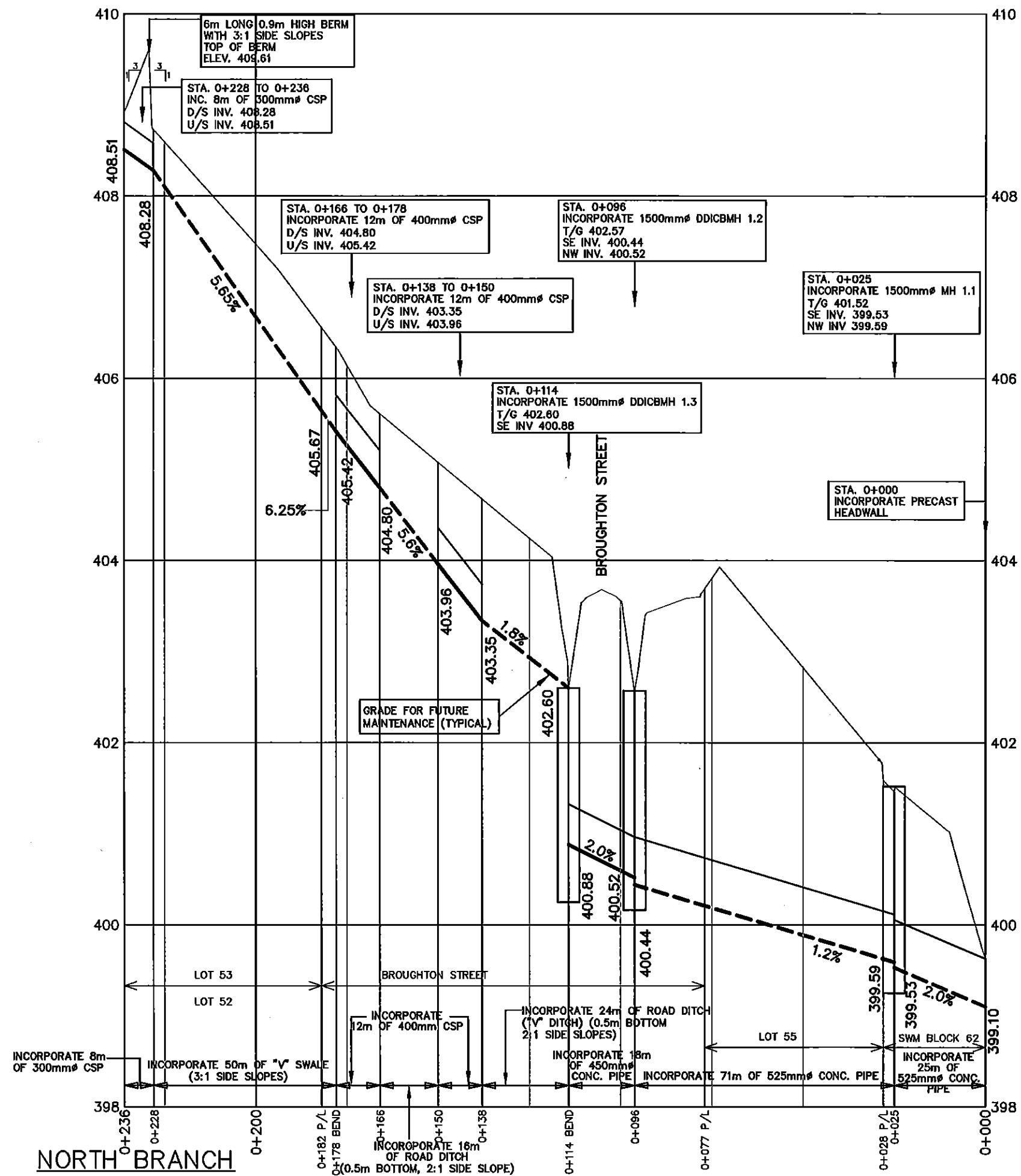
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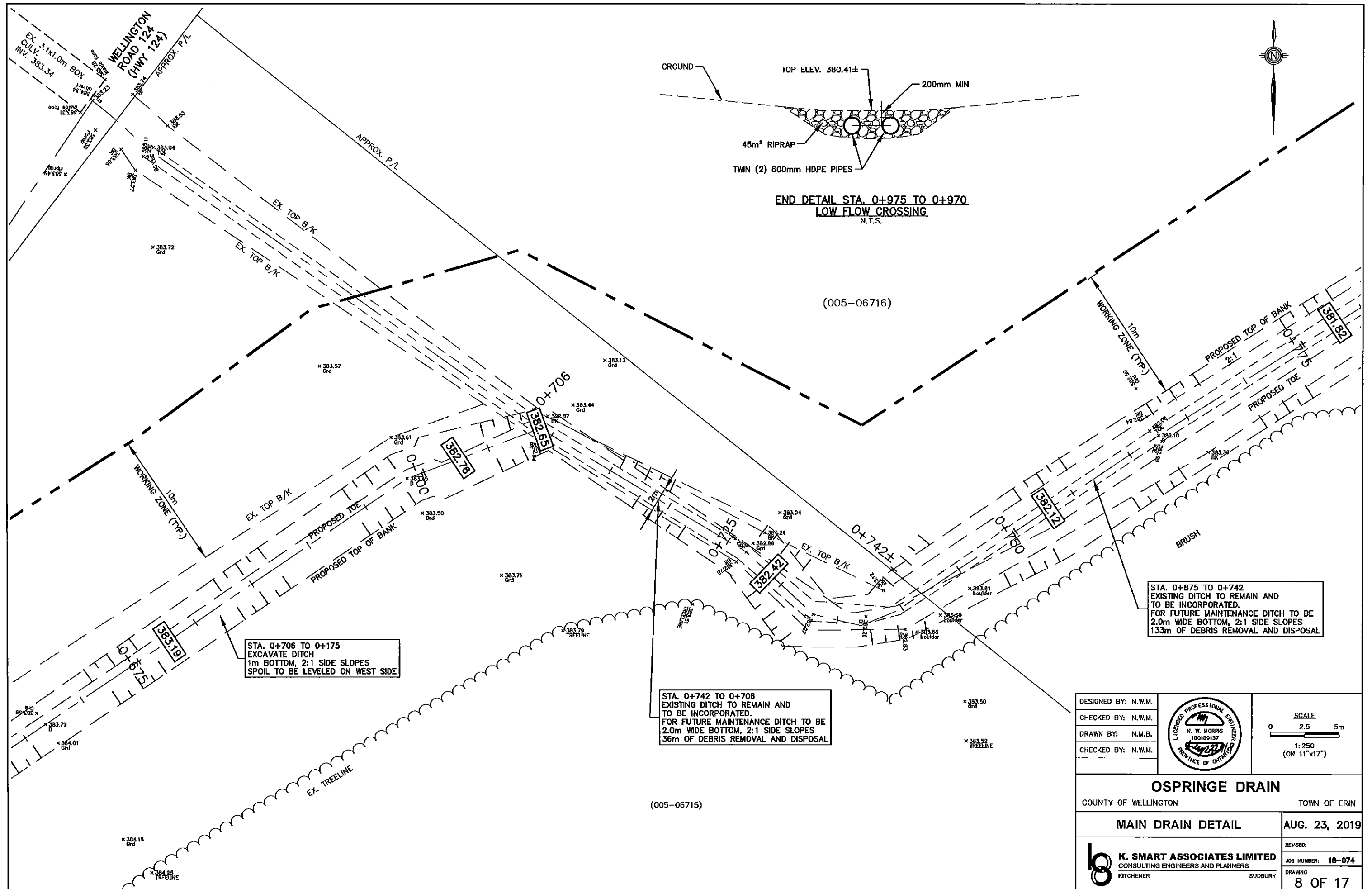


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K. SMART ASSOCIATES LIMITED	
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KITCHENER SUDBURY	
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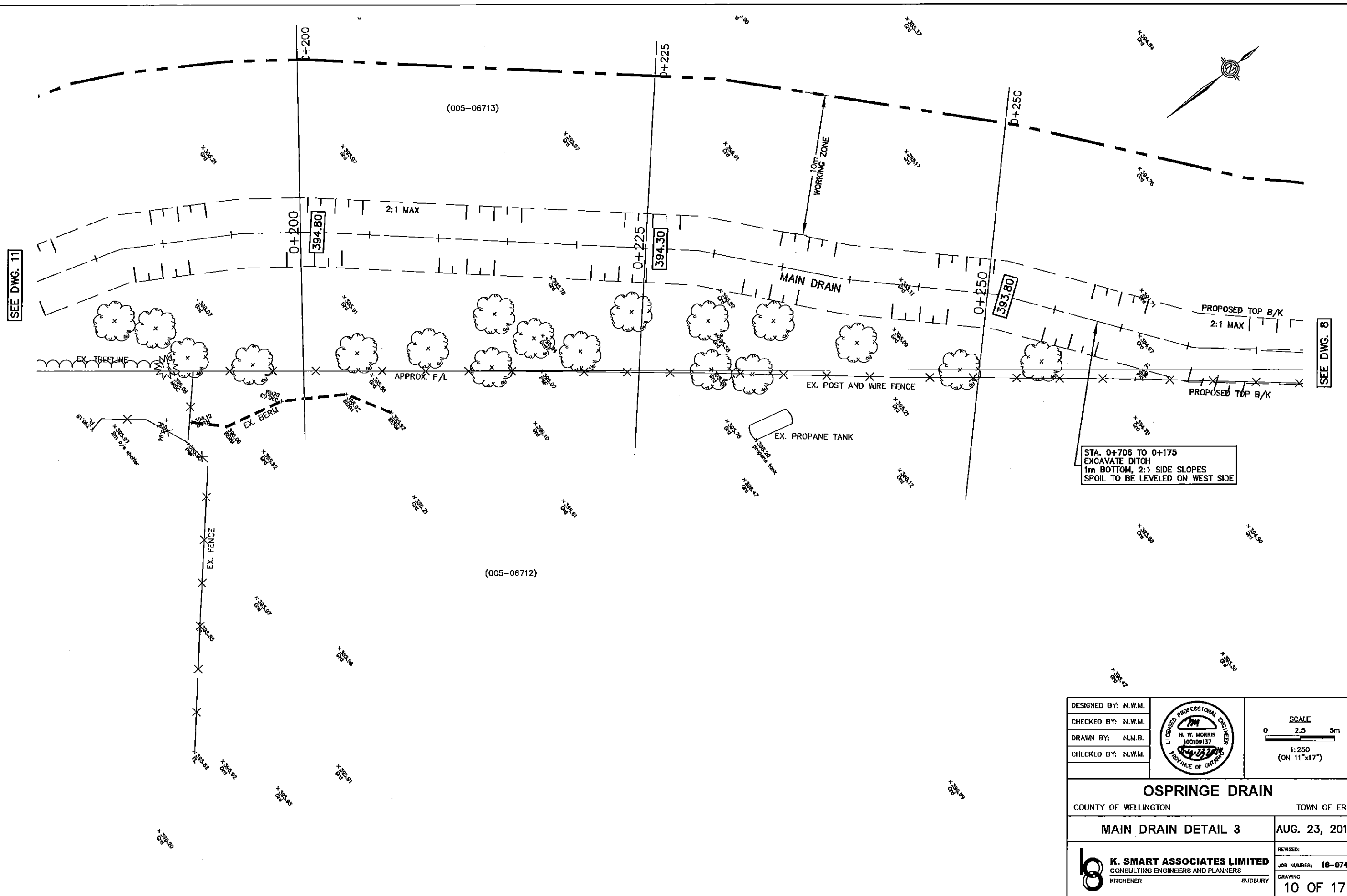




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<b>OSPRINGE DRAIN</b>		
COUNTY OF WELLINGTON		TOWN OF ERIN
<b>NORTH BRANCH PROFILE</b>		<b>AUG. 23, 2019</b>
<b>K. SMART ASSOCIATES LIMITED</b> CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY		REVISED: JOB NUMBER: 18-074 DRAWING: <b>7 OF 17</b>

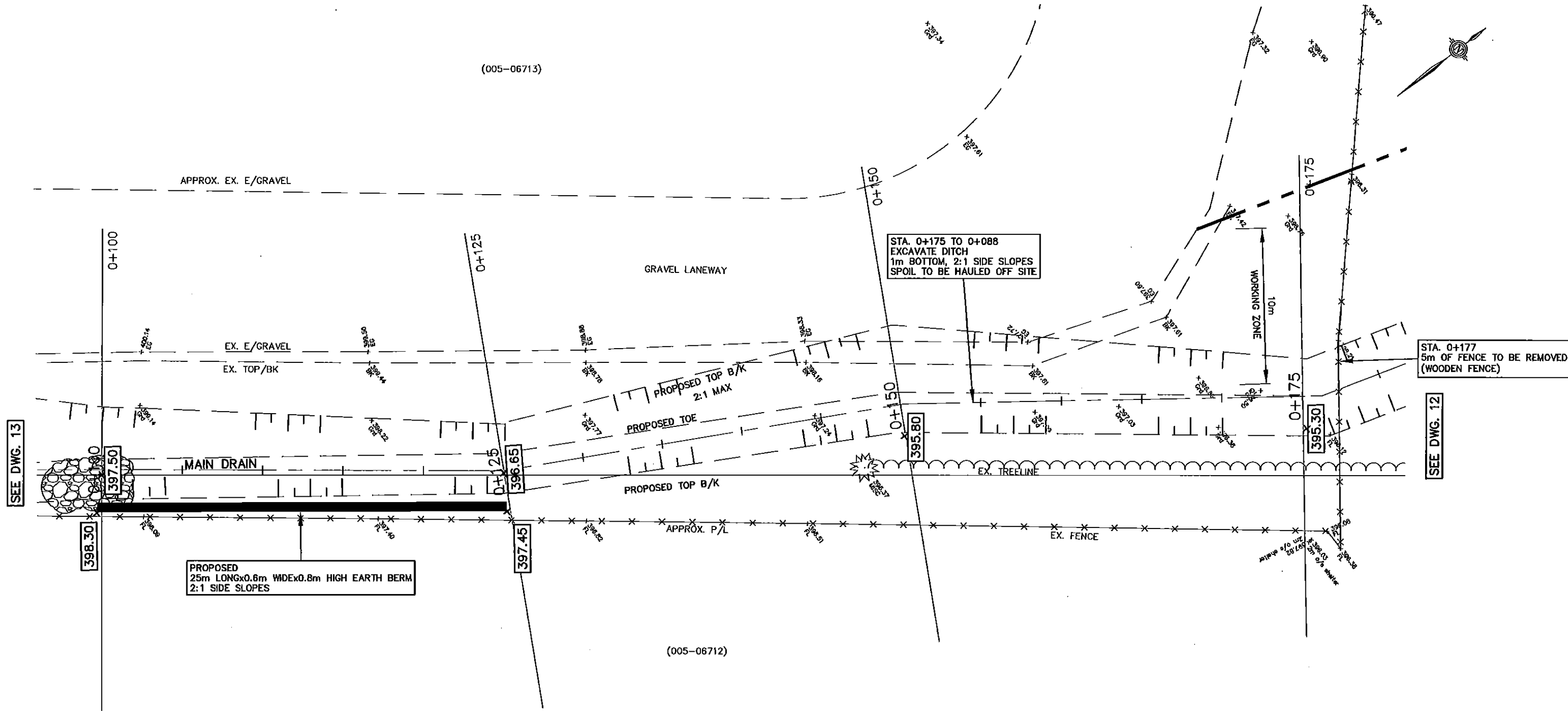


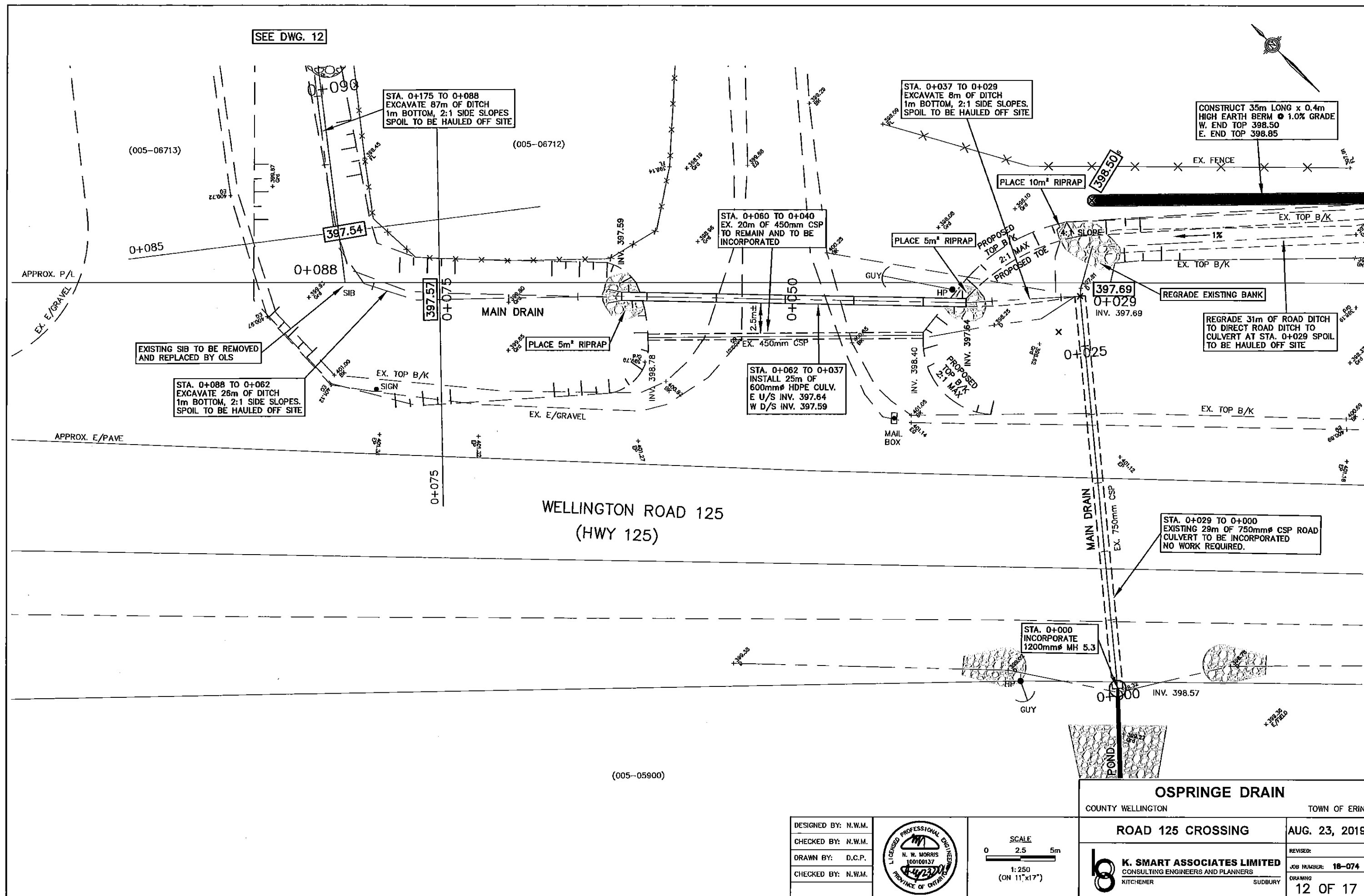




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COUNTY OF WELLINGTON		TOWN OF ERIN
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<b>K. SMART ASSOCIATES LIMITED</b> CONSULTING ENGINEERS AND PLANNERS KITCHENER SUDBURY		REVISED: JOB NUMBER: <b>18-074</b> DRAWING <b>10 OF 17</b>

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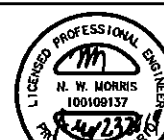
COUNTY WELLINGTON TOWN OF ERIN

**SWM POND & BRANCHES DETAIL** | AUG. 23, 2019

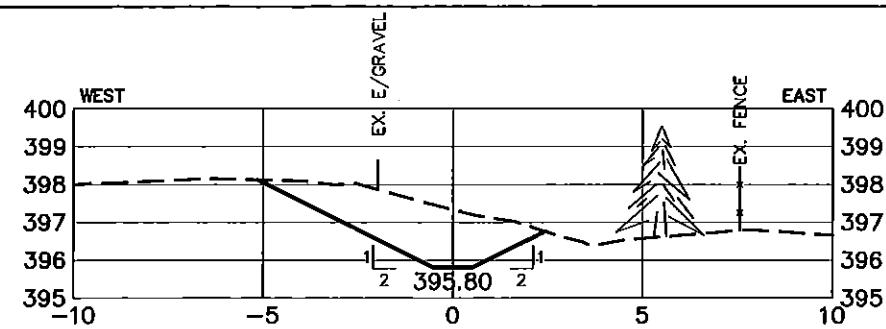
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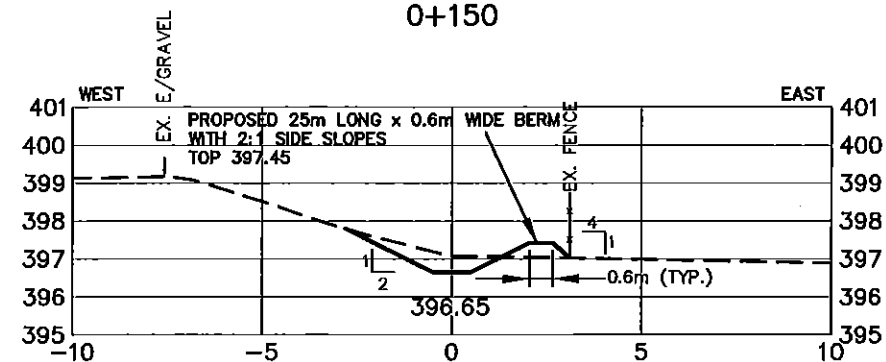
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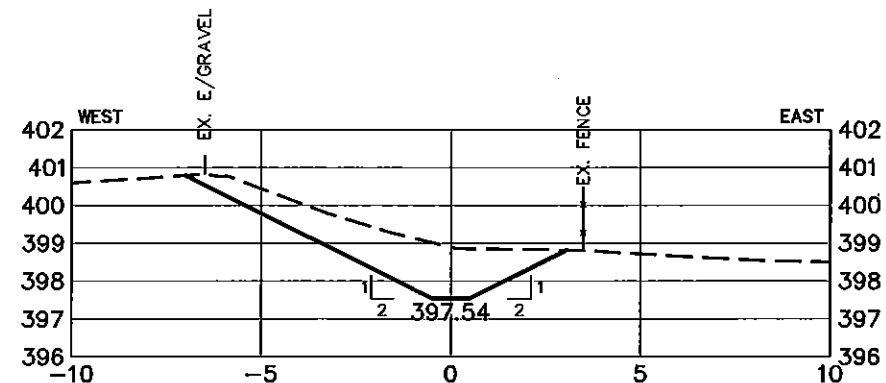
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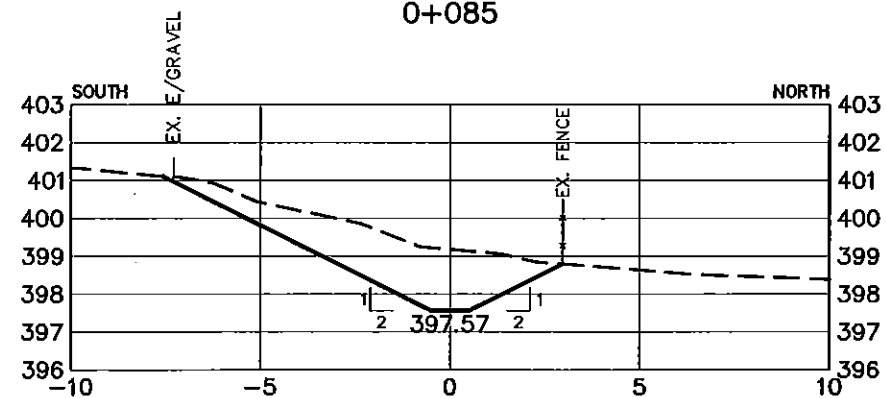
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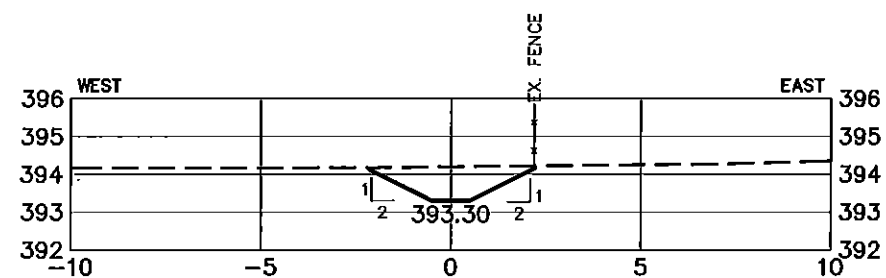
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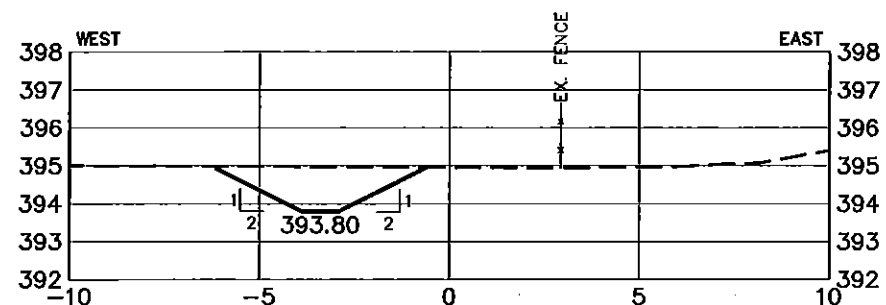
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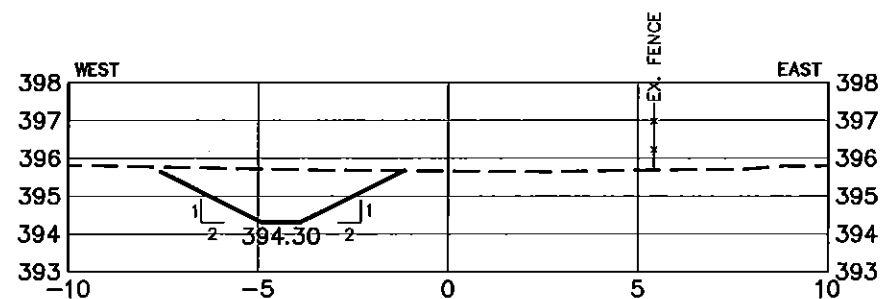
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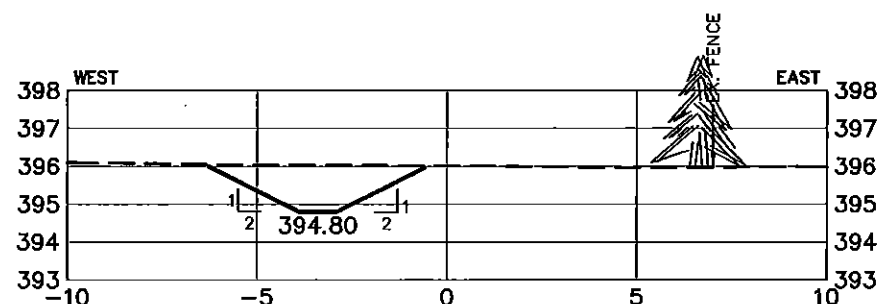
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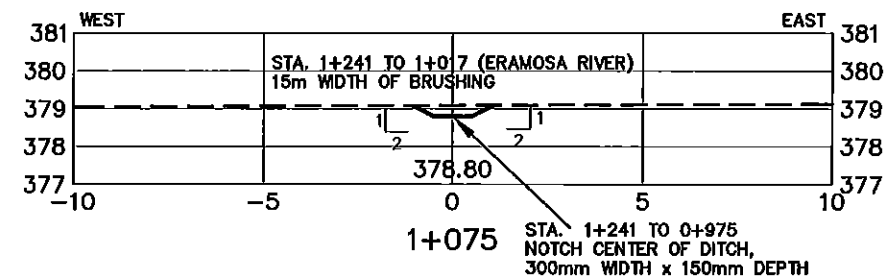
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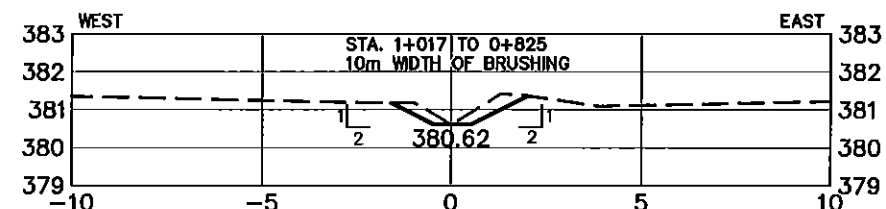
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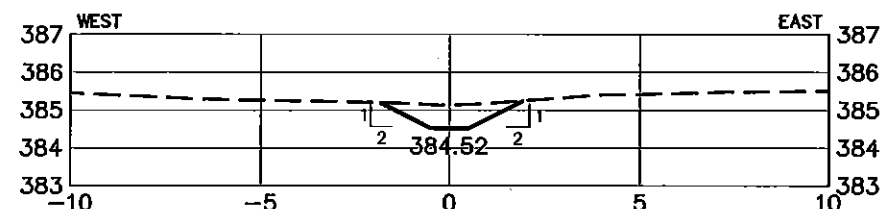
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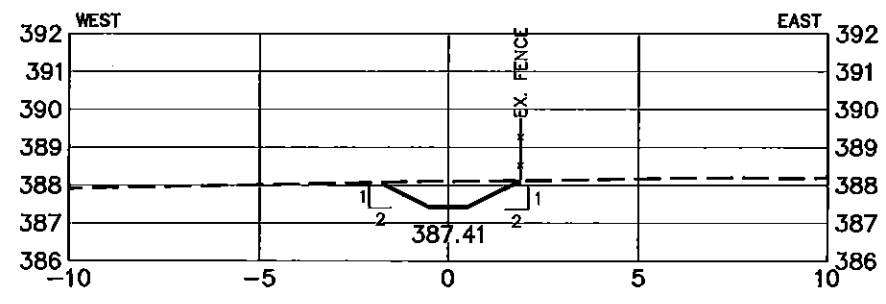
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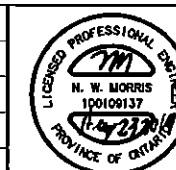


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 CHECKED BY: N.W.M.  
 DRAWN BY: N.M.B.  
 CHECKED BY: N.W.M.



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 (ON 11"x17")

### OSPRINGE DRAIN

COUNTY OF WELLINGTON

TOWN OF ERIN

MAIN DRAIN CROSS SECTIONS

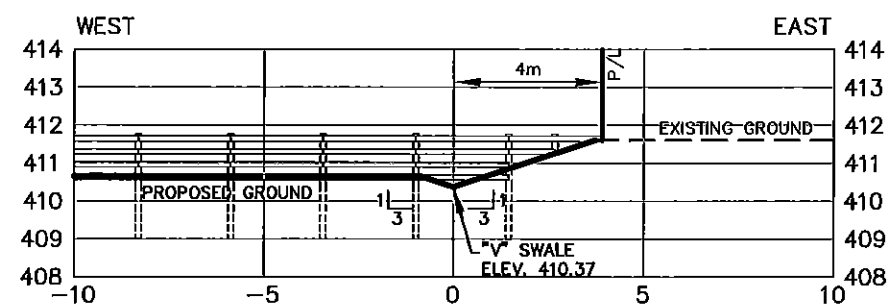
AUG. 23, 2019



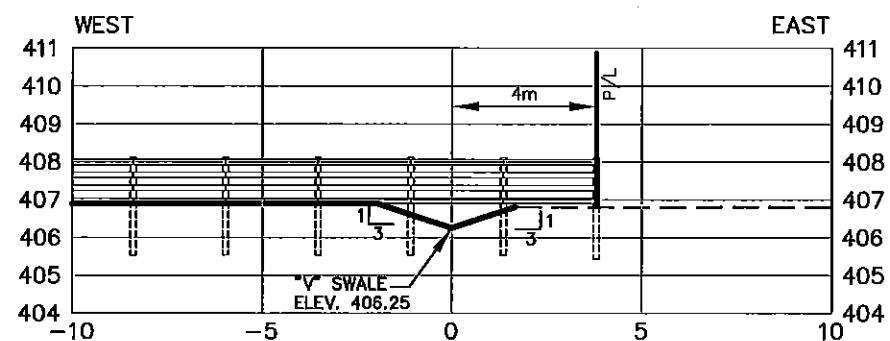
**K. SMART ASSOCIATES LIMITED**  
 CONSULTING ENGINEERS AND PLANNERS  
 KITCHENER SUDBURY

REVISED:  
 JOB NUMBER: 18-074  
 DRAWING  
 14 OF 17

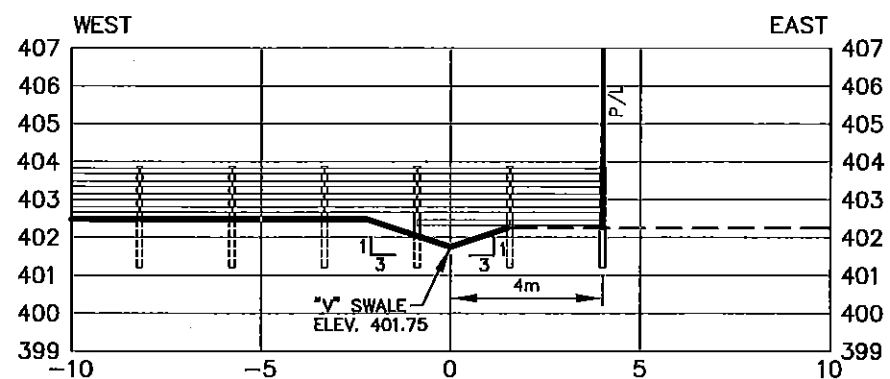




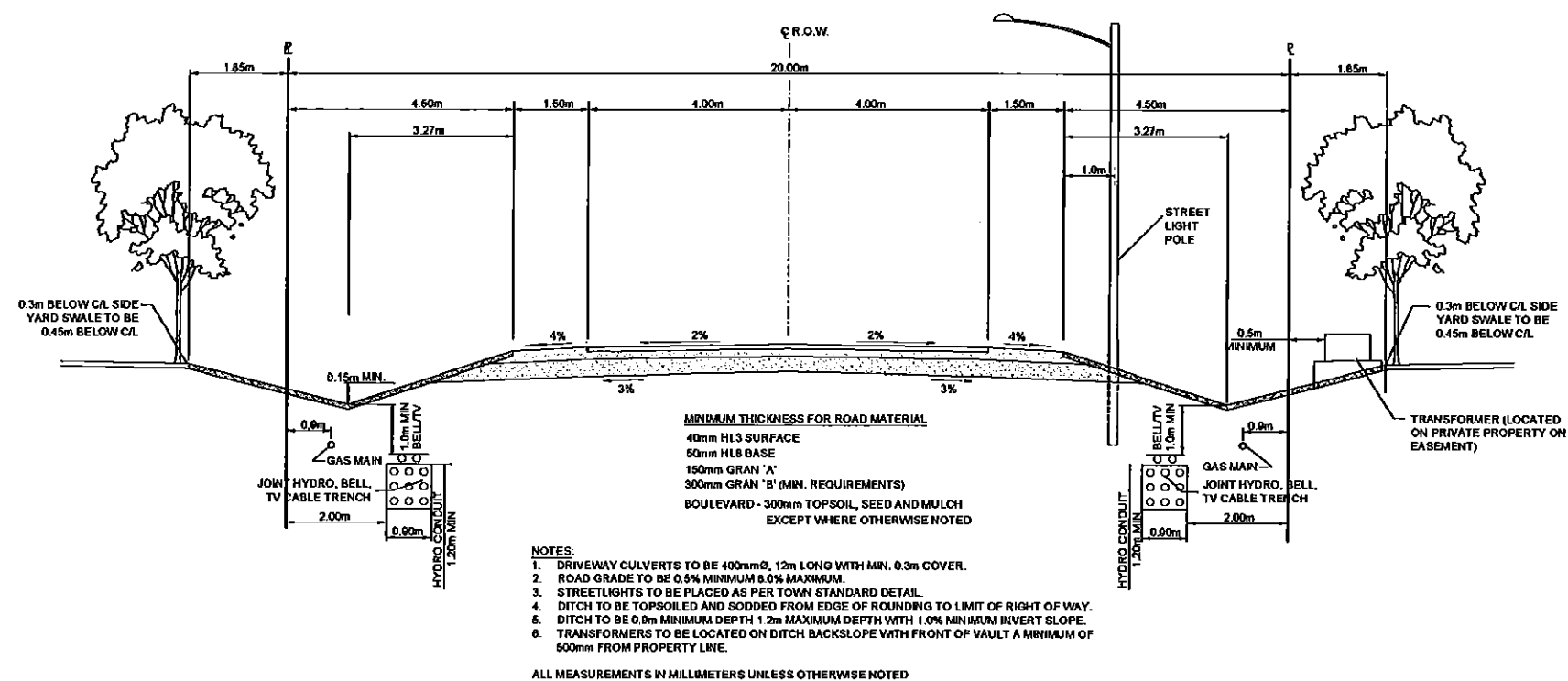
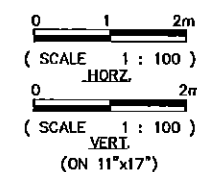
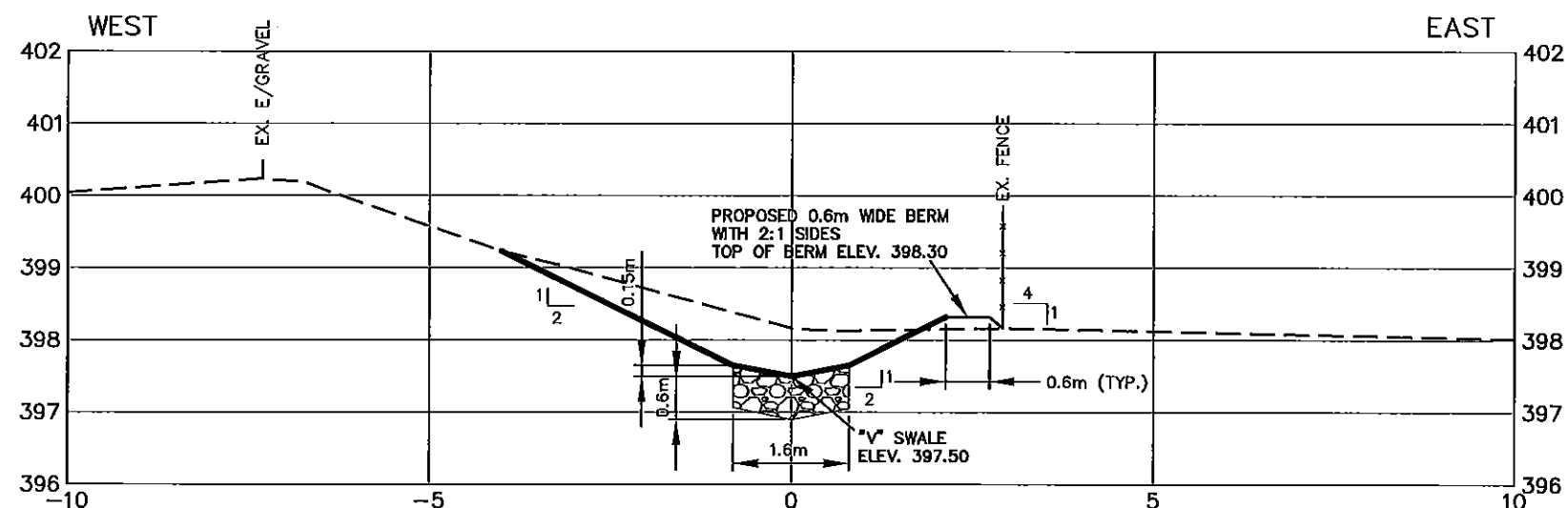
SOUTH BRANCH STA. 0+525



SOUTH BRANCH STA. 0+400



SOUTH BRANCH STA. 0+200

TYPICAL 20m ROADWAY CROSS SECTION  
WITH DITCH  
N.T.S.

DESIGNED BY: N.W.M.  
CHECKED BY: N.W.M.  
DRAWN BY: N.M.B.  
CHECKED BY: N.W.M.



SCALE  
0 2 4m  
( SCALE 1 : 200 )  
HORIZ.  
0 2 4m  
( SCALE 1 : 200 )  
VERT.  
( ON 11"x17" )

OSPRINGE DRAIN	
COUNTY OF WELLINGTON	TOWN OF ERIN
SOUTH BRANCH CROSS SECTIONS AND OTHER DETAILS	
AUG. 23, 2019	
REVISED:	
JOB NUMBER: 18-074	
DRAWING: 15 OF 17	

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

**300) SPECIAL PROVISIONS****300.1) SPECIFIC NOTES**

A description of the Drain for construction and future maintenance is as follows:

**300.1.1) Main Drain****G.R.C.A. (Roll No. 005-09100)**

- 1+200± - Construct temporary straw bale dam/sediment trap (or 10m of silt fence)
- 1+241 to 1+017 - Power brushing 15m width
- 1+200 to 1+017 - Excavate 183m of new ditch, 10m bottom with 300mm x 150mm notch and 2:1 side slopes
  - Seed with native wetland seed (10m width)
  - Spoil to be levelled on east side

**M. Scholsch (Roll No. 005-09001)**

- 1+017 to 0+975 - Excavate 42m of new ditch, 10m bottom with 300mm x 150mm notch and 2:1 side slopes
  - Seed with native wetland seed (10m width)
  - Spoil to be levelled on east side
- 1+017 to 0+903 - Power brushing 15m width
- 0+975 to 0+903 - Excavate 72m of new ditch (ditch cleanout), 2m bottom and 2:1 side slopes
  - Seed new banks (3m side)
  - Spoil to be levelled on east side
- 0+975 to 0+970 - Construct low flow crossing consisting of 2 – 5m lengths of 600mm dia. HDPE pipes and with 45m² of riprap
  - See detail on Drawing 8.
  - Existing timber footbridge to be removed and disposed of by the landowner.

**G.R.C.A. (Roll No. 005-09100)**

- 0+903 to 0+875 - Excavate 28m of new ditch (ditch cleanout), 2m bottom and 2:1 side slopes
  - Seed new banks (3m sides)
  - Spoil to be levelled on east side
- 0+903 to 0+832 - Power brushing 10m width
- 0+875 to 0+832 - Existing ditch to remain and to be incorporated.
  - For future maintenance, ditch to be 2m bottom and 2:1 side slopes.
  - Spoil to be levelled on east side at time of maintenance.
  - 42m length of debris removal and disposal

**B. Minor (Roll No. 005-06716)**

- 0+832 to 0+740 - Existing ditch to remain and to be incorporated.
  - For future maintenance, ditch to be 2m bottom and 2:1 side slopes.
  - Spoil to be levelled on east side at time of maintenance.
  - 91m length of debris removal and disposal
- 0+775 to 0+740 - See detail on Drawing 8.
- 0+800 - Existing 14m of 1600mm dia. CSP laneway culvert to remain and to be incorporated. No work required.

**G.R.C.A. (Roll No. 005-06715)**

- 0+740 to 0+706 - Existing ditch to remain and to be incorporated.
  - For future maintenance, ditch to be 2m bottom and 2:1 side slopes.

- Spoil to be levelled on east side at time of maintenance.
- 36m length of debris removal and disposal

- 0+706 to 0+589 - Excavate 117m of new ditch (ditch cleanout), 1m bottom and 2:1 side slopes
  - Seed new banks (3m sides)
  - Spoil to be levelled on west side

- 0+740 to 0+675 - See detail on Drawing 8

- 0+600 to 0+589 - Power brushing (10m width)

**1581319 Ontario Inc. (Roll No. 005-06714)**

- 0+589 to 0+300 - Excavate 289m of new ditch (ditch cleanout), 1m bottom and 2:1 side slopes
  - Seed new banks (3m sides)
  - Spoil to be levelled on west side

- 0+400 to 0+300 - No work is to be done on Roll No. 005-06712

- 0+350 to 0+300 - See detail on Drawing 9

- 0+589 to 0+475 - Power brushing (10m width)

- 0+470 to 0+464 - Remove and dispose of existing 200mm plastic culvert and install 6m of 750mm dia. HDPE pipe laneway culvert with 3m² of riprap at each end (6m² riprap total) and laneway restoration

**Elmira Farm Holdings Ltd. (Roll No. 005-06713) / W.J. Kline (Roll No. 005-06712)**

- 0+300 to 0+088 - Excavate 212m of new ditch, 1m bottom and 2:1 side slopes.
  - Seed new banks (6m sides)
  - From Sta. 0+300 to 0+175, spoil to be levelled on west side (100mm thick)
  - From Sta. 0+175 to 0+088, spoil to be hauled away off site.
  - Do not disturb existing trees
  - No work is to be done on Roll No. 005-06712.
  - See details on Drawings 9 to 12.

- 0+125 to 0+100 - Construct 25m long x 0.6m wide earth berm with 2:1 side slopes along east bank

- 0+102 to 0+092 - Construct rock riffle (10m³ of rock)
  - See detail on Drawing 15

**Wellington Road 125 (County of Wellington)**

- 0+088 to 0+000 - See detail on Drawing 12

- 0+088 to 0+062 - Excavate 26m of ditch, 1m bottom and 2:1 side slopes
  - Seed new banks (9m sides)
  - Spoil to be hauled away off site

- 0+062 to 0+037 - Construct 25m of 600mm dia. HDPE pipe laneway crossing 2.5m± north of existing culvert and including 5m² of riprap at each end (10m² riprap total) and laneway restoration
  - Existing 20m of 450mm CSP culvert to remain and to be incorporated

- 0+037 to 0+029 - Excavate 8m of ditch, 1m bottom and 2:1 side slopes
  - Seed new banks (9m sides)
  - Spoil to be hauled away off site

- 0+029 - Regrade 31m of road ditch to the east
  - Construct 35m long x 0.4m high earth berm along north bank
  - Seed disturbed area (10m width)
  - Place 25m² of riprap on bends and berm
  - Spoil to be hauled away off site

- 0+029 to 0+000 - No work required. Existing 29m of 750mm dia. CSP road culvert to remain and to be incorporated.

**300.1.2) SWM Pond**

(See Details on Drawing 13)

**Wellington Road 125 (County of Wellington)**

- 0+000 - Incorporate 1200mm dia. precast concrete manhole (MH 5.3) with traffic rated frame and grate.

- 0+000 to -0+002 - Incorporate 2m of 600mm dia. concrete CL-3 storm sewer.

**Thomasfield Homes Limited (Roll No. 005-05900) (SWM Block 62)**

- 0+002 to -0+018 - Incorporate 15.7m of 600mm dia. concrete CL-3 storm sewer.

- 0+018 - Incorporate 1500mm dia. concrete double ditch inlet catchbasin manhole (DDICBMH 5.2) with honeycomb frame and grate

- 0+018 to -0+024 - Incorporate 6.6m of 300mm dia. PVC SDR 35 storm sewer

- 0+024 - Incorporate 1200 x 600mm concrete double ditch inlet catchbasin (DDICB 5.1) complete with 2:1 top slope, honeycomb frame and grate

Incorporate 77m± wide by 107m± long SWM pond consisting of:

- 150mm dia. orifice plate (on the 300mm storm sewer at -0+024)
- Stilling basins
- Forebays
- 450m² of riprap
- 90m² of asphalt overflow weir (HL-3, 50mm depth)
- 53m² of Turfstone
- 3m wide access path around pond

**300.1.3) North Branch****Thomasfield Homes Limited (Roll No. 005-05900) (SWM Block 62 and Lot 55)**

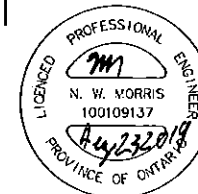
From 0+000 to 0+028 in on SWM Block 62 and from 0+028 to 0+077 is on Lot 55 in a 9m wide easement

- 0+000 - Incorporate precast concrete headwall for 525mm dia. pipe
  - Rodent gate at outlet

- 0+000 to 0+025 - Incorporate 25m of 525mm dia. concrete CL-3 storm sewer
  - See detail on Drawing 13

- 0+025 - Incorporate 1500mm dia. precast concrete manhole (MH 1.1) with traffic rated frame and grate

- 0+025 to 0+077 - Incorporate 52m of 525mm dia. concrete CL-3 storm sewer

**OSPRINGE DRAIN**

TOWN OF ERIN

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**Thomasfield Homes Limited (Roll No. 005-05900) (Broughton Street)**

- 0+077 to 0+096 - Incorporate 19m of 525mm dia. concrete CL-3 storm sewer
- 0+096 - Incorporate 1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 1.2) with honeycomb frame and grate
- 0+096 to 0+114 - Incorporate 18m of 450mm dia. concrete CL-3 storm sewer
- 0+114 - Incorporate 1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 1.3) with honeycomb frame and grate
- 0+114 to 0+138 & 0+150 to 0+166 - Incorporate 40m of road ditch ("V" ditch with 3:1 side slopes)
- 0+138 to 0+150 - Incorporate 12m of 400mm dia. CSP (2.0mm wall, 68 x 13mm corrugations) driveway/laneway crossing.
- 0+166 to 0+178 - Incorporate 12m of 400mm dia. CSP (2.0mm wall, 68 x 13mm corrugations) driveway/laneway crossing.
- 0+178 to 0+182 - Incorporate 4m of swale ("V" ditch with 3:1 side slopes)

**Thomasfield Homes Limited (Roll No. 005-05900) (Lots 52 and 53)**

- 0+182 to 0+236 - Is on Lots 52 and 53 in a 9m wide easement (6m width on Lot 52 and 3m width on Lot 53)
- 0+182 to 0+228 - Incorporate 46m of swale ("V" ditch with 3:1 side slopes)
- 0+228 to 0+236 - Incorporate 8m of 300mm dia. CSP (2.0mm wall, 68 x 13mm corrugations) with 20m± of 0.9m high earth berm. Top of berm 409.61.

**300.1.4) South Branch****Thomasfield Homes Limited (Roll No. 005-05900) (SWM Block 62 and Lots 59 & 60)**

From Sta. 0+000 to 0+020 is on SWM Block 62

From Sta. 0+020 to 0+083 is on Lots 59 and 60 in a 9m wide easement (6m width on Lot 59 and 3m width on Lot 60)

- 0+000 - Incorporate Precast concrete headwall for 825mm dia. pipe  
- Rodent gate at outlet

- 0+000 to 0+020± - See Detail on Drawing 13

- 0+000 to 0+083 - Incorporate 83m of 825mm dia. concrete CL-3 storm sewer

**Thomasfield Homes Limited (Roll No. 005-05900) (McKinnon Street)**

- 0+083 to 0+085 - Incorporate 2m of 825mm dia. concrete CL-3 storm sewer
- 0+085 - Incorporate 1500mm dia. precast concrete double ditch inlet catchbasin manhole (DDICBMH 2.1) with honeycomb frame and grate
- 0+085 to 0+103 - Incorporate 18m of 675mm dia. concrete CL-3 storm sewer
- 0+103 - Incorporate 1200 x 600mm concrete precast double ditch inlet catchbasin (DDICB 2.2) with honeycomb frame and grate
- 0+103 to 0+111 - Incorporate 8m of road ditch ("V" ditch with 3:1 side slopes)
- 0+111 to 0+114 - Incorporate 3m of swale ("V" ditch with 3:1 side slopes)

**Thomasfield Homes Limited (Roll No. 005-05900) (Lots 1 to 11)**

0+114 to 0+567 is on a 9m wide easement on each lot.

- 0+114 to 0+567 - Incorporate 447m of swale ("V" ditch with 3:1 side slopes) (Lot 1 - 90m, Lot 2 - 34m, Lot 3 - 33m, Lot 4 - 34m, Lot 5 - 34m, Lot 6 - 34m, Lot 7 - 35m, Lot 8 - 35m, Lot 9 - 36m, Lot 10 - 64m and Lot 11 - 18m)

**300.2) GENERAL NOTES****300.2.1 Working Area**

For work on the open ditch, the average working zone (areas) width is to be 10m on private lands.

Refer to Standard Specification 400.4 for exceptions.

**300.2.2 Access - Standard Specification 400.5**

The Contractor shall have access to the drain along the routes if any, shown on the plan. The access routes shall be along existing laneways or paths or where none exist, along a 6m wide (maximum) path. All specifications governing fences, livestock and crops during drain construction shall apply to access routes except where superseded by notes on the drawings. No other access routes shall be used unless first approved by the Engineer and affected landowners. The Contractor shall also contact each owner prior to using designated accesses. The landowner information will be supplied with the tender documents.

Telephone numbers for contact are:

005-09001	M. Schotsch	
005-06716	B. Minor	
005-06714	1581319 Ontario Inc.	(Available at time
005-06713	Elmira Farm Holdings Ltd.	of tender)
005-05900	Thomasfield Homes Ltd. (Tom McLaughlin, Tom Krizsan)	
005-09100, 005-06715	Grand River Conservation Authority (GRCA)	519-621-2761
Engineer (Neal Morris, P. Eng.)		519-748-1199 ext. 240
Town of Erin:		
	(Chris Clark, Drainage Superintendent)	519-831-0051
	(Greg Delfosse, Road Superintendent)	519-855-4407
	County of Wellington (Bruce McCormack)	519-837-2601
	One Call Centre	1-800-400-2055

**300.2.3 Ditch Work Required**

All construction on this project must use laser grade control for open work. Failure to do such may require forfeiture of the contract including tender deposit and payment for any work done.

**a) General Note for Ditch Work on this Project**

In all areas, the side of the drain for levelling spoil is to be the working side. Power brushing materials are preferred. Where materials are cut by chainsaw or excavated by a backhoe, materials are to be left in piles for the landowner to dispose of. Where bush is within 10m of the channel, such materials are to be pushed and windrowed in with or adjacent to the bush areas. All incidental brushing along the drain is to be included as part of the ditch work unless it is separately noted in the Specific Notes. All new ditch banks are to be seeded.

**b) General re Open Drain Work**

The open drains to be constructed will have cross-sectional dimensions as specified by the profiles and the Typical Sections on the drawings. Ditch bottom elevations are to be as shown on the profile drawings. Also, minimum bottom widths and bank slopes are shown by the typical sections and by the profile drawings. All spoil is to be levelled adjacent to the drain, and all banks where disturbed, are to be seeded the same day as excavation unless when requested otherwise. Standard Specification 410 applies for ditch work. Do not over-excavate any channel except if noted, do not unnecessarily disturb banks, and minimize bottom disturbance during root removal.

During future maintenance, all excavated materials are to be levelled on adjacent properties with the exception that any removed rock be hauled away.

**300.2.4 Soil Conditions**

The Wellington County soils mapping for this area indicates that the soils adjacent to this drain are Guelph loam (loam till, good drainage, smooth moderately sloping, slightly stony), London loam (loam till, imperfect drainage, smooth very gently sloping and slightly stony) and Muck (very poor drainage, smooth basin, stone free).

The Guelph loam soils are located in the N Pt Lot 13, Concession 2 and S Pt Lot 13, Concession 3, the London loam soils are located in the middle part of Lot 13, Concession 3 and the Muck soils are located in the N Pt Lot 13 along and for 270m± upstream of the Eramosa River.

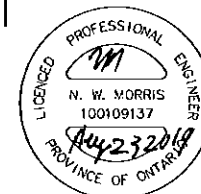
The work in the Muck soils and working on mats is to be anticipated. A portion of the Guelph loam soils in the S Pt Lot 13, Concession 3 may have possible underground springs. It is anticipated that flowing sands may be encountered in this portions.

If pockets of poor soils conditions are encountered, the contingency price from the form of the tender will be paid by the linear meter upon the engineer's approval. This contingency price is based on increased costs relating to the contractors time and materials.

**300.2.5 Native Seed (Seeding Mixture) (Main Drain, Sta. 1+200 to 0+029)**

Use Ontario Seed Company (OSC) FACW wetland native seed mixture 8175 or approved equal. Seed mixture is to be applied at a rate of 3 kg per hectare, and is to contain:

- Bebb's Sedge (Carex bebbii)
- Blue Lobelia (Lobelia siphilitica)
- Blue Vervain (Verbena hastata)
- Blunt Broom Sedge (Carex scoparia)
- Boneset (Eupatorium perfoliatum)
- Fox Sedge (Carex vulpinoidea)
- Green Bulrush (Scirpus atrovirens),
- Heath Aster (Aster pilosus)
- Lurid Sedge (Carex lurida)
- New England Aster (Aster novae-angliae)
- Purple Stemmed Aster (Aster puniceus)
- Soft Rush (Juncus effusus)
- Spotted Joe Pye Weed (Eupatorium maculatum)
- Square Stemmed Monkey Flower (Mimulus ringens)
- Swamp Milkweed (Asclepias incarnata)
- Tall Mannagrass (Glyceria grandis)
- Virginia Wild Rye (Elymus virginicus)
- Woolgrass (Scirpus cyperinus)

**OSPRINGE DRAIN**

TOWN OF ERIN

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