

**HEPBURN, LALONDE, & SHUNPIKER DRAINS**

**Municipality of Chatham-Kent**

**Community of Orford**



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## **HEPBURN, LALONDE, & SHUNPIKER DRAINS**

### **Municipality of Chatham-Kent Community of Orford**

To the Drainage Board of the  
The Municipality of Chatham-Kent

Members of the Drainage Board:

We are pleased to present our report on the construction of the Shunpiker Drain and reconstruction of the Hepburn Municipal Drain and the Lalonde Drain serving parts of Lots 15 and 18, Concessions 3 to 4 (Community of Orford) in the Municipality of Chatham-Kent and parts of Lots A and B, Concession 7 in the Municipality of West Elgin.

### **AUTHORIZATION**

This report was prepared pursuant to Section 4 and 78 of the Drainage Act. Instructions were received from your Municipality with respect to a motion of Council. The work on the Shunpiker Drain was initiated by a petition signed by the owners whose lands contain over 60 percent of the area requiring drainage. The work on the Hepburn and Lalonde Drains was initiated by a request signed by some of the affected landowners.

### **DRAINAGE AREA**

The total watershed area as described above contains approximately 198 hectares. The area requiring drainage for the Shunpiker Drain is described as the lands located within Lot 17, Concession 4, owned by Shunpiker Farms Ltd. (Roll No. 3-019).

### **HISTORY**

The Lalonde Branch of the Hepburn Drain was last reconstructed pursuant to a report submitted by W.P. Colby, P. Eng., dated September 7, 1972, and consisted of the installation of a new tile drain from the open ditch in the lands of K. Buchner & K. Ferguson (Roll No. 3-056) east to the westerly limits at McPherson Road. The drain consisted of a 300mm diameter tile at a very flat grade.

Following the above an additional report on the Lalonde Branch of the Hepburn Drain with a smaller scope of work was submitted by A.M. Spriet, P.Eng., dated August 20, 1985. This report called for the construction of a gabion basket outlet structure at the outlet of the closed drain, the construction of 115 meters of a surface waterway, and the installation of 360 lineal meters of tile from the outlet east to improve the system capacity.



## EXISTING DRAINAGE CONDITIONS

At a site meeting held with respect to the project and through later discussions, the owners reported the following:

- that the petitioning landowner, Shunpiker Farms Ltd. (Roll No. 3-019), indicated that they required a branch drain to provide an outlet to a portion of his lands in Lot 17, Concession 4 to allow for future field tiling and to alleviate current flooding conditions
- that the landowner, K. Buchner & K. Ferguson (Roll No. 3-056), requested that the existing Lalonde Closed Drain through their lands be replaced as the current drain is in poor condition and contains no cover
- the landowner, Gosnell Farms Ltd. (Roll No. 20-117), indicated that the existing Lalonde drain in their lands does not provide a proper outlet to service their lands. They indicated it is in poor condition and too shallow
- the Drainage Superintendent for Chatham-Kent indicated that the Hepburn Drain – Closed Drain through the lands of K. Buchner & K. Ferguson (Roll No. 3-056), should be replaced at this time due to capacity and depth concerns.

A field investigation and survey were completed. Upon reviewing our findings, we note the following:

- that the lands of Shunpiker Farms Ltd. (Roll No. 3-019) could obtain outlet via the construction of a new drain from the Hepburn Drain easterly to their property line
- that in general, the existing Hepburn - Open Drain does not provide enough outlet (depth) to provide an adequate outlet to the lands within the watershed area. This is attributed to the lack of available outlet provided by the surface culverts under the Chesapeake and Ohio Railway lands and the Entegrus Transmission Inc. lands
- that the existing Lalonde Drain is in poor condition and requires replacement at a deeper depth to provide a sufficient outlet to the lands and ensure adequate cover over the drain for longevity

Preliminary design, cost estimates and assessments were prepared, and informal consultations were held to review the findings and preliminary proposals. Further input and requests were provided by the affected owners at that time and at later dates. These consultations occurred via a variety of formats which were hosted by the Engineer and the Drainage Superintendents for the Municipalities of Chatham-Kent and West Elgin. Based on this input the owners decided to proceed with the report.

## DESIGN CONSIDERATIONS

The proposed drains were designed, with respect to capacity, using the Drainage Coefficient method contained in the "DRAINAGE GUIDE FOR ONTARIO", Publication 29 by the Ontario Ministry of Agriculture, Food, and Rural Affairs. The Drainage Coefficient defines a depth of water that can be removed in a 24-hour period and is expressed in millimetres per 24 hours. The coefficient used was 38mm per 24 hrs.



## DESIGN CONSIDERATIONS (cont'd)

We would like to point out that there have been no indications of any adverse soil conditions, but no formal soil investigation has been made.

All of the proposed work has been generally designed and shall be constructed in accordance with the DESIGN AND CONSTRUCTION GUIDELINES FOR WORK UNDER THE DRAINAGE ACT.

## RECOMMENDATIONS

We are therefore recommending the following:

- that the Hepburn Drain – Open Portion be cleaned out from its outlet at the Gesner McKerracher Drain, a distance of 150 meters upstream through the lands of W. Durer (Roll No 3-055) and D. & C. Gilbert. (Roll No. 3-056-12), at which point the drain shall be reconstructed upstream through the lands of D. & C. Gilbert. (Roll No. 3-056-12), Entegrus Transmission Inc., the Chesapeake and Ohio Railway to the outlet of the reconstructed Hepburn Drain - Closed Portion for a total length of 427 meters
- that the Hepburn Drain – Closed Portion (Sta 0+427 – Sta 0+628) be reconstructed commencing at the head of the Open Drain on the North property line of the Hydro One Networks Inc. lands and travel south-easterly through these lands and the lands of K. Buchner & K. Ferguson (Roll No. 3-056), for a distance of 201 lineal meters
- that the Lalonde Drain be reconstructed commencing at the head of the Hepburn Drain and travel easterly through the lands of K. Buchner & K. Ferguson (Roll No. 3-056), and then across the road allowance of McPherson Road. The drain will then head northerly through the lands of W. McMillan (Roll No. 20-118), the Hydro One Networks lands (Roll No. 2-560) the Chesapeake and Ohio Railway lands (Roll No. 80-107), the Orford Sand & Gravel lands (Roll No. 80-108), and into the lands of Gosnell Farms Ltd. (Roll No. 20-117). The total length of the drain will be 915 meters.
- that the Hepburn Drain – Closed Portion (Sta 0+628 – Sta 0+793) be reconstructed commencing at the head of the Hepburn Drain – Closed Portion and travel southerly through the lands of K. Buchner & K. Ferguson (Roll No. 3-056) to the lot line between that property and the lands of Shunpiker Farms Ltd. (Roll No. 3-019), for a total length of 165 meters
- that the crossing under McPherson Road be done by boring to minimize disruption to the traffic
- that catchbasins be installed along the course of the drain, in accordance with the drawings, to alleviate surface flows
- that the Hepburn Drain – Open Portion, upstream from Sta. 0+427, the Hepburn Drain – Closed Portion (Sta 0+628 – Sta 0+793) and the existing Lalonde Branch be officially abandoned from municipal status pursuant to Section 19 of the Drainage Act





## RECOMMENDATIONS (cont'd)

If areas of poor soil are encountered at the time of construction, it may become necessary to install the tile on crushed stone bedding wrapped with geotextile or substitute plastic filter tile through such areas. The additional costs of such work would be an extra to the project. These areas are typically identified at the time of construction but may only become apparent after construction is completed. In this case, the extra costs for removal and reinstallation on stone bedding would be an extra to the project and if already billed become a supplementary billing.

## ENVIRONMENTAL CONSIDERATIONS AND MITIGATION MEASURES

It should be noted that there are significant wetlands within the watershed area of the drain, however the proposed drain will not be constructed within them. The proposed construction of the Hepburn, Shunpiker, and Lalonde Drains includes quarry stone outlet protection, surface inlets, and grassed waterway which greatly help reduce the overland surface flows and any subsequent erosion. A temporary flow check of silt fencing is to be installed in the ditch downstream of the tile outlet for the duration of the construction.

We are also recommending that the following erosion and sediment control measures be included as part of our reconstruction proposal to help mitigate any potential adverse impacts of the proposed drainage works on water quality and fishery habitat:

- timing of construction is to be only at times of low or no flow
- various sediment basins are to be constructed along the course of the drain at the locations specified on the plan and these basins are to be maintained by the Municipality of Chatham-Kent
- a temporary flow check of silt fencing is to be installed for the duration of the construction at the bottom end of the ditch reconstruction

## SUMMARY OF PROPOSED WORK

The proposed work consists of approximately 427 lineal meters of open ditch cleanout/reconstruction including quarry stone rip-rap bank protection, bank seeding, construction of road crossing and approximately 1,469 lineal meters of 300mm (12") to 900mm (36") dia. concrete field tile and H.D.P.E. sewer pipe including related appurtenances and including railway and utility crossings.

## SCHEDULES

Four schedules are attached hereto and form part of this report, being Schedule 'A' - Allowances, Schedule 'B' - Cost Estimate, Schedule 'C' - Assessment for Construction, and Schedule 'D' - Assessment for Maintenance.



## **SCHEDULES (cont'd)**

Schedule 'A' - Allowances. In accordance with Sections 29 and 30 of the Drainage Act, allowances are provided for right-of-way and damages to lands and crops along the route of the drain as defined below.

Schedule 'B' - Cost Estimate. This schedule provides for a detailed cost estimate of the proposed work which is in the amount of \$ 323,000.00. This estimate includes engineering and administrative costs associated with this project.

Schedule 'C' - Assessment for Construction. This schedule outlines the distribution of the total estimated cost of construction over the roads and lands which are involved.

Schedule 'D' - Assessment for Maintenance. In accordance with Section 38 of the Drainage Act, this schedule outlines the distribution of future repair and/or maintenance costs for portions of, or the entire drainage works.

Drawing No.'s 1 and 2, Job No. 220070, and specifications form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

## **ALLOWANCES**

**DAMAGES:** Section 30 of the Drainage Act provides for the compensation to landowners along the drain for damages to lands and crops caused by the construction of the drain. The amount granted is based on \$3,613.00/ha. for closed drain. This base rate is multiplied by the hectares derived from the working widths shown on the plans and the applicable lengths.

**RIGHT-OF-WAY** Section 29 of the Drainage Act provides for an allowance to the owners whose land must be used for the construction, repair, or future maintenance of a drainage works.

For tile drains where the owners will be able to continue to use the land, the allowance provides for the right to enter upon such lands, and at various times for the purpose of inspecting such drain, removing obstructions, and making repairs. Also, the allowance provides for the restrictions imposed on those lands to protect the right-of-way from obstruction or derogation. The amounts granted for right-of-way on tile drains is based on a percentage of the value of the land designated for future maintenance. Therefore, the amounts granted are based on \$6,670.00/ha. through cropped lands. This value is multiplied by the hectares derived from the width granted for future maintenance and the applicable lengths.

## **ASSESSMENT DEFINITIONS**

In accordance with the Drainage Act, lands that make use of a drainage works are liable for assessment for part of the cost of constructing and maintaining the system. These liabilities are known as benefit, outlet liability and special benefit as set out under Sections 22, 23, 24 and 26 of the Act.





## ASSESSMENT DEFINITIONS (cont'd)

**BENEFIT** as defined in the Drainage Act means the advantages to any lands, roads, buildings or other structures from the construction, improvement, repair, or maintenance of a drainage works such as will result in a higher market value or increased crop production or improved appearance or better control of surface or sub-surface water, or any other advantages relating to the betterment of lands, roads, buildings, or other structures.

**OUTLET** liability is assessed to lands or roads that may make use of a drainage works as an outlet either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse.

In addition, a Public Utility or Road Authority shall be assessed for and pay all the increased cost to a drainage works due to the construction and operation of the Public Utility or Road Authority. This may be shown as either benefit or special assessment.

## ASSESSMENT

A modified "Todgham Method" was used to calculate the assessments shown on Schedule 'C'- Assessment for Construction. This entailed breaking down the costs of the drain into sections along its route. Special Assessments were then extracted from each section.

The remainder is then separated into Benefit and Outlet costs. The Benefit cost is distributed to those properties receiving benefit as defined under "Assessment Definitions", with such properties usually being located along or close to the route of the drain. The Outlet Costs are distributed to all properties within the watershed area of that section on an adjusted basis. The areas are adjusted for location along that section, and relative run-off rates. Due to their different relative run-off rates, forested lands have been assessed for outlet at lower rates than cleared lands. Also, roads and residential properties have been assessed for outlet at higher rates than cleared farmlands.

The actual cost of the work involving this report, with the exception of Special Assessments, is to be assessed on a pro-rata basis against the lands and roads liable for assessment for benefit and outlet and for special assessments as shown in detail below and on Schedule 'C' - Assessment for Construction. The Special Assessments shall be levied as noted in the Section "Special Assessment".

## SPECIAL ASSESSMENT

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against Entegrus Transmission Inc. (Roll No. 3-205) being the increased cost to the drainage work for excavating through their Right-of-Way across their lands on the Hepburn Drain - Open Portion. The Special Assessment shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessment are to be calculated as follows:

Hepburn Drain (Open Portion)	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest & Net H.S.T.	Special Assessment
Removal of existing culvert	\$6,000.00	\$300.00	\$1,700.00	\$190.00	\$7,590.00



**SPECIAL ASSESSMENT (cont'd)**

In accordance with Section 26 of the Drainage Act, a Special Assessments have been made against Chesapeake & Ohio Railway. (Roll No. 3-204 & 80-107) being the increased cost to the drainage work for installation of a C.S.P. Pipe and a H.D.P.E. pipe under their Right-of-Way across their railway on the Hepburn Drain - Open Portion and the Lalonde Drain. The Special Assessment shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessments are to be calculated as follows:

Drain	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest & Net H.S.T.	Special Assessment
Hepburn Drain (Open Portion) Culvert	\$19,000.00	\$200.00	\$5,100.00	\$600.00	\$24,500.00
Lalonde Drain (H.D.P.E. Pipe)	\$20,100.00	\$7,530.00	\$4,400.00	\$430.00	\$17,580.00

In accordance with Section 26 of the Drainage Act, a Special Assessments have been made against Hydro One Networks Inc. (Roll No. 7-057-01 & 2-560) being the increased cost to the drainage work for installation of a H.D.P.E. pipe under their Right-of-Way on the Hepburn Drain - Closed Portion and the Lalonde Drain. The Special Assessment shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessments are to be calculated as follows:

Drain	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest & Net H.S.T.	Special Assessment
Hepburn Drain (Closed Portion)	\$8,000.00	\$3,060.00	\$2,000.00	\$170.00	\$7,110.00
Lalonde Drain	\$6,300.00	\$1,650.00	\$2,400.00	\$180.00	\$7,230.00

In accordance with Section 26 of the Drainage Act, a Special Assessment has been made against the Municipality of Chatham-Kent and the County of Elgin being the increased cost to the drainage work for boring a 610mm diameter pipe across their road allowance on the Lalonde Drain due to the construction and operation of McPherson Road. The Special Assessment shall be made up of the actual cost of this work and both the final and estimated values of the Special Assessment are to be calculated as follows:

Lalonde Drain	Cost of Work	Less Equivalent Drain Cost (Fixed)	Plus Administration Cost	Plus Interest & Net H.S.T.	Special Assessment
610mm dia.	\$17,600.00	\$1,900.00	\$4,400.00	\$500.00	\$20,600.00

The Special Assessment to McPherson Line shall be borne equally by both the Municipality of Chatham-Kent and the County of Elgin as shown in Schedule 'C' - Assessment for Construction.

The above special assessments shall not apply for future maintenance purposes.





**SPECIAL ASSESSMENT (cont'd)**

If any additional work is required to the drainage works due to the existence of buried utilities such as gas pipelines, communications cables, etc. or if any of the utilities require relocation or repair, then, the extra costs incurred shall be borne by the utility involved in accordance with the provisions of Section 26 of the Drainage Act.

**GRANTS**

In accordance with the provisions of Section 85 of the Drainage Act, a grant **may** be available for assessments against privately owned parcels of land which are used for agricultural purposes and eligible for the Farm Property Class Tax rate. Section 88 of the Drainage Act directs the Municipality to make application for this grant upon certification of completion of this drain. The Municipality will then deduct the grant from the assessments prior to collecting the final assessments.

**MAINTENANCE**

Upon completion of construction, all owners are hereby made aware of Sections 80 and 82 of the Drainage Act which forbid the obstruction of or damage or injury to a municipal drain.

After completion, the portion of the Hepburn, Lalonde, and Shunpiker Drains located within the Municipality of Chatham-Kent shall be maintained by the Municipality of Chatham-Kent and the Lalonde Drain located within the Municipality of West Elgin shall be maintained by the Municipality of West Elgin at the expense of all upstream lands and roads assessed in Schedule 'D' - Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act.

Special Assessments shall **not** be pro-rated for future maintenance purposes. Special Benefit Assessments shall only be pro-rated for future maintenance purposes, if the work assessed for special benefit is part of the maintenance.

Repairs or improvements to any railway or utility culvert or bridge or sub-surface road crossing required by the performance of this work and for future repair and/or replacement, shall be the responsibility of the applicable Railway Authority or Utility, entirely at their cost.

Respectfully submitted,

SPRIET ASSOCIATES LONDON LIMITED



JMS:bv

J.M. Spriet, P.Eng.



## SCHEDULE 'A' - ALLOWANCES

## HEPBURN, LALONDE &amp; SHUNPIKER DRAIN

Municipality of Chatham-Kent  
Community of Orford

In accordance with Sections 29 and 30 of the Drainage Act, we determine the allowances payable to owners entitled thereto as follows:

CONCESSION	LOT	ROLL NUMBER (Owner)	Section 29 Right-of-Way	Section 30 Damages	TOTALS
<b>HEPBURN DRAIN (OPEN PORTION)</b>					
<b>Municipality of Chatham-Kent</b>					
4	N. ½ 16	3-055 (W. Durer)	\$ 300.00	\$ 490.00	\$ 790.00
4	Pt. 17 & Pt. 18	3-056-12 (C. & D. Gilbert)	600.00	990.00	1,590.00
Total Allowances			\$ 900.00	\$ 1,480.00	\$ 2,380.00
<b>TOTAL ALLOWANCES ON THE HEPBURN DRAIN (OPEN PORTION)</b>					<b>\$ 2,380.00</b>
<b>HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)</b>					
<b>Municipality of Chatham-Kent</b>					
4	Pt. 17 & Pt. 18	3-056 (K. Buchner & K.Ferguson)	\$ 1,210.00	\$ 980.00	\$ 2,190.00
Total Allowances			\$ 1,210.00	\$ 980.00	\$ 2,190.00
<b>TOTAL ALLOWANCES ON THE HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)</b>					<b>\$ 2,190.00</b>
<b>SHUNPIKER DRAIN</b>					
4	S Pt. 17	3-019 (Shunpiker Farms Ltd.)	\$ 40.00	\$ 30.00	\$ 70.00
4	N Pt. 17	3-056 (K. Buchner & K.Ferguson)	1,210.00	990.00	2,200.00
Total Allowances			\$ 1,250.00	\$ 1,020.00	\$ 2,270.00
<b>TOTAL ALLOWANCES ON THE SHUNPIKER DRAIN</b>					<b>\$ 2,270.00</b>

## SCHEDULE 'A' - ALLOWANCES (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAIN**  
**Municipality of Chatham-Kent**  
**Community of Orford**
**LALONDE DRAIN****Municipality of Chatham-Kent**

4	Pt. 17 & Pt. 18	3-056 (K. Buchner & K.Ferguson)	\$ 3,980.00	\$ 3,240.00	\$ 7,220.00
Total Allowances			\$ 3,980.00	\$ 3,240.00	\$ 7,220.00

**Municipality of West Elgin**

7	N Pt. A	20-117 (Gosnell Farms Ltd)	\$ 40.00	\$ 30.00	\$ 70.00
7	S Pt. A	20-118 (W. McMillan)	490.00	400.00	890.00
Total Allowances			\$ 530.00	\$ 430.00	\$ 960.00

**TOTAL ALLOWANCES ON THE LALONDE DRAIN** **\$ 8,180.00**

**HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)****Municipality of Chatham-Kent**

4	17 & 18	3-056 (K. & K. Buchner)	\$ 1,100.00	\$ 890.00	\$ 1,990.00
Total Allowances			\$ 1,100.00	\$ 890.00	\$ 1,990.00

**TOTAL ALLOWANCES ON THE HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)** **\$ 1,990.00**

**TOTAL ALLOWANCES ON THE HEPBURN, LALONDE & SHUNPIKER DRAIN** **\$ 17,010.00**



**HEPBURN, LALONDE & SHUNPIKER DRAIN****Municipality of Chatham-Kent  
Community of Orford**

We have made an estimate of the cost of the proposed work which is outlined in detail as follows:

**HEPBURN DRAIN (OPEN PORTION)**

Clearing & grubbing of ditch bank (Approx. 411m)	\$ 2,500.00
150 meters of open ditch cleanout	\$ 1,000.00
261 meters of open ditch reconstruction	\$ 4,000.00
Levelling of excavated material	\$ 2,500.00
Seeding of ditch banks and buffer strips (Approx 1600m <sup>2</sup> )	\$ 700.00
Sta. 0+252 (Entegrus Transmission Inc.) Remove and dispose of existing 1400mm dia. C.S.P. and excavate new channel through former rail bed level material adjacent to rail bed Excavated material to be placed adjacent to existing rail bed for approx. 15m each way of ditch on the both north and south sides (Approx 350m <sup>3</sup> )	\$ 6,000.00
Construct the following helical corrugated aluminized steel pipe as new crossing including removal of existing C.S.P and disposal of excess material where required	
Sta. 0+409 - Sta 0+425 (Chesapeake & Ohio Railway Company) Supply & delivery of 16m - 1500mm dia, 3.5mm thick, 125mm x 25mm cor.	\$ 9,200.00
Installation of pipe including supply and installation of bedding and backfill material and disposal of any unacceptable material	\$ 8,000.00
Supply and installation of quarry stone riprap (Approx. 12m <sup>3</sup> Q.S. required)	\$ 1,800.00
Exposing and locating existing utilities	\$ 500.00
Contingency	\$ 1,900.00
Allowances under Sections 29 and 30 of the Drainage Act	\$ 2,380.00

**HEPBURN, LALONDE & SHUNPIKER DRAIN**  
**Municipality of Chatham-Kent**  
**Community of Orford**

**HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)**

Installation of rodent gate, including quarry stone rip-rap protection around pipe and end of ditch (Approximately 8m³ quarry stone req'd)	
Supply	\$ 250.00
Installation	\$ 1,800.00
Installation of the following concrete field tile and pipe installed on crushed stone bedding including supply & installation of geotextile around tile joints (approx. 500m req'd)	
181 meters of 825mm dia. concrete tile	\$ 10,000.00
20 meters of 900mm dia. H.D.P.E. sewer pipe (Gran "A" backfill & hauling of excess)	\$ 3,000.00
Supply of the above listed tile/pipe	\$ 22,700.00
Supply & delivery of 19mm crushed stone (Approx. 80 tonnes req'd)	\$ 2,600.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 195m)	\$ 1,200.00
Removal of existing outlet structure	\$ 2,500.00
Supply & install one 900mm x 1200mm Junction Box, including lid.	\$ 2,400.00
Exposing and locating existing tile drains and utilities	\$ 500.00
Tile connections and contingencies	\$ 2,200.00
Allowances under Sections 29 and 30 of the Drainage Act	\$ 2,190.00

**SHUNPIKER DRAIN**

Installation of the following H.D.P.E. pipe installed on crushed stone bedding	
188 meters of 300mm dia. H.D.P.E. pipe	\$ 7,500.00
Supply of the above listed pipe	\$ 6,000.00
Supply & delivery of 19mm crushed stone (Approx. 75 tonnes req'd)	\$ 2,400.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 188m)	\$ 1,000.00
Supply and install one 600mm x 600mm ditch inlet catchbasin, including grate, berm, ditching and removal and disposal of existing catchbasin	\$ 1,800.00
Exposing and locating existing tile drains and utilities	\$ 500.00
Tile connections and contingencies	\$ 1,000.00
Allowances under Sections 29 and 30 of the Drainage Act	\$ 2,270.00

**HEPBURN, LALONDE & SHUNPIKER DRAIN**  
**Municipality of Chatham-Kent**  
**Community of Orford**

**LALONDE DRAIN**

Installation of the following concrete field tile and pipe including supply & installation of geotextile around tile joints (approx. 1300m req'd)	
6 meters of 375mm dia. HDPE pipe	\$ 400.00
181 meters of 450mm dia. HDPE pipe	\$ 11,800.00
75 meters of 525mm dia. concrete tile	\$ 2,000.00
28 meters of 525mm dia. H.D.P.E. sewer pipe (Gran "A" backfill & hauling of excess)	\$ 3,500.00
349 meters of 600mm dia. concrete tile	\$ 9,800.00
250 meters of 675mm dia. concrete tile	\$ 7,500.00
Supply of the above listed tile	\$ 50,700.00
Supply & delivery of 19mm crushed stone (Approx. 90 tonnes req'd)	\$ 3,000.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 674m)	\$ 4,000.00
Supply & install three 900mm x 1200mm ditch inlet catchbasins and two 600mm x 600mm ditch inlet catchbasins including grates, berms, leads, ditching, removal and disposal of existing catchbasin	\$ 11,000.00
26 meters of 610mm dia., 7.9mm thickness smooth wall steel pipe	
Supply	\$ 3,900.00
Installation under McPherson Road by boring	\$ 11,700.00
Grouting of Existing Pipe	\$ 2,000.00
Exposing and locating existing tile drains and utilities	\$ 1,000.00
Tile connections and contingencies	\$ 6,300.00
Allowances under Sections 29 and 30 of the Drainage Act	\$ 8,180.00



**HEPBURN, LALONDE & SHUNPIKER DRAIN**  
**Municipality of Chatham-Kent**  
**Community of Orford**

**HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)**

Installation of the following concrete field tile and pipe including supply & installation of geotextile around tile joints (approx. 1300m req'd)	
165 meters of 525mm dia. concrete tile	\$ 4,500.00
Supply of the above listed tile	\$ 6,000.00
Supply & delivery of 19mm crushed stone (Approx. 65 tonnes req'd)	\$ 2,000.00
Strip, stockpile and releve topsoil from tile trench and adjacent working area (4m wide) specified on drawings (approx. 165m)	\$ 800.00
Supply & install one 900mm x 1200mm ditch inlet catchbasins including grates, berms, leads, ditching, removal and disposal of existing catchbasins	\$ 2,400.00
Exposing and locating existing tile drains and utilities	\$ 500.00
Tile connections and contingencies	\$ 1,000.00
Allowances under Sections 29 and 30 of the Drainage Act	\$ 1,990.00

**ADMINISTRATION**

Interest and Net Harmonized Sales Tax	\$ 7,460.00
Survey, Plan and Final Report	\$ 37,700.00
Expenses	\$ 1,870.00
Supervision and Final Inspection	\$ 5,710.00
<b>TOTAL ESTIMATED COST</b>	<b>\$ 323,000.00</b>

CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
<b>HEPBURN DRAIN (OPEN PORTION)</b>						
<b>Municipality of Chatham-Kent</b>						
<b>Community of Orford</b>						
3	Pt. 15	2.8	3-001 (P. Roy)	\$	\$ 62.00	\$ 62.00
3	N Pt. 15	0.4	3-017-25 (D. Wagner)		18.00	18.00
3	Pt. 16	6.4	3-005 (D. & R. Wagner)		284.00	284.00
4	Pt. 15	6.0	3-017-15 (D. Wagner)		266.00	266.00
4	N ½ 16	10.1	3-055 (W. Durer)	1,590.00	448.00	2,038.00
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)		894.00	894.00
4	SE¼ & S½ 17	52.3	3-019 (Shunpiker Farms Ltd.)		2,319.00	2,319.00
4	Pt. 18	0.1	3-057 (D. & J. Farr)		2.00	2.00
4	Pt. 17 & Pt. 18	19.2	3-056 (K. Buchner & K.Ferguson)		851.00	851.00
4	Pt. 17 & Pt. 18	6.1	3-056-12 (C. & D. Gilbert)	3,190.00	270.00	3,460.00
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)		142.00	142.00
4	R.O.W.	2.2	3-205 (Entegrus Transmission Inc.)	880.00	109.00	989.00
4	R.O.W.	3.6	3-204 (Chesapeake & Ohio Railway Co.)	3,490.00	286.00	3,776.00
4	R.O.W.	1.6	420-7-057-01 (Hydro One Networks Inc.)		69.00	69.00
TOTAL ASSESSMENT ON LANDS				\$ 9,150.00	\$ 6,020.00	\$ 15,170.00
McPherson Road (50% Gesner Line				\$	\$ 135.00	\$ 135.00
Unopened Rd. All.					233.00	233.00
Schweitzer Line					18.00	18.00
					42.00	42.00
TOTAL ASSESSMENT ON ROADS				\$	\$ 428.00	\$ 428.00
<b>SPECIAL ASSESSMENT</b> against Entegrus Transmission Inc. for the increased cost of excavating through their right-of-way						\$ 7,590.00
<b>SPECIAL ASSESSMENT</b> against Chesapeake & Ohio Railway Co. for installing 16m - 1500mm dia, 3.5mm thick, 125mm x 25mm cor. Pipe under their right-of-way						\$ 24,500.00
<b>TOTAL ASSESSMENT IN THE Municipality of Chatham-Kent</b>						<b>\$ 47,688.00</b>

## SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS****Municipality of Chatham-Kent****Community of Orford**

CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
<b>HEPBURN DRAIN (OPEN PORTION) (cont'd)</b>						
<b>Municipality of West Elgin</b>						
7	N Pt. A	26.1	20-117 (Gosnell Farms Ltd)	\$	\$ 1,060.00	\$ 1,060.00
7	Pt. A	0.6	20-117-01 (J. Gosnell)		27.00	27.00
7	S Pt. A	10.1	20-118 (W. McMillan)		448.00	448.00
7	Pt. B	7.4	20-119 (H. Fleming)		328.00	328.00
7	Pt. B	6.4	20-122-01 (J. & J. Crane)		142.00	142.00
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)		248.00	248.00
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)		231.00	231.00
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)		58.00	58.00
TOTAL ASSESSMENT ON LANDS				\$	\$ 2,542.00	\$ 2,542.00
McMillan Line				\$	\$ 38.00	\$ 38.00
McPherson Road (50%)					132.00	132.00
TOTAL ASSESSMENT ON ROADS				\$	\$ 170.00	\$ 170.00
TOTAL ASSESSMENT IN THE Municipality of West Elgin					\$	<u><u>2,712.00</u></u>
TOTAL ASSESSMENT ON THE HEPBURN DRAIN (OPEN PORTION)					\$	<u><u>50,400.00</u></u>



CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
<b>HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)</b>						
<b>Municipality of Chatham-Kent</b>						
<b>Community of Orford</b>						
3	Pt. 15	2.8	3-001 (P. Roy)	\$	\$ 211.00	\$ 211.00
3	N Pt. 15	0.4	3-017-25 (D. Wagner)		61.00	61.00
3	Pt. 16	6.4	3-005 (D. & R. Wagner)		966.00	966.00
4	Pt. 15	6	3-017-15 (D. Wagner)		906.00	906.00
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)		3,050.00	3,050.00
4	SE¼ & S½ 17	52.3	3-019 (Shunpiker Farms Ltd.)		7,897.00	7,897.00
4	Pt. 17 & Pt. 18	19.2	3-056 (K. Buchner & K.Ferguson)	25,380.00	1,450.00	26,830.00
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)		483.00	483.00
4	R.O.W.	0.9	420-7-057-01 (Hydro One Networks Inc.)	2,800.00	27.00	2,827.00
TOTAL ASSESSMENT ON LANDS				\$ 28,180.00	\$ 15,051.00	\$ 43,231.00
McPherson Road (50% Gesner Line	0.7		Municipality of Chatham-Kent	\$	\$ 450.00	\$ 450.00
Unopened Rd. All.	2.1		Municipality of Chatham-Kent		634.00	634.00
Schweitzer Line	0.4		Municipality of Chatham-Kent		91.00	91.00
	0.4		Municipality of Chatham-Kent		121.00	121.00
TOTAL ASSESSMENT ON ROADS				\$	\$ 1,296.00	\$ 1,296.00
<b>SPECIAL ASSESSMENT</b> against Hydro One Networks Inc.						
for the increased cost of installing sewer pipe across their Right-of-Way					\$	7,110.00
<b>TOTAL ASSESSMENT IN THE Municipality of Chatham-Kent</b>					<b>\$</b>	<b>51,637.00</b>

## SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS****Municipality of Chatham-Kent****Community of Orford**

CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
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**HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628) (cont'd)****Municipality of West Elgin**

7	N Pt. A	25.7	20-117 (Gosnell Farms Ltd)	\$	\$ 3,571.00	\$ 3,571.00
7	Pt. A	0.5	20-117-01 (J. Gosnell)		76.00	76.00
7	S Pt. A	10.1	20-118 (W. McMillan)		1,525.00	1,525.00
7	Pt. B	7.4	20-119 (H. Fleming)		1,117.00	1,117.00
7	Pt. B	6.4	20-122-01 (J. & J. Crane)		483.00	483.00
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)		846.00	846.00
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)		785.00	785.00
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)		196.00	196.00

## TOTAL ASSESSMENT ON LANDS

\$	\$ 8,599.00	\$ 8,599.00
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McMillan Line	0.3	Municipality of West Elgin	\$	\$ 113.00	\$ 113.00
McPherson Road (50%)	0.7	County of Elgin		451.00	451.00

## TOTAL ASSESSMENT ON ROADS

\$	\$ 564.00	\$ 564.00
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**TOTAL ASSESSMENT IN THE Municipality of West Elgin****\$ 9,163.00****TOTAL ASSESSMENT ON THE HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)****\$ 60,800.00****TOTAL ASSESSMENT ON THE HEPBURN DRAIN****\$ 111,200.00****SHUNPIKER DRAIN****Municipality of Chatham-Kent****Community of Orford**

4	S Pt. 17	13.5	3-019 (Shunpiker Farms Ltd.)	\$ 1,500.00	\$ 9,916.00	\$ 11,416.00
4	N Pt. 17	1.2	3-056 (K. Buchner & K.Ferguson)	14,100.00	484.00	14,584.00

## TOTAL ASSESSMENT ON LANDS

\$ 15,600.00	\$ 10,400.00	\$ 26,000.00
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**TOTAL ASSESSMENT ON THE SHUNPIKER DRAIN****\$ 26,000.00**

## SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS**  
**Municipality of Chatham-Kent**  
**Community of Orford**

CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
<b>LALONDE DRAIN</b>						
<b>Municipality of Chatham-Kent</b>						
<b>Community of Orford</b>						
4		17 2.4	3-019 (Shunpiker Farms Ltd.)	\$	\$ 577.00	\$ 577.00
4	Pt. 17 & Pt. 18	9.6	3-056 (K. Buchner & K. Ferguson)	41,040.00	2,309.00	43,349.00
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)		1,539.00	1,539.00
4	R.O.W.	0.9	420-7-057-01 (Hydro One Networks Inc.)		216.00	216.00
TOTAL ASSESSMENT ON LANDS				\$ 41,040.00	\$ 4,641.00	\$ 45,681.00
McPherson Road (50%)				0.7	Municipality of Chatham-Kent	\$ 3,800.00 \$ 1,433.00 \$ 5,233.00
TOTAL ASSESSMENT ON ROADS				\$ 3,800.00	\$ 1,433.00	\$ 5,233.00

**SPECIAL ASSESSMENT (50%** against Municipality of Chatham-Kent for the increased cost of installing 26 meters of 610mm dia., 7.9mm thickness smooth wall steel pipe **\$ 10,300.00**

**TOTAL ASSESSMENT IN THE Municipality of Chatham-Kent \$ 61,214.00**

**Municipality of West Elgin**

7	N Pt. A	25.7	20-117 (Gosnell Farms Ltd)	\$ 1,430.00	\$ 16,629.00	\$ 18,059.00
7	Pt. A	0.5	20-117-01 (J. Gosnell)		351.00	351.00
7	S Pt. A	10.1	20-118 (W. McMillan)	4,200.00	5,307.00	9,507.00
7	Pt. B	7.4	20-119 (H. Fleming)		5,203.00	5,203.00
7	Pt. B	6.4	20-122-01 (J. & J. Crane)		2,250.00	2,250.00
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)	10,470.00	3,253.00	13,723.00
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)	6,620.00	3,287.00	9,907.00
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)	1,990.00	690.00	2,680.00
TOTAL ASSESSMENT ON LANDS				\$ 24,710.00	\$ 36,970.00	\$ 61,680.00
McMillan Line				0.3	Municipality of West Elgin	\$ 359.00 \$ 359.00
McPherson Road (50%)				0.7	County of Elgin	3,800.00 1,437.00 5,237.00
TOTAL ASSESSMENT ON ROADS				\$ 3,800.00	\$ 1,796.00	\$ 5,596.00



## SCHEDULE 'C' - ASSESSMENT FOR CONSTRUCTION (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS****Municipality of Chatham-Kent****Community of Orford**

CON	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	BENEFIT	OUTLET	TOTAL
<b>LALONDE DRAIN (cont'd)</b>						
<b>Municipality of West Elgin</b>						
<b>SPECIAL ASSESSMENT (50% against County of Elgin for the increased cost of installing 26 meters of 610mm dia., 7.9mm thickness smooth wall steel pipe</b>						
					\$	10,300.00
<b>SPECIAL ASSESSMENT against Hydro One Networks Inc. for the increased cost of installing sewer pipe across their Right-of-Way</b>						
					\$	7,230.00
<b>SPECIAL ASSESSMENT against Chesapeake &amp; Ohio Railway for the increased cost of installing sewer pipe across their Right-of-Way</b>						
					\$	17,580.00
<b>TOTAL ASSESSMENT IN THE Municipality of West Elgin</b>						<b>\$ 102,386.00</b>
<b>TOTAL ASSESSMENT ON THE LALONDE DRAIN</b>						<b>\$ 163,600.00</b>

**HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)****Municipality of Chatham-Kent****Community of Orford**

3	Pt. 15	2.8	3-001 (P. Roy)	\$	\$	180.00	\$	180.00
3	N Pt. 15	0.4	3-017-25 (D. Wagner)			51.00		51.00
3	Pt. 16	6.4	3-005 (D. & R. Wagner)			821.00		821.00
4	Pt. 15	6.0	3-017-15 (D. Wagner)			770.00		770.00
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)			2,592.00		2,592.00
4	SE¼ & S½ 17	38.8	3-019 (Shunpiker Farms Ltd.)	1,000.00		4,979.00		5,979.00
4	Pt. 17 & Pt. 18	2.4	3-056 (K. & K. Buchner)	10,960.00		154.00		11,114.00
<b>TOTAL ASSESSMENT ON LANDS</b>				<b>\$ 11,960.00</b>	<b>\$</b>	<b>9,547.00</b>	<b>\$</b>	<b>21,507.00</b>
<b>Gesner Line</b>				<b>\$</b>	<b>\$</b>	<b>540.00</b>	<b>\$</b>	<b>540.00</b>
<b>Unopened Rd. All.</b>						<b>51.00</b>		<b>51.00</b>
<b>Schweitzer Line</b>						<b>102.00</b>		<b>102.00</b>
<b>TOTAL ASSESSMENT ON ROADS</b>				<b>\$</b>	<b>\$</b>	<b>693.00</b>	<b>\$</b>	<b>693.00</b>

**TOTAL ASSESSMENT ON THE HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793) \$ 22,200.00****TOTAL ASSESSMENT ON THE HEPBURN, LALONDE & SHUNPIKER DRAINS \$ 323,000.00**

## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE

## HEPBURN, LALONDE &amp; SHUNPIKER DRAINS

Municipality of Chatham-Kent  
Community of Orford

Job No. 220070

June 14, 2021

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>HEPBURN DRAIN (OPEN PORTION)</b>				
<b>Municipality of Chatham-Kent Community of Orford</b>				
3	Pt. 15	2.8	3-001 (P. Roy)	0.5 %
3	N Pt. 15	0.4	3-017-25 (D. Wagner)	0.1
3	Pt. 16	6.4	3-005 (D. & R. Wagner)	2.1
4	Pt. 15	6.0	3-017-15 (D. Wagner)	1.9
4	N. ½ 16	10.1	3-055 (W. Durer)	9.0
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)	6.5
4	SE¼ & S½ 17	52.3	3-019 (Shunpiker Farms Ltd.)	16.8
4	Pt. 18	0.1	3-057 (D. & J. Farr)	0.1
4	Pt. 17 & Pt. 18	19.2	3-056 (K. Buchner & K. Ferguson)	6.2
4	Pt. 17 & Pt. 18	6.1	3-056-12 (C. & D. Gilbert)	13.5
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)	1.0
4	R.O.W.	2.2	3-205 (Entegrus Transmission Inc.)	4.0
4	R.O.W.	3.6	3-204 (Chesapeake & Ohio Railway Co.)	14.8
4	R.O.W.	1.6	420-7-057-01 (Hydro One Networks Inc.)	0.5
				=====
TOTAL ASSESSMENT ON LANDS				77.0 %
				=====
McPherson Road (50%)		0.9	Municipality of Chatham-Kent	1.0 %
Gesner Line		2.1	Municipality of Chatham-Kent	1.7
Unopened Rd. All.		0.4	Municipality of Chatham-Kent	0.1
Schweitzer Line		0.4	Municipality of Chatham-Kent	0.3
				=====
TOTAL ASSESSMENT ON ROADS				3.1 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE Municipality of Chatham-Kent</b>				<b>80.1 %</b>

## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS**  
**Municipality of Chatham-Kent**  
**Community of Orford**

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>HEPBURN DRAIN (OPEN PORTION) (cont'd)</b>				
<b>Municipality of West Elgin</b>				
7	N Pt. A	26.1	20-117 (Gosnell Farms Ltd)	7.6 %
7	Pt. A	0.6	20-117-01 (J. Gosnell)	0.2
7	S Pt. A	10.1	20-118 (W. McMillan)	3.3
7	Pt. B	7.4	20-119 (H. Fleming)	2.4
7	Pt. B	6.4	20-122-01 (J. & J. Crane)	1.0
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)	1.8
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)	1.7
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)	0.4
				=====
TOTAL ASSESSMENT ON LANDS				18.4 %
				=====
McMillian Line		0.3	Municipality of West Elgin	0.4 %
McPherson Road (50%)		0.9	County of Elgin	1.1
				=====
TOTAL ASSESSMENT ON ROADS				1.5 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE Municipality of West Elgin</b>				<b>19.9 %</b>
				<hr/>
<b>TOTAL ASSESSMENT FOR MAINTENANCE FOR THE HEPBURN DRAIN (OPEN PORTION)</b>				<b>100.0 %</b>
				<hr/>

## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS**  
**Municipality of Chatham-Kent**  
**Community of Orford**

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)</b>				
<b>Municipality of Chatham-Kent</b>				
<b>Community of Orford</b>				
3	Pt. 15	2.8	3-001 (P. Roy)	0.5 %
3	N Pt. 15	0.4	3-017-25 (D. Wagner)	0.2
3	Pt. 16	6.4	3-005 (D. & R. Wagner)	2.4
4	Pt. 15	6.0	3-017-15 (D. Wagner)	2.3
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)	7.7
4	SE¼ & S½ 17	52.3	3-019 (Shunpiker Farms Ltd.)	19.9
4	Pt. 17 & Pt. 18	19.2	3-056 (K. Buchner & K. Ferguson)	35.7
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)	1.2
4	R.O.W.	0.9	420-7-057-01 (Hydro One Networks Inc.)	3.7
				=====
TOTAL ASSESSMENT ON LANDS				73.6 %
				=====
McPherson Road (50%)		0.7	Municipality of Chatham-Kent	1.1 %
Gesner Line		2.1	Municipality of Chatham-Kent	1.6
Unopened Rd. All.		0.4	Municipality of Chatham-Kent	0.3
Schweitzer Line		0.4	Municipality of Chatham-Kent	0.3
				=====
TOTAL ASSESSMENT ON ROADS				3.3 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE</b>				
<b>Municipality of Chatham-Kent</b>				<b><u>76.9 %</u></b>



## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS****Municipality of Chatham-Kent****Community of Orford**

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628) (cont'd)</b>				
<b>Municipality of West Elgin</b>				
7	N Pt. A	25.7	20-117 (Gosnell Farms Ltd)	9.0 %
7	Pt. A	0.5	20-117-01 (J. Gosnell)	0.2
7	S Pt. A	10.1	20-118 (W. McMillan)	3.9
7	Pt. B	7.4	20-119 (H. Fleming)	2.8
7	Pt. B	6.4	20-122-01 (J. & J. Crane)	1.2
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)	2.1
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)	2.0
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)	0.5
				=====
TOTAL ASSESSMENT ON LANDS				21.7 %
				=====
McMillian Line		0.3	Municipality of West Elgin	0.3 %
McPherson Road (50%)		0.7	County of Elgin	1.1
				=====
TOTAL ASSESSMENT ON ROADS				1.4 %
				=====
TOTAL ASSESSMENT FOR MAINTENANCE IN THE Municipality of West Elgin				<b>23.1 %</b>
				=====
TOTAL ASSESSMENT FOR MAINTENANCE FOR THE HEPBURN DRAIN - CLOSED PORTION (Sta 0+427 - Sta 0+628)				<b>100.0 %</b>
				=====

**SHUNPIKER DRAIN****Municipality of Chatham-Kent****Community of Orford**

4	S Pt. 17	13.5	3-019 (Shunpiker Farms Ltd.)	58.6 %
4	N Pt. 17	1.2	3-056 (K. Buchner & K. Ferguson)	41.4
				=====
TOTAL ASSESSMENT ON LANDS				100.0 %
				=====
TOTAL ASSESSMENT FOR MAINTENANCE OF THE SHUNPIKER DRAIN				<b>100.0 %</b>
				=====

## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS**  
**Municipality of Chatham-Kent**  
**Community of Orford**

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>LALONDE DRAIN</b>				
<b>Municipality of Chatham-Kent</b> <b>Community of Orford</b>				
4	17	2.4	3-019 (Shunpiker Farms Ltd.)	0.7 %
4	Pt. 17 & Pt. 18	9.6	3-056 (K. Buchner & K. Ferguson)	28.0
4	Pt. 18	3.2	3-021 (R. Gysemans & T. Rudausky)	1.9
4	R.O.W.	0.9	420-7-057-01 (Hydro One Networks Inc.)	0.3
				=====
TOTAL ASSESSMENT ON LANDS				30.9 %
				=====
McPherson Road (50%)		0.7	Municipality of Chatham-Kent	4.1 %
				=====
TOTAL ASSESSMENT ON ROADS				4.1 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE</b> <b>Municipality of Chatham-Kent</b>				<b>35.0 %</b>

**Municipality of West Elgin**

7	N Pt. A	25.7	20-117 (Gosnell Farms Ltd)	21.2 %
7	Pt. A	0.5	20-117-01 (J. Gosnell)	0.4
7	S Pt. A	10.1	20-118 (W. McMillan)	9.1
7	Pt. B	7.4	20-119 (H. Fleming)	6.4
7	Pt. B	6.4	20-122-01 (J. & J. Crane)	2.8
7	R.O.W.	2.8	80-107 (Chesapeake & Ohio Railway)	10.4
7	R.O.W.	2.6	80-108 (Orford Sand & Gravel Limited)	8.1
7	R.O.W.	1.3	2-560 (Hydro One Networks Inc)	2.2
				=====
TOTAL ASSESSMENT ON LANDS				60.6 %
				=====
McMillian Line		0.3	Municipality of West Elgin	0.4 %
McPherson Road (50%)		0.7	County of Elgin	4.0
				=====
TOTAL ASSESSMENT ON ROADS				4.4 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE OF THE</b> <b>Municipality of West Elgin</b>				<b>65.0 %</b>
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE</b> <b>LALONDE DRAIN</b>				<b>100.0 %</b>

## SCHEDULE 'D' - ASSESSMENT FOR MAINTENANCE (cont'd)

**HEPBURN, LALONDE & SHUNPIKER DRAINS****Municipality of Chatham-Kent****Community of Orford**

CON.	LOT	HECTARES AFFECTED	ROLL No. (OWNER)	PERCENTAGE OF MAINTENANCE COST
<b>HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)</b>				
<b>Municipality of Chatham-Kent</b>				
3	Pt. 15	2.8	3-001 (P. Roy)	1.1 %
3	N Pt. 15	0.4	3-017-25 (D. Wagner)	0.3
3	Pt. 16	6.4	3-005 (D. & R. Wagner)	5.1
4	Pt. 15	6.0	3-017-15 (D. Wagner)	4.7
4	SW¼ 16	20.2	3-018 (D. & R. Wagner)	16.0
4	SE¼ & S½ 17	38.8	3-019 (Shunpiker Farms Ltd.)	33.8
4	Pt. 17 & Pt. 18	2.4	3-056 (K. & K. Buchner)	34.6
				=====
TOTAL ASSESSMENT ON LANDS				95.6 %
				=====
Gesner Line		2.1	Municipality of Chatham-Kent	3.3 %
Unopened Rd. All.		0.4	Municipality of Chatham-Kent	0.3
Schweitzer Line		0.4	Municipality of Chatham-Kent	0.8
				=====
TOTAL ASSESSMENT ON ROADS				4.4 %
				=====
<b>TOTAL ASSESSMENT FOR MAINTENANCE IN THE HEPBURN DRAIN - CLOSED PORTION (Sta. 0+628 - Sta. 0+793)</b>				<b><u>100.0 %</u></b>

SCHEDULE OF NET ASSESSMENT  
HEPBURN, LALONDE & SHUNPIKER DRAINS

**Municipality of Chatham-Kent**  
**Community of Orford**  
(FOR INFORMATION PURPOSES ONLY)

Job No. 220070

June 14, 2021

\* = Non-agricultural

	ROLL NUMBER (OWNER)	TOTAL ASSESSMENT	GRANT	ALLOWANCES	APPROX. NET
<b>Municipality of Chatham-Kent</b>					
*	3-001 (P. Roy)	\$ 453.00	\$	\$	453.00
	3-017-25 (D. Wagner)	130.00	43.00		87.00
	3-005 (D. & R. Wagner)	2,071.00	690.00		1,381.00
	3-017-15 (D. Wagner)	1,942.00	647.00		1,295.00
	3-055 (W. Durer)	2,038.00	679.00	790.00	569.00
	3-018 (D. & R. Wagner)	6,536.00	2,179.00		4,357.00
	3-019 (Shunpiker Farms Ltd.)	28,188.00	9,396.00	70.00	18,722.00
*	3-057 (D. & J. Farr)	2.00			2.00
	3-056 (K. Buchner & K. Ferguson)	96,728.00	32,243.00	13,600.00	50,885.00
	3-056-12 (C. & D. Gilbert)	3,460.00	1,153.00	1,590.00	717.00
*	3-021 (R. Gysemans & T. Rudausky)	2,164.00			2,164.00
	3-205 (Entegrus Transmission Inc.)	989.00	330.00		659.00
*	Special Assessment	7,590.00			7,590.00
*	3-204 (Chesapeake & Ohio Railway Co.)	3,776.00			3,776.00
*	420-7-057-01 (Hydro One Networks Inc.)	3,112.00			3,112.00
*	Hydro One Networks Inc Special	24,500.00			24,500.00
*	McPherson Road (50%)	5,818.00			5,818.00
*	Special Assessment	10,300.00			10,300.00
*	Gesner Line	1,407.00			1,407.00
*	Unopened Rd. All.	160.00			160.00
*	Schweitzer Line	265.00			265.00
<b>Municipality of West Elgin</b>					
	20-117 (Gosnell Farms Ltd)	22,690.00	7,563.00	70.00	15,057.00
	20-117-01 (J. Gosnell)	454.00	151.00		303.00
	20-118 (W. McMillan)	11,480.00	3,827.00	890.00	6,763.00
	20-119 (H. Fleming)	6,648.00	2,216.00		4,432.00
	20-122-01 (J. & J. Crane)	2,875.00	958.00		1,917.00
*	80-107 (Chesapeake & Ohio Railway)	14,817.00			14,817.00
*	Special Assessment	17,580.00			17,580.00
*	80-108 (Orford Sand & Gravel Limited)	10,923.00			10,923.00
*	2-560 (Hydro One Networks Inc)	2,934.00			2,934.00
*	Special Assessment	14,340.00			14,340.00
*	McMillian Line	510.00			510.00
*	McPherson Road (50%)	5,820.00			5,820.00
*	Special Assessment	10,300.00			10,300.00
<b>TOTALS</b>		<b>\$ 323,000.00</b>	<b>\$ 62,075.00</b>	<b>\$ 17,010.00</b>	<b>\$ 243,915.00</b>