



Section 65: Changes in Assessment for the Robert Anderson Drain

Highway 77 Truck Service Inc.
The Municipality of Leamington

January 12, 2017

Project No. 16-120

January 12, 2017

The Municipality of Leamington
111 Erie Street North
Leamington, Ontario
N8H 2Z9

Mayor Paterson and Members of Council

Subject: Robert Anderson Drain
Changes in Assessment – Highway 77 Truck Service Inc.
In the Municipality of Leamington
Our File Reference 16-120

1.0 Authorization

Pursuant to Section 65(3) of The Drainage Act, 1990 (the Act), Chapter D.17, as amended 2010, the Municipality of Leamington appointed the firm of Baird AE to prepare a report for the Value of Benefit and Outlet Liability adjustments for recently merged parcels with Roll No. 680-03901.

This appointment considers “the nature or extent of the use of a drainage works by land assessed for the drainage works is subsequently altered” which is in accordance with Section 65(3) of the Act.

2.0 Purpose of the Report and Current Drainage Report

A truck service facility currently exists at 538 Hwy 77. The parcel at 530 Hwy 77 was recently purchased and merged with the existing property to form a 2.11 ha parcel now known as 538 Hwy 77.

Both the former 530 Hwy 77 and 538 Hwy 77 are currently assessed into the Robert Anderson Drain. The current drainage report on file for the Robert Anderson Drain is dated December 7, 1990, amended by the February 19, 1991 Court of Revision, and prepared by H.E. Regts, P.Eng.

Through a review of this drainage report, we have determined that the entire area of the merged parcel, being 2.11 ha, is assessed into the Robert Anderson Drain. Plans found in Appendix A illustrate the boundaries of the affected parcel.

3.0 Existing Drainage Conditions

Under a stormwater management report prepared in September 2007 by N.J. Peralta Engineering Ltd., a stormwater management pond was constructed with a direct outlet to the Robert Anderson Drain. The flows from the outlet are restricted to pre-development flows from the merged site using an orifice.

A stormwater management report dated November 29, 2016 prepared by Baird AE states that the existing pond and outlet with orifice will continue to restrict the flows to pre-development rates.

4.0 Allowable Release Rates and Stormwater Management

Through review of the stormwater management reports it was determined that the allowable release rate for the site was to be limited to the pre-development 1:2 year runoff rate up to and including a 1:100 year storm event. Under no circumstances should additional flows be allowed to enter the drain unless this condition is met.

Generally, the flows from the merged parcel will outlet into the drain at the northeast corner of the property. Providing that the outlet flow is limited to that described in the 2007 and 2016 stormwater management reports, we are of the opinion that the drain will not experience any negative effects due to the increased total flow volumes resulting from the development and merger.

Therefore, we have determined that the Robert Anderson Drain has sufficient capacity to accept the increased flow volume from the 2.11 ha property.

5.0 Assessment for Increased Flow Volumes

Should the Town be prepared to approve the increased flow volumes from the subject lands into the Robert Anderson Drain, the Municipality may appoint an Engineer to update the assessments with said work being charged entirely to the owners of the affected lands in accordance with Section 65. (3) of the Act.

6.0 Assessment Adjustments for Increased Total Flow Volumes

We would recommend that the affected parcel have the Value of Outlet and Total Assessment amounts adjusted to reflect the increased total flow volume from the merged parcel. The Value of Outlet charges shall be increased based on the increased flow volumes from the already assessed portions. The Value of Benefit amount shall remain equal to zero.

Based on the existing impermeable areas, we would recommend that the following changes be made to the Robert Anderson Drain Ownership & Assessment Schedule within the current by-law:

Original					Updated				
Description	Affected Area (ha)	Value of Benefit (\$)	Value of Outlet (\$)	Total Value (\$)	Description	Affected Area (ha)	Value of Benefit (\$)	Value of Outlet (\$)	Total Value (\$)
270036 - Elachkar	0.4	0	77.41	77.41	Roll No. 680-03901 538 Hwy 77 - Highway 77 Truck Service Inc.	2.11	0	806.61	806.61
270037 - Moreland	0.15	0	57.28	57.28					
270038 - Moreland	0.36	0	139.34	139.34					
270039 - Moreland	0.11	0	41.8	41.80					
27003901 - Hasan	1.08	0	137.79	137.79					
Total Assessment		30,636	38,853	69,489			30,636	39,206	69,842

In accordance with Section 65. (3) of the Act, we would recommend that the values in the current Ownership & Assessment Schedule be amended as shown above for the affected parcel.

We would further recommend that the cost of future maintenance work be assessed on a pro-rata basis in accordance with the current Ownership & Assessment Schedule and the information presented above.

7.0 Subsequent Connection Charges

We find that the area being drained to the Robert Anderson Drain from the affected parcel will not be increased as a result of the development and merger. Generally, an increase in parcel area results in buy-in charges to the affected parcel for the additional area being brought into the watershed based on the remaining life of any recent work carried out on the drain. We have determined that the total affected area of the two parcels before and after the merger remains the same at 2.11 ha. Therefore, there is no additional area that requires a subsequent connection to the drain and no buy-in charges are required. As described above, the stormwater management system must restrict the outflow to the 1:2 year pre-development rate. Providing that stormwater management is implemented as designed, the increase in flow volumes will not adversely impact the Robert Anderson Drain.

8.0 Summary and Recommendations

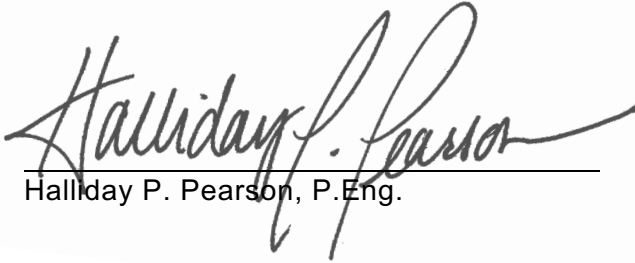
We have determined that the increased flow volumes generated by lands with Roll No. 680-03901 will not adversely affect the Robert Anderson Drain if the release rate is limited to the 1:2 year pre-development runoff calculated with a runoff coefficient of 0.15.

We have determined the updated Values of Outlet to be paid by the subject lands representing the increased flow volumes from the developed and merged site.

Based on the above information, we would recommend that the Municipality of Leamington assess 100.0% of the costs associated with preparation of this report to lands owned by Highway 77 Truck Service Inc., Roll No. 680-03901.

All of which is respectfully submitted.

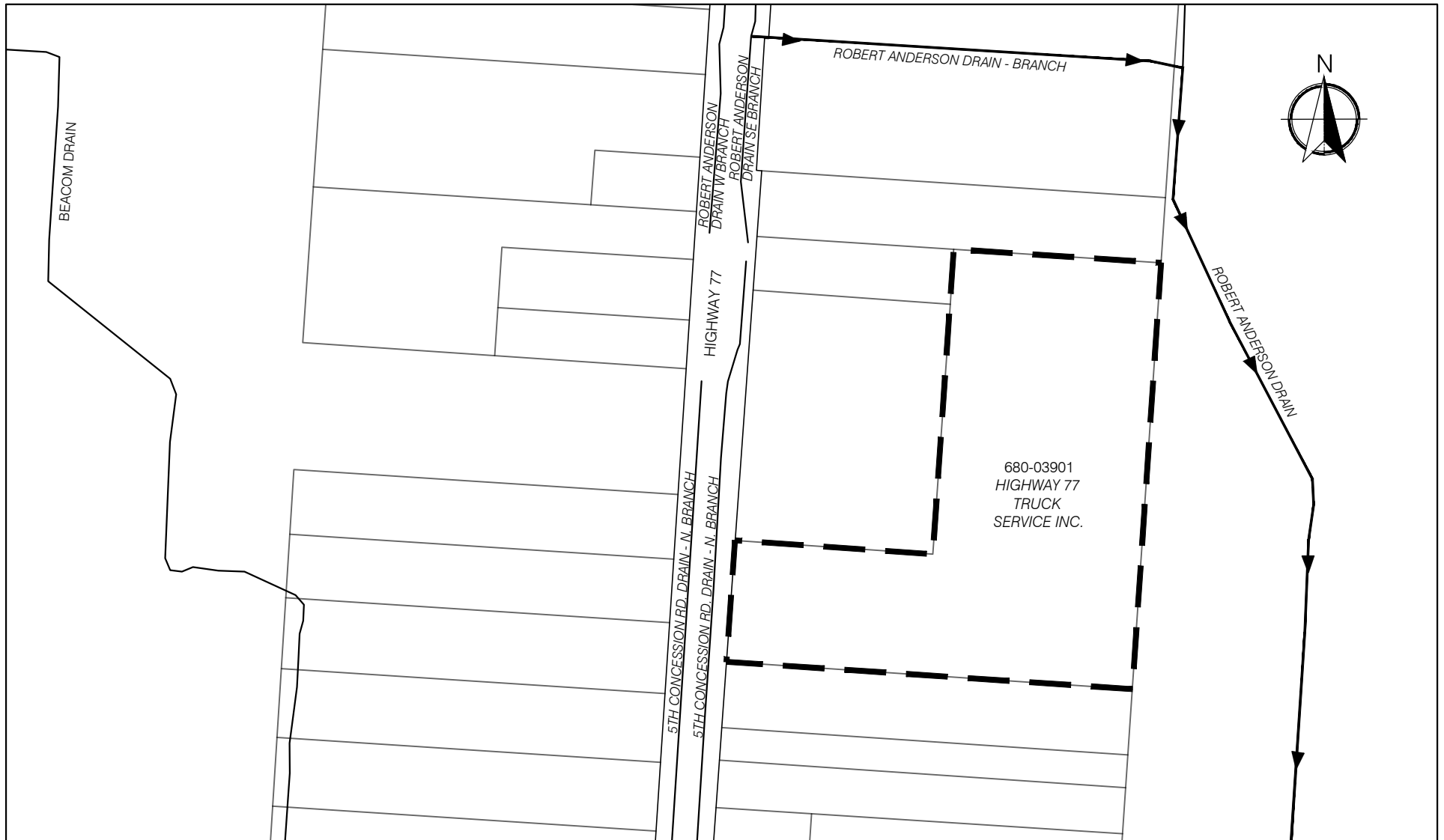
BAIRD AE
102-27 PRINCESS STREET
LEAMINGTON, ONTARIO
N8H 2X8



Halliday P. Pearson, P.Eng.



APPENDIX A



27 PRINCESS STREET, SUITE #102
LEAMINGTON, ONTARIO
N8H 2X8

1000 - 267 PELISSIER STREET,
WINDSOR, ONTARIO
N9A 4K4

PROJECT TITLE:

SECTION 65 - ROBERT ANDERSON DRAIN

538 HIGHWAY 77, LEAMINGTON ON.

SHEET TITLE:

DRAINAGE AREA PLAN

SCALE:

N.T.S.

DATE:

JAN. 12, 2017

SHEET No. :

1 OF 1

PROJECT No. :

16-098