



Changes in Assessment: Essex-Kent Townline Drain

Section 65 (3)

Roll No. 550-06050

Municipality of Leamington

January 25, 2018

Project No. 17-196

January 25, 2018

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

Mayor Paterson and Members of Council

Subject: Essex-Kent Townline Drain
Changes in Assessment
419 Kent Road 1
Roll No. 550-06050
In the Municipality of Leamington
Our File Reference 17-196

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 adjustments to the Value of Benefit and Outlet Liability for an increase in flow volumes due to development of certain parcels draining to the Essex-Kent Townline Drain. 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.

The subject parcels are described below:

Civil Address	Roll Number	Owner
419 Kent Road 1	550-06050	1594052 Ontario Inc.
417 Kent Road 1	550-06000	Donna Jean Hyatt
2420 Hickson Road	550-05900	Alfred & Jessie Matthies

2.0 Purpose of the Report and Current Drainage Reports

1594052 Ontario Inc. (Roll No. 550-06050) is severing and merging 0.440 acres from the farm parcel owned by Alfred & Jessie Matthies (Roll No. 550-05900) and merging the parcel owned by Donna Jean Hyatt (Roll No. 550-06000) to increase the total lot area of 550-06050 to 1.63 acres. Each of the three listed parcels is assessed into the Essex-Kent Townline Drain.

The current drainage report on file for the Essex-Kent Townline Drain is dated July 11, 1969 and was prepared by C.G.R. Armstrong, P.Eng.

3.0 Existing Drainage Conditions

We have established the area affected by this report and have prepared plans, located in Appendix A, illustrating the boundaries of the affected lands.

Through a review of the current drainage report and the Municipality's maintenance schedule, we have determined the areas which are assessed into the Essex-Kent Townline Drain:

Roll No.	Total Parcel Area (ac)	Essex-Kent Townline Drain Affected Hectares (ac)
550-05900	21.36	21.36
550-06000	0.29	0.29
550-06050	0.89	0.71

As described above, a portion of the parcel 550-05900 is being severed and merged with 550-06050. Roll No. 550-06000 is also being merged with 550-06050.

4.0 Allowable Release Rates and Stormwater Management

A stormwater management report will be required to be prepared for this development. All water shall be released to the Essex-Kent Townline Drain.

A stormwater management strategy was designed in 2013 but not implemented completely for parcel 550-06050. As a result, for the purposes of determining a pre-development release rate, we have assumed that the subject parcels are grassed and cultivated agricultural lands. Therefore, for the merged 1.63 acre parcel, the pre-development release rate was calculated using a runoff coefficient of 0.15. The flow from the merged parcels shall be restricted to the pre-development 1:2-year release rate up to and including the 1:100-year storm event. Under no circumstances should additional flows be allowed to enter the drain unless this condition is met.

Providing that the outlet flows are limited to that described in the forthcoming stormwater management report for the development, we believe that the increased flows will have no adverse effect on the capacity of the drain.

5.0 Assessment for Increased Flow Volumes

Should the Municipality be prepared to approve the increased flow volumes from these lands into the Essex-Kent Townline 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.

The increased Value of Outlet charges shall be based on the increased flow volumes from the already assessed portions.

6.0 Assessment Adjustments for Increased Total Flow Volumes

We would recommend adjusting the Value of Benefit, Value of Outlet and Total Assessment amounts for the Essex-Kent Townline Drain to reflect the increase in flow volumes generated by the merged parcel.

Based on the existing and proposed impermeable areas, we would recommend that the following changes be made to the Schedule of Assessment dated July 11, 1969 for the Essex-Kent Townline Drain:

Parcel	Original				Parcel	Updated			
	Affected Area (ac)	Value of Benefit (\$)	Value of Outlet (\$)	Total Value (\$)		Affected Area (ac)	Updated Value of Benefit (\$)	Updated Value of Outlet (\$)	Updated Total Value (\$)
Alfred & Jessie Matthies 550-05900	21.36	590	615	1,205	1594052 Ontario Inc. 550-06050	20.92	578	602	1,180
Donna Jean Hyatt 550-06000	0.29	54	56	110		0	0	0	0
1594052 Ontario Inc. 550-06050	0.71	28.8	30	58.8		1.63	108	113	221
Total Assessment		4,204	4,094	8,298					8,325

In accordance with Section 65. (3) of the Act, we would recommend that the values in the July 11, 1969 Schedule of Assessment and the Municipality's maintenance schedule be amended as shown above for the affected parcels. Further we would recommend that the above noted updated values be collected from the affected parcels by the Municipality on a pro-rata basis only at the time of future maintenance or repairs to the Essex-Kent Townline Drain.

8.0 Subsequent Connection Charges

We have determined that the area being drained to the Essex-Kent Townline Drain from the subject parcels will increase. As a result of stormwater management, an additional 0.18 acres from parcel 550-06050 will now drain to the subject drain. Approximately 0.71 acres of parcel 550-06050 was previously assessed; however, now the area of the entire parcel will be assessed to the subject drain. A buy-in charge will be levied against the parcel for the area being added to the watershed based on recently completed maintenance.

We have determined that the total area of the affected parcels now utilizing the Essex-Kent Townline Drain equals 117.64 acres which is more than the 117.46 acres that was originally assessed. Based on the increase in drainage area, there should be an assessment increase of \$24.37. This amount shall be collected from parcel 550-06050 and used toward future maintenance of the drain pursuant to Section 65 of the Act.

9.0 Summary and Recommendations

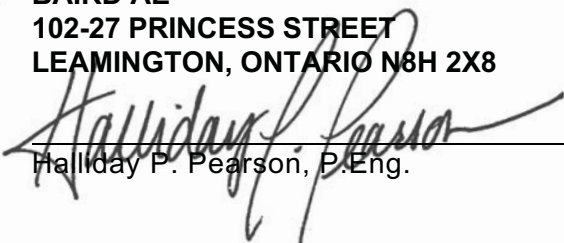
We have determined that the increased flow volumes generated by the merging of parcels 550-06000, 550-06050 and a portion of 550-05900 will not adversely affect the Essex-Kent Townline Drain if the release rate is limited to the 1:2-year pre-development runoff calculated with a runoff coefficient of 0.15.

We have determined the updated assessments levied against the subject parcels. These amended values represent the change in flow volume generated by the merger of the parcels that outlet to the Essex-Kent Townline Drain.

Based on the above information, we would recommend that the Municipality of Leamington assess 100% of the costs associated with preparation of this report to parcel 550-06050.

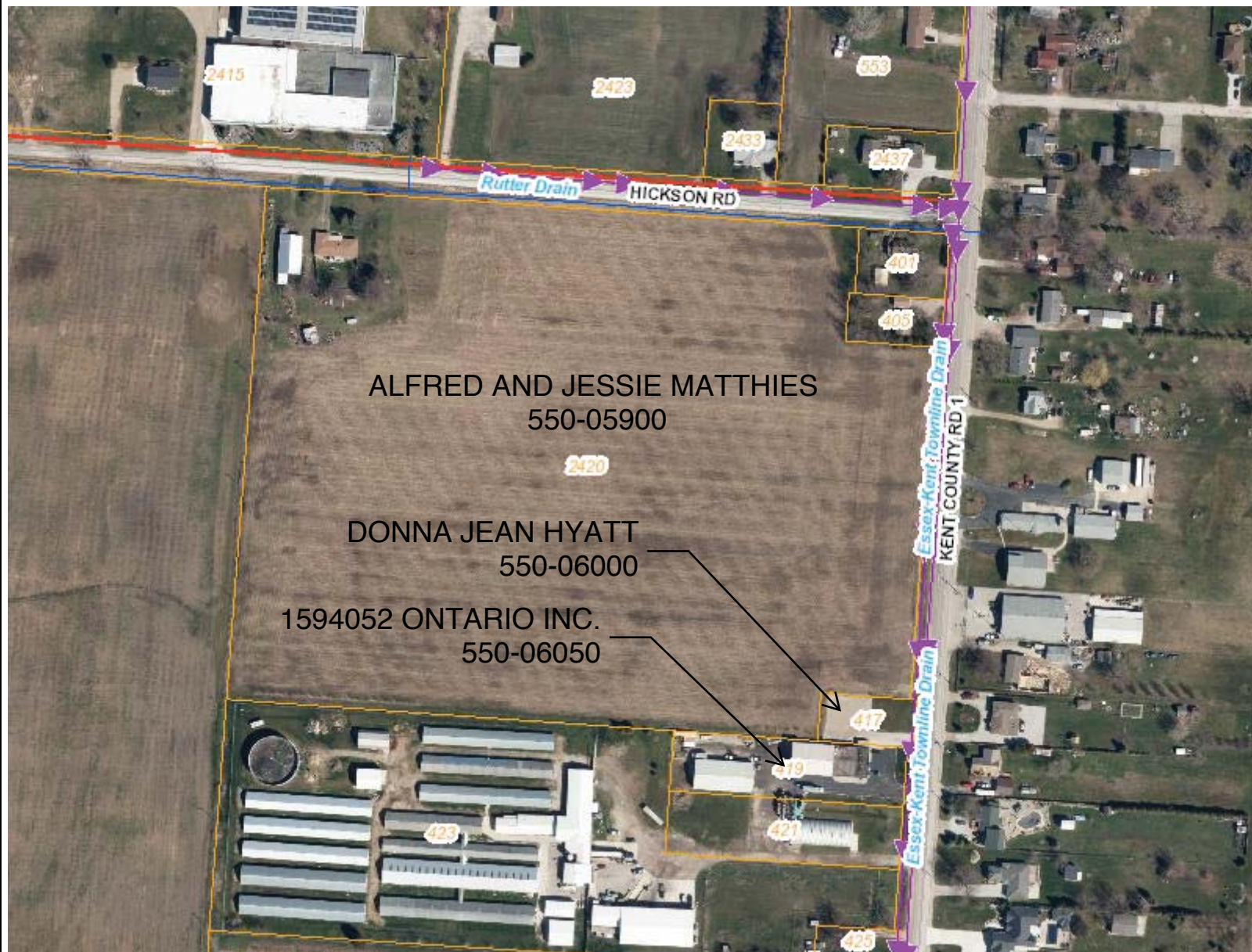
All of which is respectfully submitted.

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


H. P. Pearson, P. Eng.



APPENDIX A



Legend

- Swales
- ERCA Drains
 - Channelized
 - Natural
 - Tiled
 - BreakWall
- LTVCA Drains
 - Channelized
 - Natural
 - Tiled
- Roadside Ditch
 - Channelized
 - Tiled
- Private Drain Catchbasins
- Private Drains
- ERCA Species at Risk
 - No SAR
 - SAR PRESENT
- LTVCA Species at Risk
 - No SAR
 - SAR Present
- Combination Fittings
- Combination Manholes
- Combination Mains
- Combination Private Connectic
- Sanitary Fittings
- Sanitary Manholes

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This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

LEGEND	
	GRASS AREA
	ASPHALT SURFACE
	GRAVEL SURFACE
	CONCRETE SURFACE

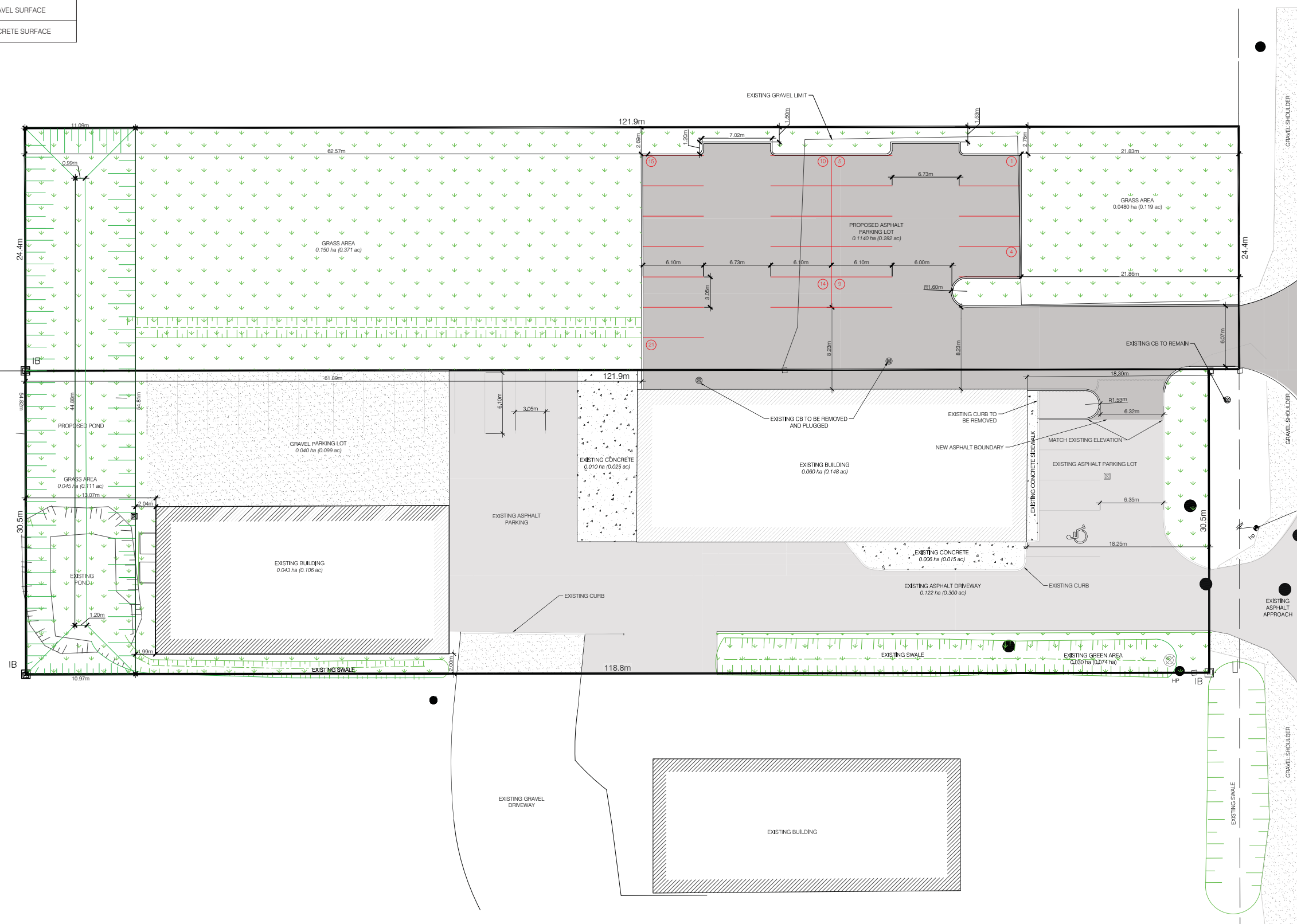
BENCHMARK
TOP NUT OF FIRE HYDRANT: 180.7



KENT COUNTY ROAD 1

BENCHMARK
NAIL IN HP: 180.654

CONCESSION 4 LOT 24



DATE JAN 24, 2018	DATE	REVISIONS
MATTHEW J. BAIRD, P.ENG.		



PROJECT TITLE: TAYLOR FISH (POLE BARN) 419 KENT COUNTY ROAD 1, WHEATLEY (MUNICIPALITY OF LEAMINGTON)
SHEET TITLE: SITE PLAN

DATE: FEB. 13, 2018	PROJECT NO: 17-168
SCALE: 1:200	
DRAWN BY: D.B.	SHEET NO: 1
CHECKED BY: T.L.	

SHEET NO: