

## ARBORIST REPORT - SPA

Project: Elgin Park Development, Cobourg  
Prepared For: Northumberland County  
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Date of Inventory: June 5, 2020  
Date of Report: April 6, 2021

### INTRODUCTION

New Leaf was retained by BBA and Northumberland County to carry out tree inventory and preservation plans for the above noted project. Tree inventory include the study limits of Lots 84 – 95, Registered Plan No. 227 in the Town of Cobourg, County of Northumberland. Location of existing vegetation is based on survey by J.D.Barnes Ltd. dated 5/14/2020. The summary in this report is based on site plan application, grading and servicing drawings provided by BBA and MGM Consulting Inc.

### TREE REMOVAL AND COMPENSATION SUMMARY

- Refer to Tree Preservation Plan TP1 dated April 6, 2021
- Inventory includes 63 trees
- 44 trees are over 25cm diameter at breast height (DBH)
- 19 trees are under 25cm DBH and include suckers and shrubby trees
- The Town of Cobourg requires that tree compensation be provided for all existing trees, with a caliper of 300mm diameter at breast height (DBH) and greater, to be removed from the subject site for the purpose of land development
- Removals will be determined based on final site plan layout and limits of excavation, grading and servicing.
  - o Preliminary removals include 34 trees over 30cm DBH
  - o Preservation includes 10 trees; Trees # 1-7 along the west edge and Trees # 27, 29 & 30 along the east edge
- Tree compensation calculations are outlined in this report. Compensation planting should be provided on the subject site where space allows.
- Credit to all proposed new tree planting as part of the site overall landscape design will be given using an aggregate caliper method with the net difference to be applied as a cash-in-lieu payment. Any cash-in-lieu payment shall be provided by the developer for the quantity of trees not planted on site at the levy unit rate of \$350 per 50mm tree.
- The Municipal Tree Levy amount will not be considered as part of the tree replacement compensation as this would be implemented in a new development regardless of if there were trees on the site or not
  - o The Tree Planting Levy requires trees planted along streets and road allowances to be imposed in the form of a levy as a condition of site plan agreement. The total number of required trees for all development shall be based on a formula which recognizes that a 'street tree' should be provided every forty (40) feet (12.2 metres) of linear frontage.
  - o The levy equates to approx. 19 trees for the subject site

Canopy compensation is calculated using the following:

- Trees with a caliper of 300mm DBH at a compensation ratio of 1:1
- Trees with a caliper of 310mm to 400mm DBH at a compensation ratio of 2:1
- Trees with a caliper of 410mm to 500mm DBH at a compensation ratio of 3:1
- Trees with a caliper of 510mm to 740mm DBH at a compensation ratio of 4:1
- Trees with a caliper of 750mm DBH or greater at a compensation ratio of 5:1
  
- Quantity is adjusted by Condition Rating
  - o Good x 1
  - o Good-Fair x 0.75
  - o Fair x 0.5
  - o Fair-Poor x 0.25
  - o Poor x 0.25
  - o Dead x 0

Table 1 summarizes the size, condition and compensation calculation for existing trees over 30cm DBH proposed for removal.

#### **REPLACEMENT PLANTING**

There are limited opportunities for replanting on the site due to parking and road widening setback requirements. It is anticipated that street trees will be planted by the Town under the Tree Planting Levy. The Landscape Plan dated April 6, 2021 includes the planting of 13 deciduous trees at 60mm caliper. Planting layout and species are subject to the approval from the Town of Cobourg.

TABLE 1 - TREE COMPENSATION – BASED ON REMOVAL OF 34 SITE TREES

SIZE (DBH)	CONDITION					Subtotal
	Good (1x condition factor)	Good/Fair (.75x condition factor)	Fair (.5x condition factor)	Fair/Poor (.25x condition factor)	Poor (.25x condition factor)	
30cm	1	0	0	0	0	1
Adjusted	1	0	0	0	0	1
					<b>1:1 Repl.</b>	<b>1</b>
31 to 40	4	5	2	2	0	13
Adjusted	4	3.75	1	0.5	0	9
					<b>2:1 Repl.</b>	<b>18</b>
41 to 50	6	1	2	3	0	12
Adjusted	6	0.75	1	0.75	0	8.5
					<b>3:1 Repl.</b>	<b>25.5</b>
51 to 74	3	2	1	1	0	7
Adjusted	3	1.5	0.5	0.25	0	5.25
					<b>4:1 Repl.</b>	<b>21</b>
75cm +	0	1	0	0	0	1
Adjusted	0	0.75	0	0	0	0.75
					<b>5:1 Repl.</b>	<b>3.75</b>
TOTAL TREE REMOVALS						<b>34</b>
TOTAL COMPENSATION						<b>69.25</b>
PROPOSED ON-SITE TREE PLANTING						<b>13</b>
TREE PLANTING LEVY						<b>56.25</b>

**CONCLUSION**

Based on a levy unit rate of \$350 per 50mm tree, the resulting levy is **\$19,687.50**. This calculation shall be reviewed and confirmed with the Town for final compensation.

Refer to current Tree Preservation Plan TP-1 for full tree inventory and Landscape Plan L1 for proposed planting.

Existing Species / Size composition:

- 13 Norway maple (20-55cm DBH)
- 13 honeylocust (28 55cm DBH)
- 8 sugar maple (38 – 80cm DBH)
- 7 Austrian pine – 30-55cm DBH
- 3 Manitoba maple (multi-stem 30-40cm DBH)
- 3 black walnut (15 – 32cm DBH)
- 3 elm (18 – 35cm DBH)
- 2 linden (37/38cm DBH)
- 2 serviceberry (10/18cm DBH)
- 2 eastern red cedar (20/40cm DBH)
- 2 eastern white cedar (20/30cm DBH)
- 2 fir (15/39cm DBH)
- 1 cedar hedge (~5-10cm DBH)
- 1 flowering crabapple (23cm DBH)
- 1 lilac hedges
- invasive buckthorn suckers along the chain link fence