Appendix III

325 King Street, Niagara-On-The-Lake, Ontario Arborist Report: Tree Inventory and Preservation Plan

March 3, 2023

Prepared for:

Two Sisters Properties
122 Romina Drive
Concord, ON L4K 4Z7

Prepared by:

Stantec Consulting Ltd.

in Association With:

Buchanan Expert Tree Care Inc.

160940942

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Prepared by _____
(signature)

Bill Buchanan, HBSc Forestry
ISA Board Certified Master Arborist NY-0392B

Reviewed by _____
(signature)

David Waverman, CAHP, OALA, CSLA
Senior Landscape Architect

BUCHANAN
expert tree care

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1.0 INTRODUCTION

Stantec and Buchanan Expert Tree Care (BETC), were retained by Two Sisters Properties (the Property Owner) to prepare an Arborist Report including a Tree Inventory and Preservation Plan for the property located at 325 King Street (the Study Area), in the Town of Niagara-on-the-Lake, Ontario.

All tree inventory and assessments were conducted by Bill Buchanan, HBSc Forestry, ISA Board Certified Master Arborist NY-0392B. Graphic preparation was provided by Stantec. The tree inventory led by Bill Buchanan, ISA Board Certified Master Arborist was conducted on January 3, 2023.

2.0 METHODOLOGY

2.1.1 Tree Inventory Methodology

At the request of the Town, the following information on the inventoried trees was collected and appears graphically on the tree inventory plans; as text in the tree inventory charts, and as photographs, found in Appendices B, C and D respectively.

1) **Tree species**, scientific and common name.

2) **Diameter at Breast Height (DBH)** (metric). Measurement of the trunk at 1.4m above grade. Expressed as diameter in centimetres.

3) **Health Rating System**: The following health rating system has been used based on visual inspection of above ground parts of the trees.:

   0 – Dead, hazardous, or uprooting. Tree exhibits no signs of life. Needs removal.

   1 – Declining or diseased tree. Too weak to survive construction. Recommend removal.

   2 – Relatively healthy but less vigorous. Will struggle with construction.

   3 – Healthy and vigorous. Defects if present are minor (e.g., twig dieback, small wounds) Good chance of survival with construction depending on proximity.

4) **Photographic Record:** A photographic record of each individual tree was recorded and can be found in Appendix C.

2.1.2 Town of Niagara-on-the-lake Tree Inventory Requirements

The methodology used for the tree inventory was adopted from the tree inventory requirements provided by the Town of Niagara-on-the-lake. Refer to Appendix A for the full list of requirements.

3.0 DESCRIPTION OF THE STUDY AREA.

3.1 325 KING STREET

The property at 325 King Street is a square shaped parcel bordered by Regent Street to the west, Centre Street to the south, King Street to the east, and Gage Street to the north, The property consists of mature coniferous and deciduous tree species of various health conditions, one irregularly shaped school building, a large grassed area, paved play area, semi-circle seating area, parking lot, underground railroad marker, and historical oak tree marker.

4.0 SUMMARY OF FINDINGS

This section summarizes the findings of the tree inventory conducted on January 3, 2023, by Bill Buchanan, HBSc Forestry, ISA Board Certified Master Arborist with specific attention to tree 28. The detailed tree inventory chart is located in Appendix B, with information pertaining to tree species, DBH, health rating, ownership, tree removals, and additional comments.

Table 1: Summary of Inventory

Item	Description	Quantity
1	Total Number of Individual Trees Inventoried	46
2	Total Number of Trees Inventoried on Adjacent Properties	8
3	Total Number of Dead Trees on Subject Properties	1
4	Total Number of Dead Trees on Adjacent Properties	0

Table 2: Summary of Preservation

Item	Description	Quantity
1	Total Number of Individual Trees to be Preserved	26
2	Total Number of Individual Trees to be Transplanted	1
3	Total Number of Individual Trees to be Removed	19

4.1 ASSESSMENT OF TREE 28 – RED OAK

Based on observations on January 3, 2023, by Bill Buchanan, HBSc Forestry, ISA Board Certified Master Arborist assessment of tree 28, the tree is in a state of decline due to age and environmental factors. The explanation is as follows:

1. Red Oak (*Quercus rubra*) has a biological life expectancy of about 350 years. It is the opinion of the Master Arborist that the red oak tree is over 300 years old. A more accurate age can be determined, if required, by using an increment bore to count annual growth rings. Due to its age, the tree is in a state of decline called 'senescence'. It is similar to a person at the age of 100 and biological functions start failing which lead to natural death.

2. Signs of this decline are evident in the lack of twig elongation throughout the canopy. Also, the top outermost region of the canopy is developing dead limbs. This is typical of senescence because that is the farthest part of the tree that water needs to travel. With biological functions failing, that part of the tree suffers.

3. There are significant dead limbs throughout the canopy which is expected for a tree this age and a major crossing limb (50cm diameter) near the main crotch of the tree causing major decay.

These items are more of an indication of the lack of care and maintenance that has occurred by the previous owner responsible for the health of the tree.

4. Lastly, there are signs of Phytophthora canker on the main trunk of the tree. This is also not uncommon but is another reason that this tree will have difficulty staying alive and healthy for any significant amount of time.

In summary, it is in the opinion of the master arborist that this tree will be short lived with or without Buchanan Expert Tree Care's involvement, but will be slightly longer with some care. Any and all construction, grade changes, and especially slight changes in the natural water table will greatly affect the tree's longevity.

5.0 TREE PRESERVATION, PROTECTION & MANAGEMENT

This section outlines the prescriptions for tree preservation, protection and maintenance pre-construction, during construction, and post construction. This includes the required tree removals, pruning, fertilizing, root pruning and protection, mulching, and installation of tree protection hoarding. All tree maintenance shall be carried out to the most current arboricultural standards and only by qualified arborists who are certified to practice in the province of Ontario. Work completed on site will adhere to the following by-laws:

1. Town By-law 4571-12, *A By-law to Authorize and Regulate the Planting, Care, Maintenance and Removal of Trees on the Town of Niagara-on-the-Lake's Property* (the "**Public Tree By-law** ").

2. Town By-law 5139-19, *A By-law to Regulate the Destruction or Injuring of Trees on Private Property in the Urban Areas of the Municipality and to Rescind By-law 5106-18* (the "**Private Tree Bylaw**").

Trees recorded in the inventory are assigned one of two levels of protection and/or preservation/removal:

1. **Preserve, Protect & Maintain**

Includes protection with tree preservation hoarding, as well as pre- and post-construction arboricultural works

2. Remove

Due to site or development constraints, tree condition or location, retention is not possible or desirable

5.1 TREE PROTECTION BARRIERS: FENCING AND HOARDING

All trees scheduled to be Preserved, Protected & Maintained or Preserved & Protected shall have their critical rooting zones protected with the installation of tree protection barriers to form a Tree Protection Zone (TPZ).

Tree protection barriers shall be installed as per International Society of Arboriculture standards.

The tree protection barriers shall be installed at the approved location and shall be maintained in their original location and condition until all construction activities within the site have ceased and all equipment is removed from the site. No equipment or material storage, flushing of fuel or washing of equipment is allowed within the TPZ

5.2 TREE MAINTENANCE

Specifications for tree maintenance are outlined in this section. This includes maintenance prior to construction, remedial action during construction and post-construction maintenance.

5.3 PRE-CONSTRUCTION MAINTENANCE

Prior to any construction works commencing, all trees scheduled to be Preserved, Protected & Maintained shall undergo preventative maintenance. This may include:

i. Pruning

Trees shall be properly pruned to encourage healthy, vigorous growth. This includes the removal of deadwood, and crown cleaning and thinning. Additionally, any branches or limbs found to interfere with the proposed construction works shall be removed at this time to prevent improper pruning or mechanical injury.

ii. Root Bio-stimulants

The critical rooting zones specified to be protected with tree protection hoarding shall be deep root bio-stimulated to assist the tree in mitigating any possible impacts or stresses caused by the proposed construction. A suspension formulation of sea kelp hormonal bio-stimulant with a complete micronutrient package shall be used. Delivery of the bio-stimulant formulation shall be by high pressure injection using water as a medium.

5.4 TREE MAINTENANCE DURING CONSTRUCTION

During the construction phase of development, mitigation of problems caused by excavation and other construction activities must be addressed. This shall include:

i. Excavation Monitoring & Root Pruning

During construction, any excavation that will affect the critical rooting zones of a tree shall be monitored by a certified arborist. If, during the excavation, roots are injured or cut, the arborist shall prune or cut the injured root with a sharp implement. This will encourage callous formation and adventitious root sprouting.

ii. Irrigation During construction

Any trees that are subject to drought conditions shall have their critical root zones watered to maintain a moist/fresh moisture regime.

iii. Accidental Damage to Trees

If, during any phase of construction, damage occurs to any trees that are scheduled to be preserved, it is the responsibility of the contractor to immediately notify the Consulting Arborist. The consulting arborist shall prescribe the remedial works which shall commence immediately and at the owner's expense.

5.5 POST-CONSTRUCTION MAINTENANCE

Once construction activities are completed, any required remedial works shall be prescribed by the consulting arborist. This will include:

i. Post-Construction Inspection

Evaluation of the current condition of preserved trees should be conducted. This will include examination of the critical root zone, examination of the tree for any mechanical injury and overall health.

ii. Removal of Tree Protection Barriers

Upon the approval of the Town of Niagara of the Lake, all tree protection barriers can be removed

5.6 TREE 28

As a result of the assessment denoted in Section 4.1 of this report, extra caution will be taken during preservation, protection, and maintenance measures for tree 28. For example, the tree protection zone will be located at the dripline or as near as possible with respect to required construction.

6.0 DISCLAIMER

The assessment of the trees presented within this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay, evidence of insect presence, discoloured foliage, the general condition of the trees and the surrounding site, as well as the proximity of property and people.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour is constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

This report was completed prior to the finalization of the Grading Plan. Final preservation and removal recommendations for trees will determined upon completion of final Grading and Composite Utility Plans.

While reasonable efforts have been made to ensure the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behavior of any single tree or group of trees in all circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure if provided with the necessary combinations of stresses and elements. This risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

APPENDIX A:
Town of Niagara-On-The-Lake List of Tree Inventory Requirements

Original List of Tree Inventory Requirements from the Town of Niagara-on-the-Lake

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TERMS OF REFERENCE

Given this history and context, we are looking for an Arborist Report and Tree Inventory that includes:

1. *Trees on adjacent private and municipal lands that are within 6 m of the Subdivision Property boundary.*
2. *Identification and use of the minimum DBH for trees to be surveyed as per ISA standards. Survey all trees that meet that standard. Include DBH in Tree Inventory Chart.*
3. *DBH in metric.*
4. *An indication as to whether tree canopies shown are conceptual or accurate.*
5. *A Health Rating System based on the tree health in its current condition.*
6. *A Tree Inventory that identifies and differentiates trees proposed for removal due to poor health v. the proposed development.*
7. *Photos sufficient to assess tree character and the basis for the health rating assigned.*
8. *The dates for site visits or visual inspections.*

APPENDIX B:
Tree Inventory Charts

Tree #	Common Name	Botanical Name	DBH	Health Rating	Trees to be Removed	Ownership	Comments	Additional Removal Comments
1	Norway Spruce	*Picea abies*	66	3		Private	healthy	
2	White Mulberry	*Morus alba*	18	2		Private	multi-stem volunteer recommend removal/growing into fence	
3	White Mulberry	*Morus alba*	22	2		Private	multi-stem volunteer recommend removal/growing into fence	
4	White Pine	*Pinus strobus*	56	2		Private	Poor colour in foliage low growth rate	
5	White Pine	*Pinus strobus*	34	2		Private	Poor colour in foliage low growth rate	
6	Silver Maple	*Acer saccharinum*	86	2		Private	poor canopy structure/some decline	
7	White Pine	*Pinus strobus*	40	2		Private	Poor colour in foliage low growth rate	
8	White Pine	*Pinus strobus*	58	2		Private	Poor colour in foliage low growth rate	
9	White Pine	*Pinus strobus*	50	2		Private	Poor colour in foliage low growth rate	
10	White Pine	*Pinus strobus*	52	2		Private	Poor colour in foliage low growth rate	
11	Sugar Maple	*Acer saccharum*	68	3		Private	good health	
12	White Mulberry	*Morus alba*	22	2	X	Private	volunteer - remove	
13	Red Oak	*Quercus rubra*	10	3	*TRANSPLANT*	Private	small/tree is transplantible with spade	
14	White Ash	*Fraxinus americana*	14	2	X	Private	volunteer (not planted) /remove	
15	Silver Maple	*Acer saccharinum*	104	1	X	Private	poor structure/major cavities/declining - remove	Owrership to be determined. Recommended removal due to health.
16	Silver Maple	*Acer saccharinum*	102	1	X	Private	poor structure/major cavities/declining - remove	Owrership to be determined. Recommended removal due to health.
17	Norway Spruce	*Picea abies*	68	3		Private	good health	
18	Norway Spruce	*Picea abies*	44	1	X	Private	good health/major base wound/possible removal	
19	Norway Spruce	*Picea abies*	64	3		Private	good health	
20	Norway Maple	*Acer platanoides*	48	2		Private	decent health poor twig growth	
21	Norway Maple	*Acer platanoides*	58	2		Private	decent health poor twig growth	
22	Norway Maple	*Acer platanoides*	50	2		Private	decent health poor twig growth	
23	Red Oak	*Quercus rubra*	58	3		Private	good health	
24	Norway Maple	*Acer platanoides*	58	1	X	Private	poor structure/declining	Owrership to be determined. Recommended removal due to health.
25	Red Oak	*Quercus rubra*	56	3	X	Private	good health	
26	Red Oak	*Quercus rubra*	24	3	X	Private	good health	
27	Norway Maple	*Acer platanoides*	36	2		Private	poor twig growth	
28	Red Oak	*Quercus rubra*	132	1		Private	300yrs old/major deadwood/phytopthora/major leaders contain multi-stem/poor twig growth/elongation multiple years	
29	Silver Maple	*Acer saccharinum*	106	1	X	Public	major cavities/declinging/poor health	
30	Yew	*Taxus canadensis*	24	3		Private	healthy/ old	
31	Norway Maple	*Acer platanoides*	68	1	X	Private	poor health/multi-stem	Owrership to be determined. Recommended removal due to health.
32	Silver Maple	*Acer saccharinum*	122	1	X	Private	declining/cavities/multi-stem/remove	Owrership to be determined. Recommended removal due to health.
33	Sycamore	*Platanus occidentalis*	60	2		Private	major trunk crack/healthy	
34	Norway Maple	*Acer platanoides*	34	1	X	Private	poor health/understory tree with Sycamore/ remove	
35	White Ash	*Fraxinus americana*	66	0	X	Private	dead/ remove	
36	White Pine	*Pinus strobus*	52	1	X	Private	poor colour / low growth rate	
37	Silver Maple	*Acer saccharinum*	72	2	X	Private	poor structure/multi-stem	
38	Blue Spruce	*Picea pungens*	34	3	X	Private	good health	
39	Norway Maple	*Acer platanoides*	40	2	X	Private	poor structure/multi-stem	
40	Basswood	*Tilia americana*	82	2		Public	multi-stem/trunk wounds/poor structure	
41	Basswood	*Tilia americana*	68	2		Public	multi-stem/trunk wounds/poor structure	
42	Silver Maple	*Acer saccharinum*	116	2		Public	poor structure/cavities	
43	Sugar Maple	*Acer saccharum*	18	3		Public	young/healthy	
44	Silver Maple	*Acer saccharinum*	96	1	X	Public	multiple cavities/recently pruned/declining	Owrership to be determined. Recommended removal due to health.
45	Sycamore	*Platanus occidentalis*	32	3		Public	young/generally healthy	
46	Silver Maple	*Acer saccharinum*	108	1	X	Public	multi leaders/multiple cavities/declining	Owrership to be determined. Recommended removal due to health.

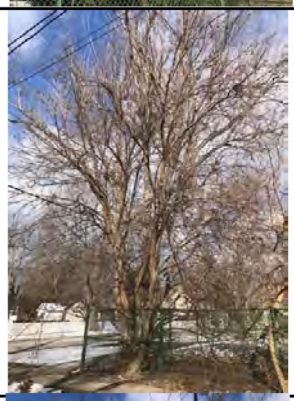
Health Rating:

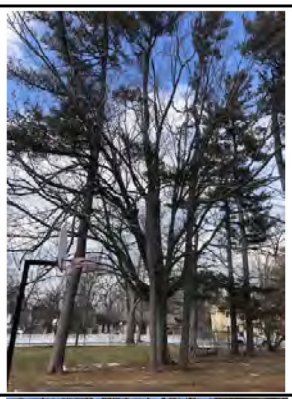
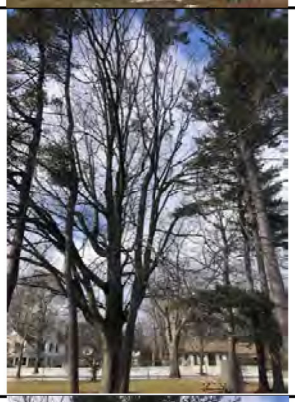
0 – Dead, hazardous, or uprooting. Tree exhibits no signs of life. Needs removal.
1 – Declining or diseased tree. Too weak to survive construction. Recommend removal.
2 – Relatively healthy but less vigorous. Will struggle with construction.
3 – Healthy and vigorous. Defects if present are minor (e.g. twig dieback, small wounds) Good chance of survival with construction depending on proximity.

DBH:

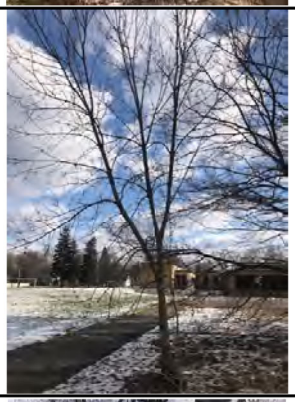
The DBH data documented in this chart was retained from Colville Consulting Inc's January 31st, 2020 report, "Tree Inventory and Assessment - Parliament Oak School Property, Town of Niagara-on-the-Lake".

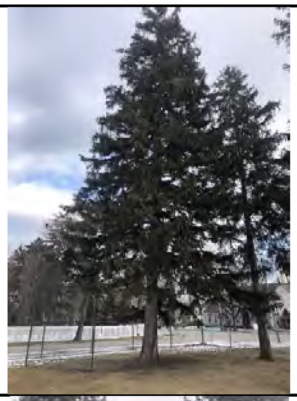
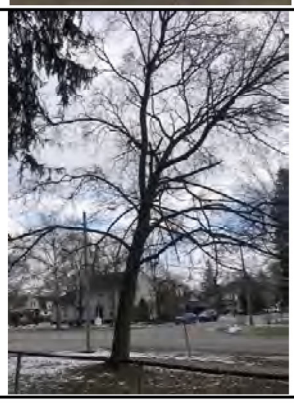
APPENDIX C:
Photographic Inventory

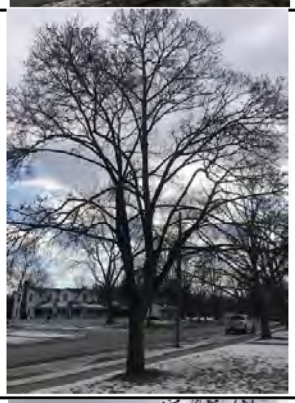
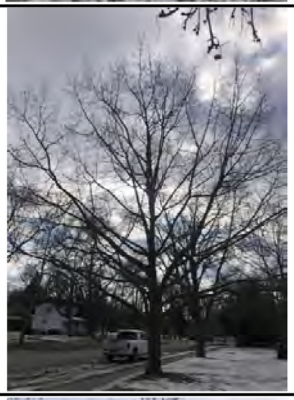
Tree #	Botanical Name	Common Name	Tree Photo
1	Norway Spruce	*Picea abies*	
2	White Mulberry	*Morus alba*	
3	White Mulberry	*Morus alba*	
4	White Pine	*Pinus strobus*	

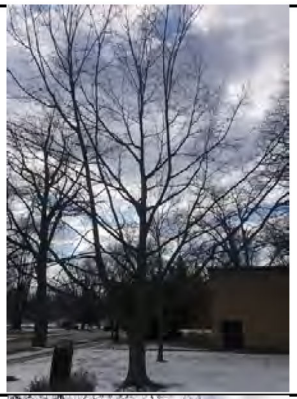
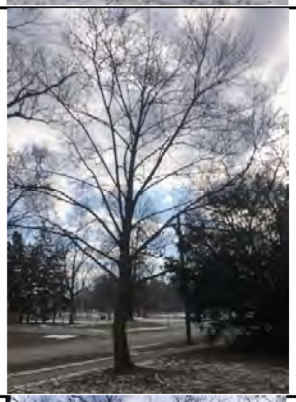
5	White Pine	*Pinus strobus*	
6	Silver Maple	*Acer saccharinum*	
7 (Tree on Left)	White Pine	*Pinus strobus*	
8	White Pine	*Pinus strobus*	

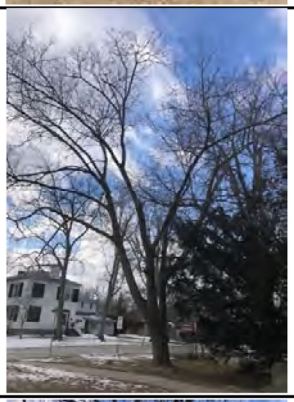
9 (Left Tree)	White Pine	*Pinus strobus*	
10 (Right Tree)	White Pine	*Pinus strobus*	
11	Sugar Maple	*Acer saccharum*	
12	White Mulberry	*Morus alba*	

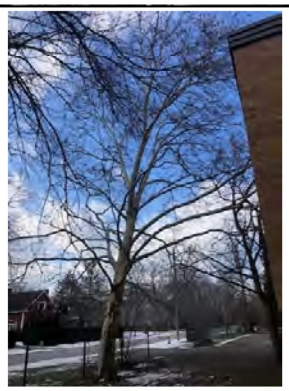
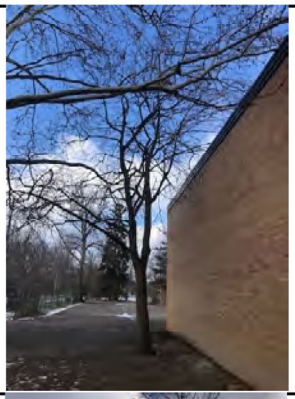
13	Red Oak	*Quercus rubra*	
14	White Ash	*Fraxinus americana*	
15	Silver Maple	*Acer saccharinum*	
16	Silver Maple	*Acer saccharinum*	

17	Norway Spruce	*Picea abies*	
18	Norway Spruce	*Picea abies*	
19	Norway Spruce	*Picea abies*	
20	Norway Maple	*Acer platanoides*	

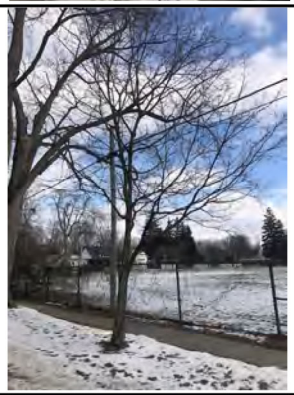
21	Norway Maple	*Acer platanoides*	
22	Norway Maple	*Acer platanoides*	
23	Norway Maple	*Acer platanoides*	
24	Norway Maple	*Acer platanoides*	

25	Red Oak	*Quercus rubra*	
26	Red Oak	*Quercus rubra*	
27	Norway Maple	*Acer platanoides*	
28	Red Oak	*Quercus rubra*	

29	Silver Maple	*Acer saccharinum*	
30	Yew	*Taxus canadensis*	
31	Norway Maple	*Acer platanoides*	
32	Silver Maple	*Acer saccharinum*	

33	Sycamore	*Platanus occidentalis*	
34	Norway Maple	*Acer platanoides*	
35	White Ash	*Fraxinus americana*	
36	White Pine	*Pinus strobus*	

37	Silver Maple	*Acer saccharinum*	
38	Blue Spruce	*Picea pungens*	
39	Norway Maple	*Acer platanoides*	
40	Basswood	*Tilia americana*	

41	Basswood	*Tilia americana*	
42	Silver Maple	*Acer saccharinum*	
43	Sugar Maple	*Acer saccharum*	
44	Silver Maple	*Acer saccharinum*	

45	Sycamore	*Platanus occidentalis*	
46	Silver Maple	*Acer saccharinum*	

APPENDIX D:
Tree Inventory Plans

Stantec

Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo ON N2L 0A4
Tel: (519) 579-4410
www.stantec.com

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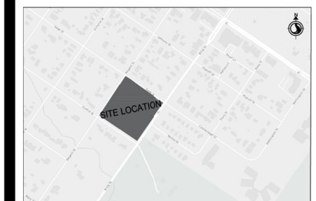
Key Map NTS.



Legend

- Existing Deciduous Tree
- Existing Coniferous Tree
- Tree Number
- Schematic Tree Protection Fence (TD-1)
- Schematic Tree Protection Hoarding (TD-2)
- Tree To Be Removed

Note: Tree canopy size and location have been interpreted from aerial photography.

Revision/Issue	By	Appd	YYYY.MM.DD
EXISTING TREE INVENTORY AND PRESERVATION PLAN	KB	DW/WB	2023.03.04

File Name: 160940942_L-TM	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD
	KB		DW/WB	2023.02.02

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Client/Project

SOLMAR (Niagara 2) Corp.

325 KING STREET
NIAGARA-ON-THE-LAKE

ONTARIO, CANADA

Title

EXISTING TREE INVENTORY AND PRESERVATION PLAN - FULL SITE

Project No. 160940942

Scale

Revision

Sheet 1 of 3

Drawing No. **L-1**

ORIGINAL SHEET - ARCH D

Tree #	Common Name	Botanical Name	DBH	Health Rating	Trees to be Removed	Ownership	Comments	Additional Removal Comments
1	Norway Spruce	*Picea abies*	66	3		Private	healthy	
2	White Mulberry	*Morus alba*	18	2		Private	multi-stem volunteer recommend removal/growing into fence	
3	White Mulberry	*Morus alba*	22	2		Private	multi-stem volunteer recommend removal/growing into fence	
4	White Pine	*Pinus strobus*	56	2		Private	Poor colour in foliage low growth rate	
5	White Pine	*Pinus strobus*	34	2		Private	Poor colour in foliage low growth rate	
6	Silver Maple	*Acer saccharinum*	86	2		Private	poor canopy structure/some decline	
7	White Pine	*Pinus strobus*	40	2		Private	Poor colour in foliage low growth rate	
8	White Pine	*Pinus strobus*	58	2		Private	Poor colour in foliage low growth rate	
9	White Pine	*Pinus strobus*	50	2		Private	Poor colour in foliage low growth rate	
10	White Pine	*Pinus strobus*	52	2		Private	Poor colour in foliage low growth rate	
11	Sugar Maple	*Acer saccharum*	68	3		Private	good health	
12	White Mulberry	*Morus alba*	22	2	X	Private	volunteer - remove	
13	Red Oak	*Quercus rubra*	10	3	*TRANSPLANT*	Private	small/tree is transplantible with spade	
14	White Ash	*Fraxinus americana*	14	2	X	Private	volunteer (not planted) /remove	
15	Silver Maple	*Acer saccharinum*	104	1	X	Private	poor structure/major cavities/declining - remove	Ownership to be determined. Recommended removal due to health.
16	Silver Maple	*Acer saccharinum*	102	1	X	Private	poor structure/major cavities/declining - remove	Ownership to be determined. Recommended removal due to health.
17	Norway Spruce	*Picea abies*	68	3		Private	good health	
18	Norway Spruce	*Picea abies*	44	1	X	Private	good health/major base wound/possible removal	
19	Norway Spruce	*Picea abies*	64	3		Private	good health	
20	Norway Maple	*Acer platanoides*	48	2		Private	decent health poor twig growth	
21	Norway Maple	*Acer platanoides*	58	2		Private	decent health poor twig growth	
22	Norway Maple	*Acer platanoides*	50	2		Private	decent health poor twig growth	
23	Red Oak	*Quercus rubra*	58	3		Private	good health	
24	Norway Maple	*Acer platanoides*	58	1	X	Private	poor structure/declining	Ownership to be determined. Recommended removal due to health.
25	Red Oak	*Quercus rubra*	56	3	X	Private	good health	
26	Red Oak	*Quercus rubra*	24	3	X	Private	good health	
27	Norway Maple	*Acer platanoides*	36	2		Private	poor twig growth	
28	Red Oak	*Quercus rubra*	132	1		Private	300yrs old/major deadwood/phytopthora/major leaders contain multi-stem/poor twig growth/elongation multiple years	
29	Silver Maple	*Acer saccharinum*	106	1	X	Public	major cavities/declinging/poor health	
30	Yew	*Taxus canadensis*	24	3		Private	healthy/ old	
31	Norway Maple	*Acer platanoides*	68	1	X	Private	poor health/multi-stem	Ownership to be determined. Recommended removal due to health.
32	Silver Maple	*Acer saccharinum*	122	1	X	Private	declining/cavities/multi-stem/remove	Ownership to be determined. Recommended removal due to health.
33	Sycamore	*Platanus occidentalis*	60	2		Private	major trunk crack/healthy	
34	Norway Maple	*Acer platanoides*	34	1	X	Private	poor health/understory tree with Sycamore/ remove	
35	White Ash	*Fraxinus americana*	66	0	X	Private	dead/ remove	
36	White Pine	*Pinus strobus*	52	1	X	Private	poor colour / low growth rate	
37	Silver Maple	*Acer saccharinum*	72	2	X	Private	poor structure/multi-stem	
38	Blue Spruce	*Picea pungens*	34	3	X	Private	good health	
39	Norway Maple	*Acer platanoides*	40	2	X	Private	poor structure/multi-stem	
40	Basswood	*Tilia americana*	82	2		Public	multi-stem/trunk wounds/poor structure	
41	Basswood	*Tilia americana*	68	2		Public	multi-stem/trunk wounds/poor structure	
42	Silver Maple	*Acer saccharinum*	116	2		Public	poor structure/cavities	
43	Sugar Maple	*Acer saccharum*	18	3		Public	young/healthy	
44	Silver Maple	*Acer saccharinum*	96	1	X	Public	multiple cavities/recently pruned/declining	Ownership to be determined. Recommended removal due to health.
45	Sycamore	*Platanus occidentalis*	32	3		Public	young/generally healthy	
46	Silver Maple	*Acer saccharinum*	108	1	X	Public	multi leaders/multiple cavities/declining	Ownership to be determined. Recommended removal due to health.

Health Rating:
0 – Dead, hazardous, or uprooting. Tree exhibits no signs of life. Needs removal.
1 – Declining or diseased tree. Too weak to survive construction. Recommend removal.
2 – Relatively healthy but less vigorous. Will struggle with construction.
3 – Healthy and vigorous. Defects if present are minor (e.g. twig dieback, small wounds) Good chance of survival with construction depending on proximity.

DBH:
The DBH data documented in this chart was retained from Colville Consulting Inc's January 31st, 2020 report, "Tree Inventory and Assessment - Parliament Oak School Property, Town of Niagara-on-the-Lake".

TREE INVENTORY CONDUCTED ON JANUARY 3RD, 2023 BY:
BILL BUCHANAN, HBSCFORESTRY, ISA BOARD CERTIFIED MASTER ARBORIST NY-0392B

Stantec
Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo ON N2L 0A4
Tel: (519) 579-4410
www.stantec.com

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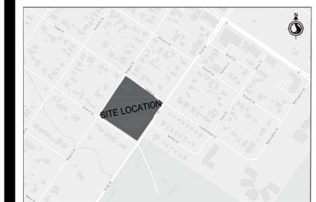
Key Map NTS.



Legend
Existing Deciduous Tree
Existing Coniferous Tree
Tree Number

Revision/Issue	By	Appd	YYYY.MM.DD
EXISTING TREE INVENTORY AND PRESERVATION PLAN	KB	DW/WB	2023.03.04

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Client/Project
SOLMAR (Niagara 2) Corp.

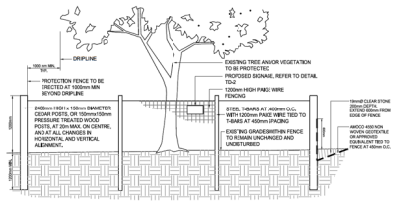
325 KING STREET
NIAGARA-ON-THE-LAKE

ONTARIO, CANADA

Title
EXISTING TREE INVENTORY
AND PRESERVATION PLAN
TREE INVENTORY/REMOVAL TABLE

Project No. 160940942
Scale

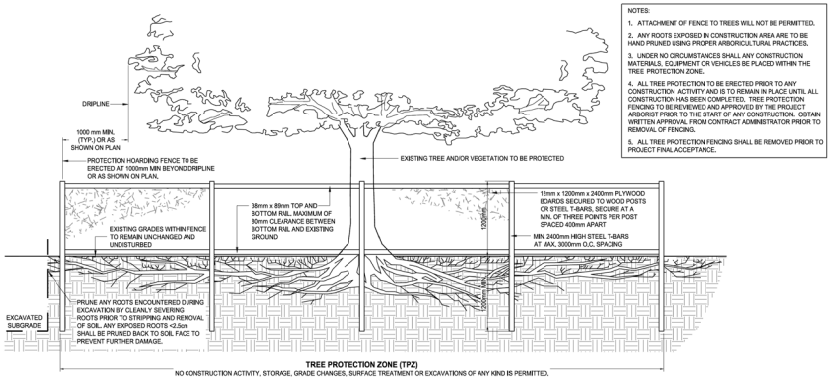
Revision
Sheet 2 of 3
Drawing No. **L-2**



NOTES:

1. ATTACHMENT OF FENCE TO TREES WILL NOT BE PERMITTED.
2. ANY EXPOSED ROOTS ARE TO BE HAND PRUNED USING PROPER ARBORICULTURAL PRACTICES.
3. UNDER NO CIRCUMSTANCES SHALL ANY CONSTRUCTION MATERIALS, EQUIPMENT OR VEHICLES BE PLACED WITHIN THE TREE PROTECTION ZONE.
4. ALL TREE PROTECTION TO BE ERECTED PRIOR TO ANY CONSTRUCTION ACTIVITY AND IS TO REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS BEEN COMPLETED. OBTAIN WRITTEN APPROVAL FROM CONTRACT ADMINISTRATOR PRIOR TO REMOVAL OF FENCING.
5. ALL TREE PROTECTION FENCING SHALL BE REMOVED PRIOR TO PROJECT FINAL ACCEPTANCE.
6. SEDIMENT CONTROL FENCING WILL BE INSTALLED INDEPENDENTLY UNDER DIRECTION OF THE ENVIRONMENTAL INSPECTOR.

TD 1 — PROPOSED TREE PROTECTION FENCING
N.T.S.



NOTES:

1. ATTACHMENT OF FENCE TO TREES WILL NOT BE PERMITTED.
2. ANY ROOTS EXPOSED IN CONSTRUCTION AREA ARE TO BE HAND PRUNED USING PROPER ARBORICULTURAL PRACTICES.
3. UNDER NO CIRCUMSTANCES SHALL ANY CONSTRUCTION MATERIALS, EQUIPMENT OR VEHICLES BE PLACED WITHIN THE TREE PROTECTION ZONE.
4. ALL TREE PROTECTION TO BE ERECTED PRIOR TO ANY CONSTRUCTION ACTIVITY AND IS TO REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS BEEN COMPLETED. TREE PROTECTION FENCING TO BE REVIEWED AND APPROVED BY THE PROJECT ARBORIST PRIOR TO THE START OF ANY CONSTRUCTION. OBTAIN WRITTEN APPROVAL FROM CONTRACT ADMINISTRATOR PRIOR TO REMOVAL OF FENCING.
5. ALL TREE PROTECTION FENCING SHALL BE REMOVED PRIOR TO PROJECT FINAL ACCEPTANCE.

TD 2 — PROPOSED TREE PROTECTION HOARDING FENCING
N.T.S.

Stantec

Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo ON N2L 0A4
Tel: (519) 579-4410
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BUCHANAN
expert tree care

Key Map NTS.

Legend

- Existing Deciduous Tree
- Existing Coniferous Tree
- Tree Number

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NIAGARA-ON-THE-LAKE

ONTARIO, CANADA

Title
EXISTING TREE INVENTORY

AND PRESERVATION PLAN DETAILS

Project No. 160940942
Scale

Revision
Sheet 3 of 3
Drawing No. **L-901**