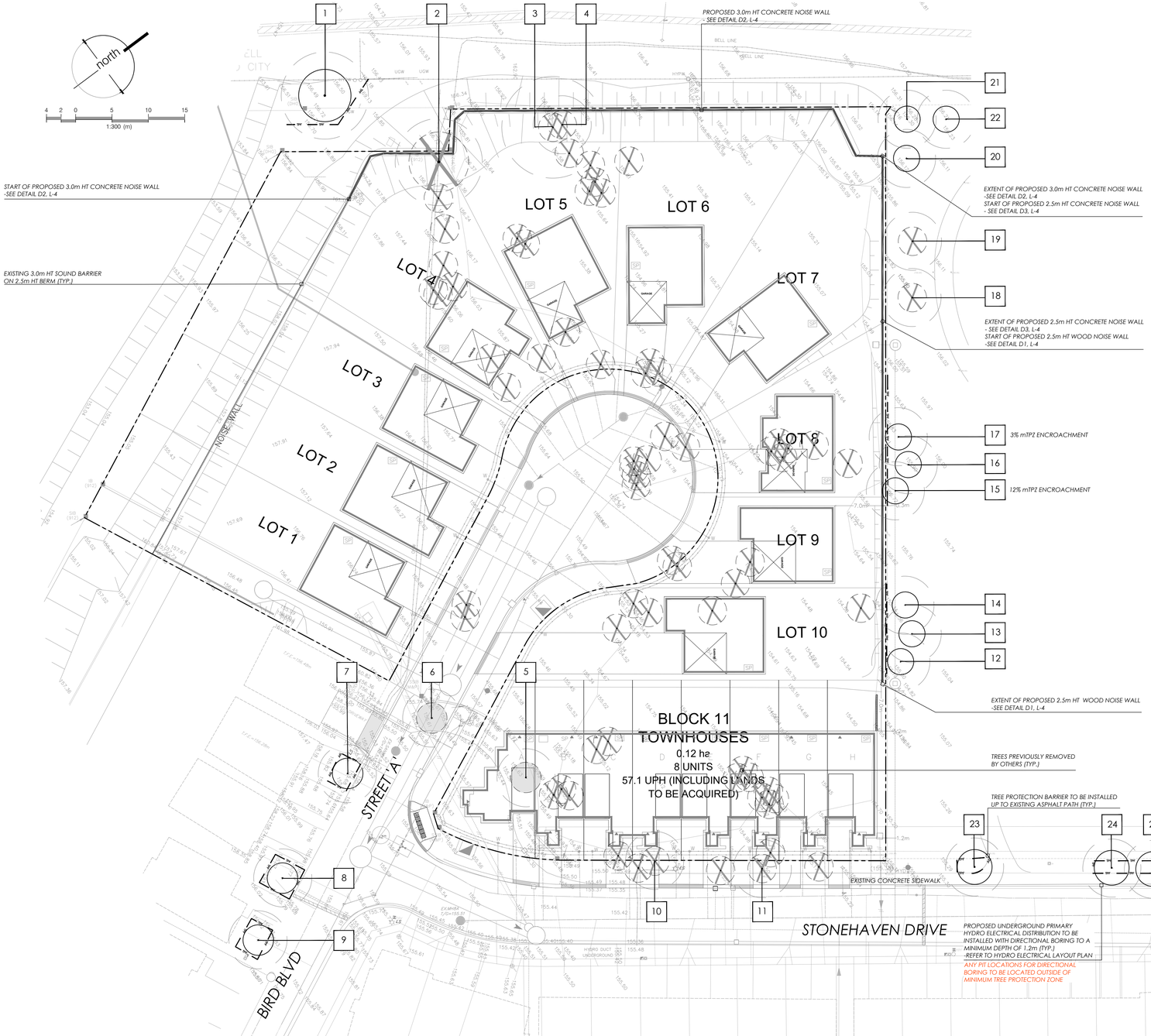
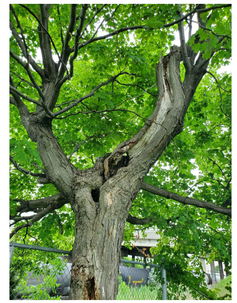
project #: 21-156





Tree 1 - large trunk cavity



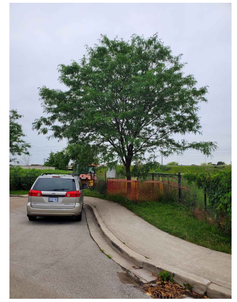
Tree 2



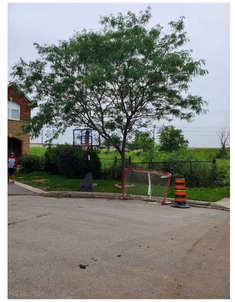
Tree 3



Tree 4



Tree 5



Tree 6



Tree 15



Trees 16 & 17

NOTE

Original Tree Preservation Plan submitted by IBI Group (2021-03-22).

Revised Tree Preservation Plan and Arborist Report prepared by adesso design inc. per City of Burlington comments dated February 3 2021.



LEGEND

- property line
- 2 — existing tree number (refer to chart)
- existing vegetation to remain
- existing vegetation to be removed
- tree removed by others
- 155.07 — existing elevations
- critical root zone
- minimum tree protection zone

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DIRECTOR OF CAPITAL WORKS

DATE

NOTE:
Vegetation inventory undertaken by Carleigh Pope ISA Certified Arborist (ON-2578A) on July 8 2021 and October 26 2021.

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5	2024-07-12	Issued for submission

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ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS
MANJO PANTHURI
OALA
MEMBER

CLIENT

MUNICIPALITY
City of Burlington

PROJECT
5209 Stonehaven Drive

MUNICIPAL FILE NUMBER
510-07/17 & 520-09/17

SHEET
Tree Protection Plan

L-1

adesso design inc.
landscape architecture

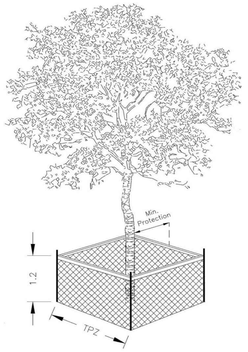
218 Locke Street South, 2nd Floor
Hamilton, ON L8P 4B4
t. 905.526.8876
www.adessodesigninc.ca

REVIT Project Path: Projects 2021\21-156 Stonehaven Drive, Burlington\01 Current Drawings\01 Site Plan\21-156_Site_L1.RVT, TPP
LAST SAVED BY: Stefanie M. Ritchey July 12, 2024 7:41:00 AM PLOTTED BY: Carleigh Pope Ritchey July 12, 2024 7:47:48 AM

project #: 21-156

Tree Protection and Preservation
Specification No.: SS12A

Detail TP-1 – Tree Protection Detail.



Trunk Diameter (DBH) [2]	Minimum Tree Protection Zone (MTPZ) Distances Required [3]	Critical Root Zone (CRZ) Distances Required [3,4,4]
<10 cm	1.8 m	1.8 m
11 - 40 cm	2.4 m	4.0 m
41 - 50 cm	3.0 m	5.0 m
51 - 60 cm	3.6 m	6.0 m
61 - 70 cm	4.2 m	7.0 m
71 - 80 cm	4.8 m	8.0 m
81 - 90 cm	5.4 m	9.0 m
91 - 100+ cm	6.0 m	10.0 m

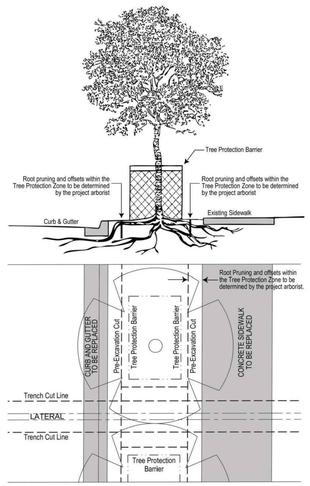
NOTES:
[1] The roots of a tree can extend from the trunk to approximately 2-3 times the distance of the drip line.
[2] Diameter at breast height (DBH) is the measurement of tree trunk taken at 1.4 metres above ground.
[3] Minimum Tree Protection Zone and Critical Root Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work and is subject to Section 6 of this specification.
[4] Where work is being performed beyond the Minimum Tree Protection Zone but within the Critical Root Zone the works are subject to Section 8 of this specification.

TREE PROTECTION BARRIER

1. The required barrier is a 1.2 metre (4 ft) high orange plastic web snow fencing on 2" x 4" frame. Where orange plastic web snow fencing creates a restriction to sightlines, page wire fencing with reflective tape can be used.
2. Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place throughout the entire duration of the project. The barriers shall be maintained erect and in good repair throughout the duration of construction operations with breaks and unsupported sections repaired immediately. Tree protection may be not be removed prior to the completion of construction without written authorization from the Manager of Urban Forestry or designate.
3. All supports and bracing used to safely secure the barrier should be located outside the MTPZ. All supports and bracing should minimize damage to roots.
4. Where some fill or excavated material must be temporarily located near a MTPZ, a wooden barrier with silt fencing must be used to ensure no material enters the MTPZ.
5. No materials or fill may be stored within the MTPZ.
6. Equipment or vehicles shall not be operated, parked, repaired, or refueled within the MTPZ.
7. No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the MTPZ without written authorization from the Manager of Urban Forestry or designate.
8. A laminated Minimum Tree Protection Zone sign (See Detail TP-3 – Minimum Tree Protection Zone Sign) must be attached to the side of the Tree Protection where it will be visible by persons entering the site. Minimum size must be 10"x14".

Tree Protection and Preservation
Specification No.: SS12A

Detail TP-2 – Root Pruning Detail



NOTE:
For excavations perpendicular to to the curbing (ie. sidewalk, curbing, water or sewer laterals renewal)

(a) The contractor is to use a trench box to minimize the width of the open cut.
(b) When the lateral replacement is within the Tree Protection Zone of a tree, the contractor is to complete the works using trenchless technologies.

CITY OF Burlington

TREE PROTECTION ZONE (TPZ)

No equipment or vehicles shall be operated, parked, repaired or refueled within the Tree Protection Zone.

No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

No materials or fill may be stored within the Tree Protection Zone.

This tree protection barrier must not be removed prior to the completion of construction without written authorization from the City of Burlington, Urban Forestry Department.

For information, contact:
City of Burlington, Development and Infrastructure Division,
905-335-7642.

NOTES:

1. *The area within the dripline of all existing trees shall be properly protected with temporary fencing.*
2. *The area within the protective fencing shall remain undisturbed with no construction activity, grade changes, surface treatment, compaction, or excavation. Area shall not be used for the storage of building materials or equipment access/storage or project related garbage.*
3. *Tree protection measures shall be installed prior to any demolition, tree removal or construction and shall remain until the completion of fine grading and sodding or seeding.*
4. *Prune all trees for dead, diseased, weak or hazardous branches only, also trim back branches which will interfere with construction, prune for structural restoration where necessary.*
5. *No stockpiles and/or excavated material shall be placed within the tree preservation area.*
6. *No rigging cable shall be wrapped around or installed to trees.*
7. *Where root systems of protected trees are exposed directly adjacent to or damaged by construction work they are to be root pruned and the area back filled with topsoil to prevent root desiccation.*
8. *Any fine grading within the preservation area is to be done by hand, no heavy equipment is permitted within the preservation zone.*
9. *Sediment accumulations to be removed by subdivider/builder when sediment deposits reach within 150mm of top of filter fabric barrier.*
10. *A copy of the approved and signed Vegetation Management Plan will be on site for the duration of construction and available upon request.*
11. *This detail does not represent any particular tree species.*

EXISTING VEGETATION IDENTIFICATION TABLE

Tree #	Species (Common Name)	Species (Botanical Name)	DBH (cm)	Crown Class*	Condition**	Crown Width (m)	Comments	Potential Impacts from Construction	Ownership	Recommendation
1	Sugar Maple	*Acer saccharum*	51	D	Fair - Poor	9	Dead branches; large trunk cavity in scaffold branch; stem wound at 1.75m; grapevines throughout canopy		Neighbouring	SAVE
2	Red Maple	*Acer rubrum*	60	D	Fair - Poor	8	Dead branches; severe grapevine growth in canopy; co-dominant leaders at 2.5m; included bark	direct conflict with proposed noise wall; existing condition makes poses potential hazard	Subject Site	REMOVED BY OTHERS
3	Ash species	*Fraxinus spp.*	65*	D	Dead/Dying	5	Grapevine in canopy; broken leader/major scaffold branch	direct conflict with proposed noise wall; existing condition makes poses potential hazard	Subject Site	REMOVED BY OTHERS
4	Ash species	*Fraxinus spp.*	33	D	Dead/Dying	4	Grapevine in canopy; dead branches; broken branches; leaning southeast	direct conflict with proposed noise wall; existing condition makes poses potential hazard	Subject Site	REMOVED BY OTHERS
5	Thornless Honeylocust	*Gleditsia triacanthos var. inermis*	28	D	Good	6	Tree protection barrier installed; dead branches in canopy (minor)	direct conflict with proposed building footprint	Public	REMOVE
6	Thornless Honeylocust	*Gleditsia triacanthos var. inermis*	24	D	Good	5	Minor twig dieback; included bark at union	direct conflict with proposed street	Public	REMOVE
7	Red Oak	*Quercus rubra*	34	D	Good	7	Minor twig dieback		Public	SAVE
8	Littleleaf Linden	*Tilia cordata*	22	D	Good	4	Included bark at union		Public	SAVE
9	Littleleaf Linden	*Tilia cordata*	20	D	Good	3.5	Included bark at union; co-dominant leaders at 2.5m; trunk seam on lower stem		Public	SAVE
10	White Elm	*Ulmus americana*	13	D	Poor	2	Severe grapevine growth throughout canopy; leaning approx. 90° south over existing concrete sidewalk	conflict with proposed driveway(s) and proposed servicing	Public	REMOVED BY OTHERS
11	Thornless Honeylocust	*Gleditsia triacanthos var. inermis*	15	D	Good	4		conflict with proposed servicing; tree recommended for removal in discussion with Burlington Urban Forestry	Public	REMOVED BY OTHERS
12	White Pine	*Pinus strobus*	4	D	Dead	--	Dead standing snag (0.5m ht.)		Public	SAVE
13	White Pine	*Pinus strobus*	4	D	Good	1			Public	SAVE
14	White Pine	*Pinus strobus*	4	D	Good	1	Poor form/crooked leader		Public	SAVE
15	White Pine	*Pinus strobus*	5	D	Good	1	Asymmetrical canopy	3% mtpz encroachment due to proposed noise wall	Public	SAVE
16	White Pine	*Pinus strobus*	4	D	Good	1			Public	SAVE
17	White Pine	*Pinus strobus*	4	D	Good	0.75	Conflict with self-seeded Ulmus spp.	12% mtpz encroachment due to proposed noise wall	Public	SAVE
18	Tulip Tree	*Liriodendron tulipifera*	5	D	Fair - Poor	1	Sparse crown; leader shows significant dieback		Public	REMOVED BY OTHERS
19	Deciduous tree	--	4	D	Dead	1	Dead standing snag; large stem wound on lower stem		Public	REMOVED BY OTHERS
20	Colorado Spruce	*Picea pungens*	5	D	Dead/Dying	1			Public	SAVE
21	Colorado Spruce	*Picea pungens*	5	D	Dead/Dying	0.75			Public	SAVE
22	Colorado Spruce	*Picea pungens*	5	D	Good	1			Public	SAVE
23	Norway Maple	*Acer platanoides*	22	D	Good	6	Co-dominant leaders at 2.0m, included bark at unions (minor)		Public	SAVE
24	Autumn Blaze Maple	*Acer x freemanii 'Jeffersred'*	21	D	Good - Fair	5	Healed stem wounds at 2.0m and 1.0m, included bark at branch-stem unions (moderate), rubbing branches in canopy		Public	SAVE
25	Autumn Blaze Maple	*Acer x freemanii 'Jeffersred'*	20	D	Good-Fair	4	Poor branch taper, longitudinal crack on main stem		Public	SAVE

** CROWN CLASS*
Dominant- (D) Emergent canopy (receives full sunlight)
Co-dominant - (C) Not fully emergent (top of canopy receives sunlight)
Intermediate - (I) Sub-canopy tree (receives partial sunlight)

*** CONDITION - consideration of trunk integrity, crown structure and crown vigor*
Good - few or no issues related to trunk integrity, crown structure or crown vigor
Fair - minor issues related to trunk integrity, crown structure (form, some dead or damaged branches) or crown vigor (20-80% healthy foliage)
Poor - issues with trunk integrity such as cavities or exposed dead wood, poor crown structure (poor form, no clear leader, significant dead or damaged branches) or poor crown vigor (<20% healthy foliage)

CONDITION OF TREES
The decision to remove or retain a tree is subject to the forecasted development impacts, the structural condition of the tree (e.g. cracks, cavities, decay, weak branching, leaning, hazard potential), the biological condition of the tree (e.g. pest or disease concerns, overall health) and the suitability of the tree in its location (e.g. hardiness, soil conditions, salt tolerance, visual obstruction, available soil volume)

MIGRATORY BIRDS AND NESTS:

1. *The Owner and Contractor must be aware of the Migratory Birds Convention Act, 1994 - specifically:*
   - *No tree removal or construction activity shall contravene the Act.*
   - *Construction activities with the potential to harm migratory birds or their nest should be restricted from March 15 to August 31.*
   - *If work must occur during the migratory bird breeding season, a nest survey should be taken by a qualified avian biologist.*
   - *A mitigation plan (showing active nests and appropriate buffers) may be required for review and approval by the Canadian Wildlife Services.*

TREE REMOVAL:

1. *No trees shall be removed prior to municipal approvals of the Tree Management/Tree Preservation Plan.*

BOUNDARY TREES:

2. *Note that boundary trees are protected under the Ontario Forestry Act. Boundary trees are defined in the Forestry Act (Section 10.2) and are considered shared or co-owned property. The Forestry Act indicates that it is a prosecutable offense for one co-owner to injure or cut down a boundary tree without the other co-owner's permission.*
3. *Written permission from the neighbouring property owner is required prior to removal or injury of any boundary tree(shared ownership) or any tree that is not fully on the subject property.*
4. *An ISA certified Arborist should be on site prior to any work being performed within the rootzone of a boundary or neighbouring tree to perform root pruning as required.*

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DIRECTOR OF CAPITAL WORKS

DATE

NOTE:
Vegetation inventory undertaken by Carleigh Pope, ISA Certified Arborist (ON-2578A) on July 8 2021 and October 26 2021.

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