TREE PROTECTION RECOMMENDATIONS:

- Install hoarding for subsequent municipal review/approval.
- Hoarding may be moved temporarily to provide access for tree removal only. These trees should be felled away from protected areas to avoid pulling and breaking of roots of trees to remain.
- Pruning, if required, should be done prior to construction and in accordance with current arboricultural practices.
- Storage of any materials, fill, vehicles/equipment, and disposal of liquids is not permitted within 1m of protected areas.
- Excavation in close proximity to protected areas are to be undertaken with a certified arborist present.
- Roots encountered due to excavation are to be cut with a clean sharp blade. Tearing and ripping of roots is not permitted.
- Hydrovacing is recommended as the preferred method for excavation. within 1m of protected areas.
- Exposed roots are to be covered immediately with mulch or topsoil and watered thoroughly. A light coloured tarpaulin may also be used to prevent root desiccation.
- Deep root fertilize (3:1:1) following backfilling.
- Trees should be re-assessed periodically in order to maintain an up to date understanding of health and structure.

TREE INVENTORY LEGEND

Biological Health
H (High) - No apparent diseases or symptoms, moderate to high vigour.
M (Medium) - Minor diseases and/or symptoms, moderate vigour.
L (Low) - Major disease and/or symptoms, poor vigour.

Structural Condition
H (High) - No defects, well-developed crown.
M (Medium) - Minor structural defects.
L (Low) - Major structural defects.

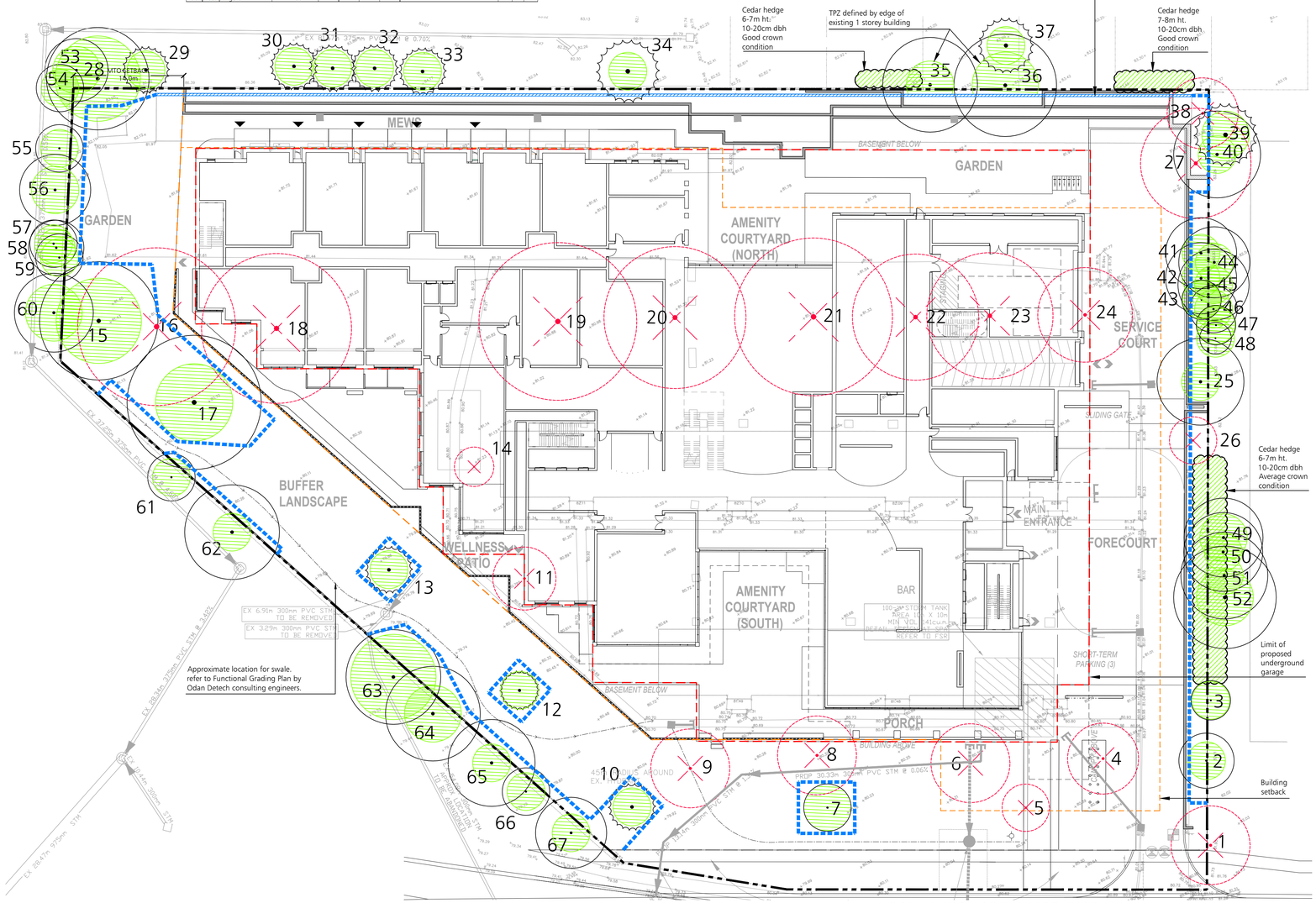
Recommended Action
P - Preserve
R - Remove for poor condition
RC - Remove for Construction
R* - Remove with Neighbours Approval
R** - Remove with Town's Approval
T - Transplant

Comments
B Borer
BF Backfilled
CS Compacted soil
DB Dead branches
G Girdling
HA Hazard
IB Included bark
LS Lean showing direction (i.e. LS=lean south)
2L 2 leaders or codominant stems
MB Multibranched node
MS/ML Multistem
PL Pruned limbs
SU Supressed crown
TB Torn/broken branch
TD Trunk damage
TH Top heavy
UB Unbalanced crown (N,S,E,W indicates weighted side of crown)
V Vine growing in tree
WB Witches broom growth
WP Woodpecker damage
WS Watersprouts
ZZ Zigzag trunk
_%D X% crown is dead

Trees less than 9cmØ caliper, and large shrubs may exist on the site. It is the contractors responsibility to determine the extent of possible removals by field review prior to submission of quotations for removals work.

~ for DBH = Tree size and location approximated on plan. Exact location to be surveyed.

Tree No.	Species	dbh (cm)	Measure to Drip Line diameter (m)	Biological Health	Structural Condition	Recommended Action	Comments	Location: Municipal Boulevard	Location: Subject Site	Location: Boundary (5m to PL)
1	Juglans nigra	52	10	M	M	R*	DB(M), BB, 2L			X
2	Acer saccharum	28	7	M	M	P	L20°W, DB(S), BB		X	
3	Picea glauca	22	5	M	M	P	DB(M), BB			X
4	Betula papyrifera	19,16,24	9	M	M	RC	3L, DB(S), BB		X	
5	Picea pungens	37	7	H	H	RC	PL		X	
6	Gleditsia triacanthos	34	10	MH	H	RC	PL, DB(S)		X	
7	Picea pungens	46	6	MH	H	P	PL, DB(S)		X	
8	Gleditsia triacanthos	35	10	MH	H	RC	PL, DB(S)		X	
9	Gleditsia triacanthos	38	10	MH	H	RC	PL, DB(S)		X	
10	Picea pungens	35	6	H	H	P	PL, 2L		X	
11	Betula papyrifera	23,17,22	8	M	M	RC	3L, DB(S), BB		X	
12	Betula papyrifera	28	5	H	H	P	PL, DB(S)		X	
13	Picea pungens	43	6	H	H	P	PL, DB(S)		X	
14	Picea pungens	45	5	MH	H	RC	Top dead, PL, DB(S)		X	
15	Acer saccharum	84	15	MH	MH	P	DB(S), BB		X	
16	Salix sp.	114	20	M	M	RC	BB, DB(M), WS, TD(rot-hvaled)		X	
17	Platanus × acerifolia	78	17	MH	MH	P	UB(S), DB(S), BB, PL		X	
18	Platanus × acerifolia	90	19	M	M	RC	TD(rot-healed), PL		X	
19	Platanus × acerifolia	133	20	MH	MH	RC	DB(S), BB, 2L, IB, PL, WS		X	
20	Platanus × acerifolia	95	18	MH	MH	RC	DB(S), BB		X	
21	Acer saccharum	109	20	M	M	RC	PL, DB(S), BB		X	
22	Platanus × acerifolia	54	16	H	H	RC	DB(S)		X	
23	Platanus × acerifolia	67	16	H	H	RC	DB(S)		X	
24	Juglans nigra	52	12	M	M	RC	L10°E, DB(M), BB		X	
25	Juglans nigra	38	11	M	M	P	DB(M), BB		X	
26	Juglans nigra	22	6	M	M	RC	UB(W)		X	
27	Acer negundo	42	14	M	M	RC	UB(S), L45°S, DB(M), BB		X	
28	Juglans nigra	~ 30, 30, 25	13	MH	H	P	IB@union, DB(S), BB			X
29	Picea pungens	~ 30	6	H	H	P				X
30	Picea pungens	~ 30	7	H	H	P				X
31	Picea pungens	~ 30	6	H	H	P				X
32	Picea pungens	~ 30	7	H	H	P				X
33	Picea pungens	~ 30	6	H	H	P				X
34	Picea pungens	~ 40	8	H	H	P				X
35	Juglans nigra	~ 45	12	MH	H	P	DB(S), BB			X
36	Robinia pseudoacacia	~ 30,40	13	M	MH	P	2L, DB(S), BB			X
37	Picea glauca	~ 30	7	MH	MH	P	DB(S)			X
38	Ulmus americana	22	9	MH	H	RC	DB(S)		X	
39	Pinus nigra	42	9	H	MH	P	DB(M)			X
40	Ulmus americana	11	6	H	H	P				X
41	Acer saccharum	21	9	H	H	P	UB(W)	X		
42	Acer saccharum	26	9	H	H	P	UB(W)	X		
43	Juglans nigra	16	5	MH	H	P	UB(W), BB	X		
44	Acer saccharum	36	9	H	H	P	PL			X
45	Acer saccharum	37	9	M	MH	P	PL, DB(M)			X
46	Acer saccharum	19	6	ML	ML	P	50%D			X
47	Acer saccharum	15	5	ML	ML	P	50%D			X
48	Acer saccharum	11	4	ML	ML	P	topped, 70%D			X
49	Juglans nigra	43	10	M	MH	P	UB(N), DB(M)			X
50	Juglans nigra	37	10	M	MH	P	UB(N), DB(M)			X
51	Juglans nigra	42	11	M	MH	P	DB(M)			X
52	Juglans nigra	51	13	M	MH	P	DB(M)			X
53	Juglans nigra	~ 25,25	8	M	M	P	V(grapes), DB(M), BB			X
54	Acer saccharum	~ 20	6	H	H	P				X
55	Acer saccharum	~ 10,10,10	6	MH	M	P	SU(Acer negundo), DB(S)			X
56	Acer saccharum	~ 10,10,15,15	9	MH	H	P	DB(S)			X
57	Juglans nigra	~ 15,20	7	MH	H	P	DB(S)			X
58	Acer saccharum	~ 10,10	6	H	H	P				X
59	Juglans nigra	~ 15	6	M	MH	P	DB(M)			X
60	Acer saccharum	~ 10,10,15,20	10	MH	MH	P	IB@union, DB(S), MB			X
61	Acer saccharum	~ 5,10,15	6	MH	M	P	growing in fence, DB(S)			X
62	Juglans nigra	~ 35	11	MH	M	P	V(grape), DB(S)			X
63	Juglans nigra	~ 25,30,35	12	ML	ML	P	TD(rot), V(grape), growing in fence			X
64	Juglans nigra	~ 20,35	12	M	M	P	growing in fence, DB(M), BB			X
65	Juglans nigra	~ 25	11	M	M	P	growing in fence, TD(rot), DB(M), V(grape)			X
66	Juglans nigra	~ 5,5,10	6	MH	MH	P	DB(S), V(grape)			X
67	Juglans nigra	~ 30	9	MH	MH	P	DB(S), V(grape)			X



TREE INVENTORY & PRESERVATION PLAN
1:300

City of Burlington

TREE PROTECTION ZONE (TPZ)

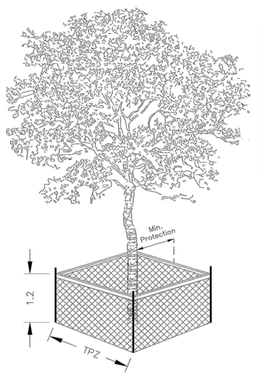
No equipment or vehicles shall be operated, parked, repaired or refueled within the Tree Protection Zone.

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.



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]
< 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 City Arborist.
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 City Arborist.
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 BARRIER
N.T.S

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Jul 14, 2019 - 08:01am

LEGEND

- Property line
- Existing vegetation grouping to be preserved
- Existing tree to be preserved
- Existing tree to be removed for construction
- Minimum Tree Protection Zone (MTPZ) (distance from trunk shown on drawing)
- Tree protection barrier
- Limit of proposed underground garage

NOTE:
A Tree Inventory was conducted on May 14, 2018 for trees within the property limits; another Tree Inventory was conducted on July 17, 2019 for trees within 3 meters of the property line.

NO TREE REMOVAL SHALL OCCUR PRIOR TO APPROVAL OF APPLICATION.

LIMITING CONDITIONS:

This tree inventory was derived from data gathered on the site using accepted arboricultural practices. This includes a visual examination of all above ground parts of the tree for structural defects and signs of health and vigour. All examination took place from the ground plane and no trees were cored, probed or climbed. There was also no detailed inspection of the root crown where excavation would have been required.

This inventory describes the health, structural stability and identifies potential hazards of the trees to a reasonable extent. Where dead branches or other are identified in the notes it is the owners responsibility to take action. This inventory does not provide or imply a guarantee that these trees or branches will remain standing intact. The stability of any tree or branches of a tree cannot be predicted with absolute certainty under all circumstances.

There is, likewise, no guarantee of survival for those trees to be preserved during construction but which are subject to injury. Tree preservation guidelines that are provided in this report are generally suitable for the tree as determined by the visual assessment. However, there is no guarantee that these guidelines will be followed throughout construction unless an arborist is retained for complete supervision of the site at all times. Even with complete supervision, roots in an urban environment are unpredictable. Guidelines, that suppose an even distribution of roots may not be effective in cases where roots have clustered in small areas.

The assessment in this inventory is valid only at the time of inspection.

Nick Taylor
ISA Certified Arborist
ON-2068A
Baker Turner Inc.

REVISIONS

Date	Description
14 Aug 18	Issued for Rezoning Submission
12 Sept 18	Issued for Rezoning Submission

DATE DESCRIPTION

NOTE: Contractor is to check and verify all dimensions and conditions on the project, and is to immediately report any discrepancies to the landscape architect before proceeding with the work.

BTi Baker Turner inc.
Landscape Architecture I Site Design
Suite 300
8501 Mississauga Road
Brampton Ontario L6Y 5G8
Tel: (905) 453-9398
Fax: (905) 453-9376
email: tba@bakerturner.com

Project Title

Amica North Shore
1157-1171 North Shore Boulevard
Burlington, ON, L7S 1C3
TREE INVENTORY & PRESERVATION PLAN

Date	Issued
May 2018	
Job Number	Drawn By
BTI-1398	NT
Scale	Checked By
As shown	TT
Sheet Number	File Number
TS.1	