

Table 1. Tree Inventory											
Location: 228 Queen St., NOL											
Date: 21 Dec. 2022											
Surveyors: JJJ											
Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	mTPZ	Location	Comments	Recom.
1	Norway Maple	Acer platanoides	40	F	G	G	5	3.0	ROW	Girdling roots, stem wound at flare	Preserve
2	Norway Maple	Acer platanoides	64	FG	G	G	6	4.2	ROW	Damaged structural root with dry rot adjacent to sidewalk	Preserve
3	Norway Maple	Acer platanoides	63	FG	G	G	6	4.2	ROW	Flare/roots have dry rot adjacent to sidewalk	Preserve
4	Horsechestnut	Aesculus hippocastanum	77	FG	G	G	6	4.8	ROW	Union at 3 m w/ th leaning down to the ground, light stem wound at flare with dry rot	Preserve
5	Norway Maple	Acer platanoides	45	F	FG	G	6	3.0	ROW	Union at 1.6 m, girdling roots, seam	Preserve
6	Norway Maple	Acer platanoides	12	FG	G	G	2	2.4	ROW	Stem wounds at flare	Preserve
7	Norway Maple	Acer platanoides	34	G	G	G	5	2.4	ROW	Union at 1.8 m	Preserve
8	Norway Maple	Acer platanoides	59	FG	G	G	7	3.6	ROW	Girdling roots	Preserve
9	Norway Maple	Acer platanoides	37	G	G	G	4		ROW		Preserve
10	Norway Maple	Acer platanoides	50	G	G	FG	5		ROW	Union at 2 m, epicormic branching	Preserve
11	London Plane-Tree	Platanus x acerifolia	46	G	G	G	7		ROW	Bow ed east	Preserve
12	London Plane-Tree	Platanus x acerifolia	44	G	G	G	7		ROW	Bow ed east	Preserve
13	Little-leaf Linden	Tilia cordata	74	G	G	G	7		ROW	No flare - flared likely covering flare	Preserve
14	Silver Maple	Acer saccharinum	55	FG	FG	G	6		ROW	Union at 3.5 m, stem wound in crown, pruning wounds, 10% crown dieback	Preserve
15	White Oak	Quercus alba	5	G	G	G	1		ROW		Preserve
16	Silver Maple	Acer saccharinum	4	G	G	G	1		ROW		Remove
17	Silver Maple	Acer saccharinum	3	G	G	G	1		ROW		Preserve
18	Sugar Maple	Acer saccharum	68	G	FG	FG	6		ROW	10% dieback at top of crown, 1 large vertical scaffold limb	Preserve
19	Sugar Maple	Acer saccharum	62	G	G	G	6		ROW	Broken branches	Preserve
20	European Larch	Larix decidua	55	G	G	G	5		Subject Property		Remove
21	Horsechestnut	Aesculus hippocastanum	22	G	G	G	3		Subject Property		Remove
22	Norway Spruce	Picea abies	26	G	G	G	3		Subject Property		Preserve
23	Norway Spruce	Picea abies	25	G	G	G	3		Subject Property		Preserve
24	Red Oak	Quercus rubra	102	G	G	G	10		Subject Property	Light stem wounds, light fruiting body	Preserve
25	Silver Maple	Acer saccharinum	118	FG	FG	FG	11		Subject Property	Union at 4 m, english ivy growing up stem, broken branches, pruning wounds	Preserve
26	Norway Spruce	Picea abies	66	G	G	G	4		Subject Property	English ivy growing up stem	Preserve
27	Blue Spruce	Picea pungens	37	G	G	G	4		Subject Property		Preserve
28	Slippery Elm	Ulmus rubra	96	FG	F	F	9		Subject Property	Light stem wounds, 20% crown dieback	Remove
29	Norway Spruce	Picea abies	56	G	G	G	4		Subject Property	Stem wound on 1 structural root	Preserve
30	Saucer Magnolia	Magnolia x soulangeana	10, 5, 6	G	G	G	2		Subject Property	Union at ground	Preserve
31	Saucer Magnolia	Magnolia x soulangeana	10	G	G	G	4		Subject Property		Preserve
32	Siberian Elm	Ulmus pumila	10, 12	FG	G	G	3		Subject Property	Union at ground	Remove
33	Blue Spruce	Picea pungens	45	G	G	G	4		Subject Property		Remove
34	Red Oak	Quercus rubra	52	G	G	G	8		Subject Property		Remove
35	False Cypress species	Chamaecyparis sp.	10, 11	G	G	G	2		Subject Property	Union at ground	Preserve
36	Silver Maple	Acer saccharinum	101	F	FG	G	12		Subject Property	Union at 4 m w/ th cavity full of concrete	Preserve
37	Norway Spruce	Picea abies	47	G	G	G	6		Subject Property		Remove
38	Pin Oak	Quercus palustris	54	G	G	G	6		Subject Property		Remove
39	Red Oak	Quercus rubra	76	FG	G	G	9		Subject Property	Girdling roots	Remove
40	Blue Spruce	Picea pungens	55	G	G	G	4		Subject Property		Remove
41	European Hornbeam	Carpinus betulus	~14, 9	G	G	G	2		Subject Property		Remove
42	European Hornbeam	Carpinus betulus	11	G	G	G	2		Subject Property		Remove
43	Japanese Maple	Acer palmatum	13	G	G	G	3		Subject Property		Remove
44	European Hornbeam	Carpinus betulus	10	G	G	G	2		Subject Property		Remove
45	European Hornbeam	Carpinus betulus	15, 8	G	G	G	2		Subject Property		Remove
46	European Hornbeam	Carpinus betulus	13	G	G	G	2		Subject Property		Remove
47	European Hornbeam	Carpinus betulus	13	G	G	G	2		Subject Property		Remove
48	European Hornbeam	Carpinus betulus	~15	G	G	G	2		Subject Property		Remove
49	European Hornbeam	Carpinus betulus	~14	G	G	G	2		Subject Property		Remove
50	European Hornbeam	Carpinus betulus	~12, 8, 9	G	G	G	2		Subject Property		Remove
51	European Hornbeam	Carpinus betulus	~15	G	G	G	2		Subject Property		Remove
52	European Hornbeam	Carpinus betulus	~17	G	G	G	2		Subject Property		Remove
53	European Hornbeam	Carpinus betulus	10, 13, 11	G	G	G	2		Subject Property		Remove
54	European Hornbeam	Carpinus betulus	15	G	G	G	2		Subject Property		Remove
55	European Hornbeam	Carpinus betulus	~10	G	G	G	2		Subject Property		Remove
56	White Fir	Abies concolor	23	G	G	G	2		Subject Property		Remove
57	Ohio Buckeye	Aesculus glabra	15	G	G	G	3		Subject Property		Remove
58	White Mulberry	Morus alba	10, 8	G	G	G	4		Subject Property	Bow ed	Remove
59	European Hornbeam	Carpinus betulus	11	G	G	G	2		Subject Property		Remove
60	European Hornbeam	Carpinus betulus	9, 11, 9	G	G	G	2		Subject Property		Remove
61	European Hornbeam	Carpinus betulus	12	G	G	G	2		Subject Property		Remove
62	European Hornbeam	Carpinus betulus	19	G	G	G	2		Subject Property		Remove
63	European Hornbeam	Carpinus betulus	16	G	G	G	2		Subject Property		Remove
64	European Hornbeam	Carpinus betulus	13	G	G	G	2		Subject Property		Remove
65	European Hornbeam	Carpinus betulus	17	G	G	G	2		Subject Property		Remove
66	Blue Spruce	Picea pungens	29	G	G	G	3		Subject Property		Remove
67	Siberian Elm	Ulmus pumila	25	G	G	G	5		Subject Property		Remove
68	Saucer Magnolia	Magnolia x soulangeana	37, 30	G	G	G	5		Subject Property	Union at 0.5 m, light girdling root	Remove
69	Saucer Magnolia	Magnolia x soulangeana	32, 41	G	G	G	6		Subject Property		Remove
70	Blue Spruce	Picea pungens	~15	G	G	G	2		Neighbouring		Preserve
71	European Hornbeam	Carpinus betulus	~14, 11	G	G	G	2		Subject Property		Remove
72	European Hornbeam	Carpinus betulus	9, 13	G	G	G	2		Subject Property		Remove
73	European Hornbeam	Carpinus betulus	12	G	G	G	2		Subject Property		Remove
74	European Hornbeam	Carpinus betulus	14, 9, 10	G	G	G	2		Subject Property		Remove
75	European Hornbeam	Carpinus betulus	10, 9, 12	G	G	G	2		Subject Property		Remove
76	European Hornbeam	Carpinus betulus	10, 11, 7	G	G	G	2		Subject Property		Remove
77	European Hornbeam	Carpinus betulus	13, 11, 10	G	G	G	2		Subject Property		Remove
78	European Hornbeam	Carpinus betulus	8, 11, 10	G	G	G	2		Subject Property		Remove
79	European Hornbeam	Carpinus betulus	11, 8, 7	G	G	G	2		Subject Property		Remove
80	European Hornbeam	Carpinus betulus	12	G	G	G	2		Subject Property		Remove
81	European Hornbeam	Carpinus betulus	12, 8	G	G	G	2		Subject Property		Remove
82	Blue Spruce	Picea pungens	~15	G	G	G	2		Neighbouring		Preserve
83	Columnar Beech	Fagus sylvatica Fastigiata	~15	G	G	G	1		Neighbouring		Preserve
84	Columnar Beech	Fagus sylvatica Fastigiata	~11	G	G	G	1		Neighbouring		Preserve
85	Blue Spruce	Picea pungens	~17	G	G	G	2		Neighbouring		Preserve
86	Blue Spruce	Picea pungens	~15	G	G	G	2		Neighbouring		Preserve
87	Eastern White Cedar	Thuja occidentalis	10-15	F	F	F	1.5		Subject Property	Cedar hedge, 10 trees 10-15 cm DBH	Remove
88	Ginkgo	Ginkgo biloba	~35	G	F	F	4		Neighbouring	Top of crown is dead	Preserve
89	White Elm	Ulmus americana	16, 13, 13	FG	G	G	4		Subject Property	Union at ground and 0.5 m	Remove
90	Turkish Hazel	Corylus colurna	19, 10	F	F	F	3		Subject Property	Union at 0.5 m, 20% crown dieback, peeling bark	Remove
91	European Hornbeam	Carpinus betulus	~20	G	G	G	3		Neighbouring		Preserve
92	Norway Spruce	Picea abies	21	G	G	G	3		Neighbouring	Tagged 253	Preserve

Table Legend

DBH Diameter at Breast Height (cm)

TI Trunk Integrity (G, F, P)

CS Crown Structure (G, F, P)

CV Crown Vigor (G, F, P)

DL Dripline (m)

mTPZ Minimum Tree Preservation Zone (m)

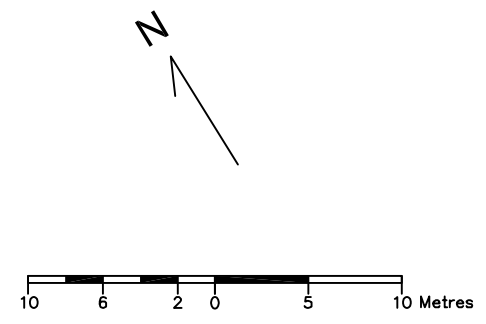
Recom. Recommendation (preserve/remove)

G Good

F Fair

P Poor

- Estimate

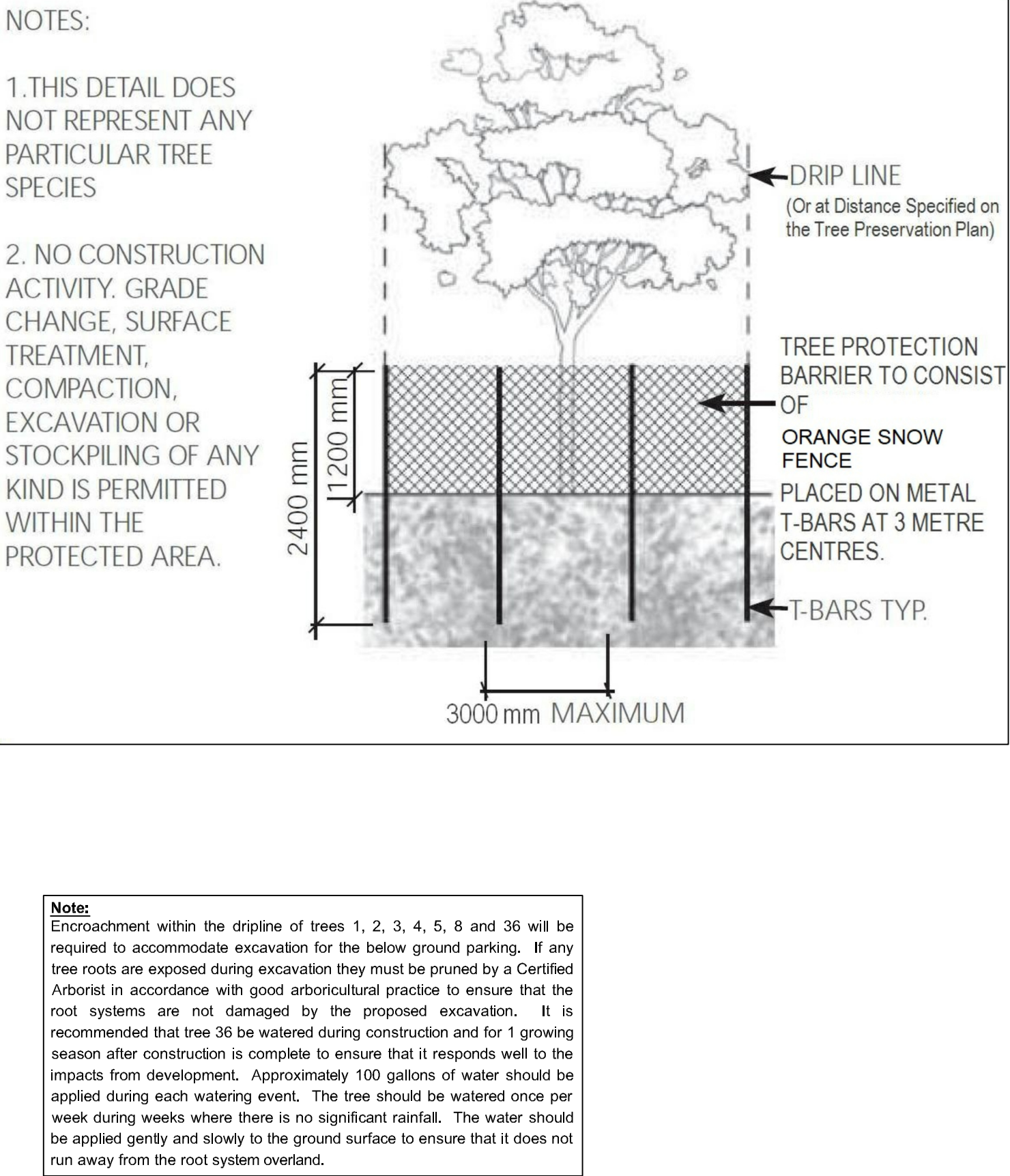


DETACHED RESIDENTIAL

Note:
Encroachment within the driplines of Trees 10, 11 and 29 will be required to accommodate the proposed concrete driveway. A gravel driveway already exists adjacent to tree 29 and it is anticipated that few tree roots reside below the existing driveway. Where the curb is proposed within the driplines of Trees 10 and 11, air spade excavation will be required to excavate the limit of the proposed curb to gently expose any tree roots that reside within the area of encroachment. If any roots are exposed they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged by construction.

Note:
Encroachment within the dripline of tree 24 will be required to accommodate the proposed patio stone walkway and parking spaces. If any roots are exposed by construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root system is not damaged. It is recommended that tree 24 be watered during construction and for 1 growing season after construction is complete to ensure that it responds well to the impacts from development. Approximately 100 gallons of water should be applied during each watering event. The tree should be watered once per week during weeks where there is no significant rainfall. The water should be applied gently and slowly to the ground surface to ensure that it does not run away from the root system overland.

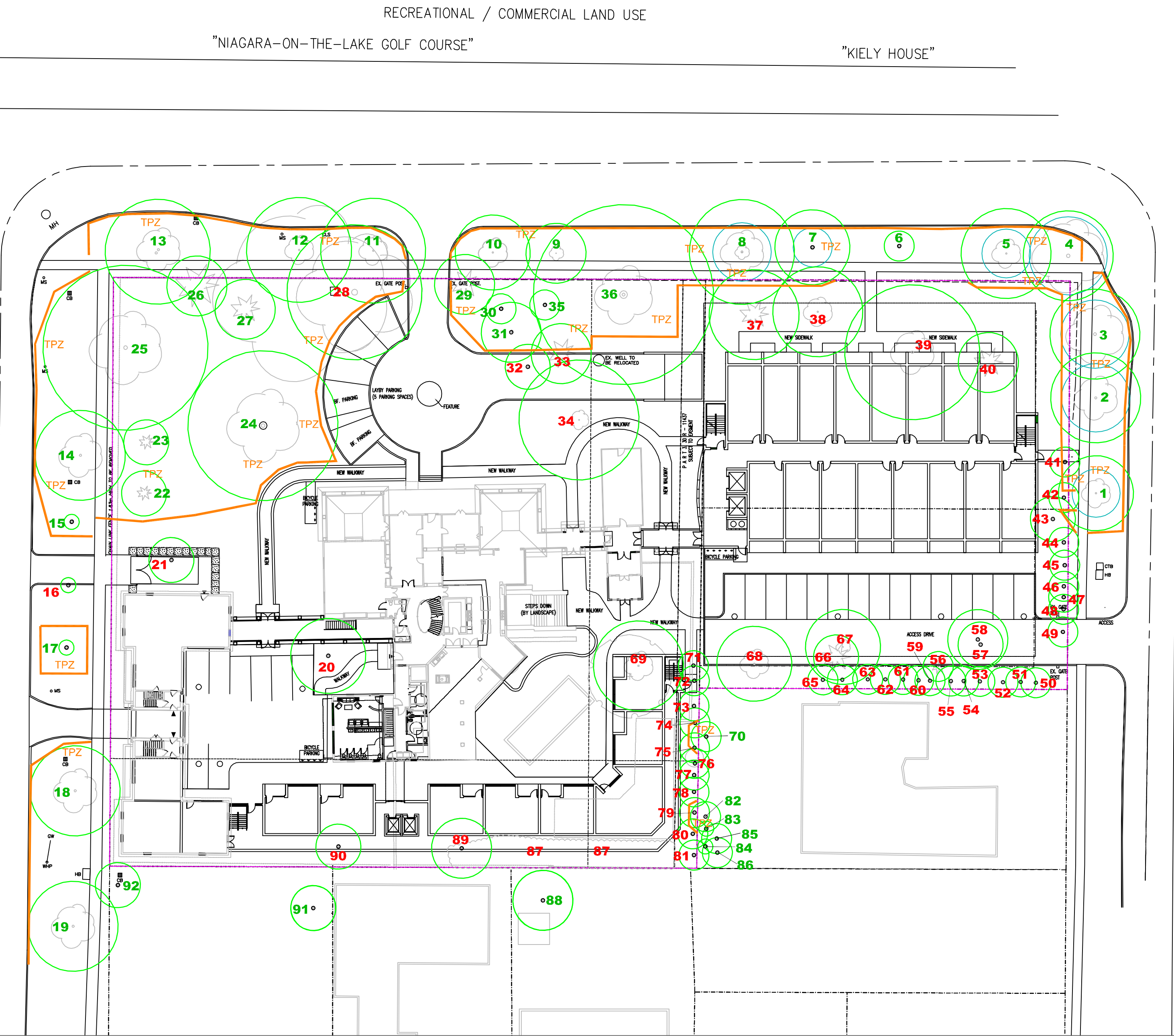
TREE PROTECTION PLAN NOTES
Prior to site disturbance the owner must confirm that no migratory birds are making use of the site for nesting. The owner must ensure that the works are in conformance with the Migratory Bird Convention Act and that no migratory bird nests will be impacted by the proposed work. It is the applicants' responsibility to discuss potential tree injury of trees on shared property lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible for removal and such issues would be dealt with in civil court or through regulation.
TREE PROTECTION ZONE: No construction activity including grade changes, surface treatments or excavations of any kind is permitted within the area identified on the Tree Protection Plan or Site Plan as a Tree Protection Zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. No movement or storage of vehicles or equipment is permitted within the TPZ. Grade changes are not permitted within established TPZ. The area(s) identified as a TPZ must remain undisturbed at all times.
TREE PROTECTION BARRIERS:
Tree protection barriers must be installed around trees to be protected using orange snow fencing. All supports and bracing to safely secure the barrier should be outside the TPZ. All such supports and bracing should minimize damage to roots outside the TPZ.
General Note:
Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed. Established tree protection zones must not be used as construction access, storage or staging areas. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. Permission from the City/Town must be provided prior to the removal of tree protection fence.
ARBORICULTURAL WORK:
Any roots or branches which extend beyond the TPZ indicated on this plan which require pruning, must be pruned by a Certified Arborist. All pruning of tree roots and branches must be in accordance with good arboricultural standards. Roots located outside the TPZ that have received approval from the City/Town to be pruned must first be exposed by hand digging or by using an air spade. This will allow a proper pruning cut and minimize tearing of the roots.



LEGEND

- Surveyed Deciduous Tree Location
- Surveyed Coniferous Tree Location
- GPS Tree Location
- Tree Number Identified for Preservation (GREEN)
- Tree Number Identified for Removal (Red)
- Tree Preservation Zone Symbol
- Dripline
- Minimum Tree Preservation Zone
- Tree Protection Fence Location
- Property Boundary

- Tree Protection Recommendations**
The following recommendations are made in attempts to reduce the impacts to trees identified for preservation:
- Tree protection fence must be installed at the dripline for trees identified for preservation prior to the commencement of demolition, unless noted otherwise in this report and on Sheet 1.
 - Where tree protection fence is proposed in the road allowances it should be construction from a "see through" fence so lines of site are not obstructed.
 - Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
 - No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction.
 - No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
 - Any tree branches or roots that conflict with proposed development must be pruned by a Certified Arborist in accordance with good arboricultural practice.
 - The proposed encroachment area within the dripline of trees 10 and 11 must be excavated using air spade excavation to gently expose any roots that may conflict with development.
 - Trees 24 and 36 will require watering as outlined in the note on this drawing.
 - Tree protection fencing should be inspected by a Certified Arborist prior to and during construction to ensure that the fencing remains intact and in good repair throughout the stages of development.



No.	Description	Date	By
1	Report Submission	9 Feb. 2023	JJ
2	Resubmission	8 Nov. 2023	JJ

Data Source: The Larocque Group, 204 Architects

228 Queen Street
Niagara-on-the-Lake, ON

Van Riesen Hotel Group Inc.
PO Box 612
St. Davids, ON L0S 1P0

Tree Preservation Plan

JACKSON ARBORICULTURE INC.

118 Pleasant Ridge Road
Burlington ON N7B 0B8
jreney@jacksonarbor.com

Project # P360

Date 9 February 2023
Revised 8 November 2023

Scale 1:400 @24x36

Sheet # 1