Tree Inventory and Preservation Plan Report
4000 Riverside Drive
Ottawa, Ontario

prepared for

IGP Realty Advisors Inc.
19 Galtsworthy Avenue
Toronto ON M1R 2N5

prepared by

KUNTZ
FORESTRY
CONSULTING Inc.

PO Box 1267 Lakeshore W PO
146 Lakeshore Road West
Oakville ON L6K 0B3
289.837.1871
www.kuntzforestry.ca
consult@kuntzforestry.ca

26 September 2025

KUNTZ FORESTRY CONSULTING INC Project P4752

Introduction

Kuntz Forestry Consulting Inc. was retained by IGP Realty Advisors Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 4000 Riverside Drive in Ottawa, Ontario. The property is located on the west side of Riverside Drive, south of Hunt Club Road, within a commercial area.

The work plan for this tree preservation study included the following:

- Prepare inventory of all tree resources on and adjacent to the subject property, with the potential to be impacted by the proposed work;
- Evaluate potential tree saving opportunities based on proposed development plans; and
- Document the findings in a Tree Inventory and Preservation Plan Report.

The results of the evaluation are provided below.

Methodology

The tree inventory was conducted on 22 September 2025. The topographic survey and KFCI's Trimble GPS Unit were used to locate trees. Tree resources located on the subject property or within the road right-of-ways were tagged using numbers 1084-1099, 1100-1102 and 1475-1500. Polygons (groups of trees) were identified as P1. Tree locations are shown on Figure 1. Refer to Tables 1 for the results of the tree inventory.

Tree resources were assessed utilizing the following parameters:

Tree # - number assigned to tree that corresponds to Figure 1.
Species - common and botanical names provided in the inventory table.
DBH - diameter (centimetres) at breast height, measured at 1.4 m above the ground.
Dripline – the radius of the crown, measured from the trunk to the outer tips of the branches.
Critical Root Zone – the radius of the critical root zone, calculated based on the DBH in accordance with City of Ottawa standards.
Condition - condition of tree considering trunk integrity, crown structure, and crown vigour. Condition ratings include poor (P), fair (F) and good (G).
Comments - additional relevant detail.

Existing Site Conditions

The subject property is currently occupied by a Petro-Canada and Car Wash, with driveways providing access to Hunt Club Road and Riverside Drive. Tree resources exist in the form of landscape trees. Refer to Figure 1 for the existing conditions.

Individual Tree Resources

The inventory documented 45 trees and polygons on and adjacent to the subject property. Refer to Tables 1 for the full tree inventory and Figure 1 for the locations of trees reported in the tree inventory.

Tree resources were comprised of Blue Spruce (*Pica pungens*), Trembling Aspen (Populus tremuloides), Red Pine (Pinus resinosa), Hackberry (Celtis occidentalis), Austrian Pine (Pinus nigra), Eastern Cottonwood (Populus deltoides), Japanese Tree Lilac (*Syringa reticulata*), Freeman Maple (*Acer x freemanii*), White Spruce (*Picea glauca*), Ornamental Pear (*Pyrus calleryana*) and Hackberry (*Celtis occidentalis*).

Proposed Development

The proposed works include new drive aisles and the modification of select curblines throughout the site. The existing building and gas bar canopy is to remain, along with the existing driveway entrances. Refer to Figure 1 for the existing conditions and proposed site plan.

Discussion

The following sections provide a discussion and analysis of development impacts, tree removal requirements, and tree preservation relative to the proposed development and existing conditions.

Development Impacts/Tree Removals

The removal of two trees, identified as Trees 1086 and 1101 will be required to accommodate the proposed development. Trees identified for removal either conflict directly with the proposed drive aisle, or intrusion into their critical root zone (CRZ) would be too great, and we would not expect them to tolerate that level of intrusion. Refer to Table 1 for the reason for removal for the trees.

Trees 1086 and 1101 are located on the subject property and are greater than 10cm DBH.

Dead trees indicated on Figure 1 should also be removed. Where dead trees are located offsite, they are shown for preservation, but their removal should be discussed with the City and/or neighbouring property owner.

Refer to Figure 1 for the location of proposed tree removals.

Tree Preservation

The preservation of the remaining trees will be possible with appropriate tree protection measures as indicated on Figure 1. Tree protection measures will have to be implemented prior to construction to ensure tree resources designated for retention are not impacted by the development. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence detail.

City of Ottawa standards define the Critical Root Zone (CRZ) of trees, the minimum distance to be protected, as 10cm x DBH. These zones are shown on Figure 1 and will be protected. Where trees are set substantially back from the construction area, tree protection fencing has not been prescribed. If these areas are used for staging, equipment storage, etc., then TPZ fencing may be required.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by IGP Realty Advisors Inc. to complete a Tree Inventory and Preservation Plan in support of a development application for the property located at 4000 Riverside Drive in Ottawa, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 45 trees and tree polygons on and within six metres of the subject property. The removal of two trees will be required to accommodate the proposed development and/or due to their condition. The remaining trees can be saved provided appropriate tree protection measures are installed prior to the development.

The following recommendations are suggested to minimize impact to trees identified for preservation. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence detail.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.

- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.

- Branches and roots that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with Good Arboricultural Standards.

- Site visits, pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

Celine Batterink

Celine Batterink, H.B.Sc. Ecology
Project Manager, Senior Consulting Arborist, Ecologist
ISA Certified Arborist #ON1546-A, ASCA Member, TRAQ
Email: cbatterink@kuntzforestry.ca
Phone: 289-837-1871 ext 101

Natasha Brooks

Natasha Brooks, B.B.R.M.(EM), CERPIT Ecologist, ISA Certified Arborist #ON-2906A, TRAQ
Email: natasha.brooks@kuntzforestry.ca
Phone: 289-837-1871 ext.108

Table 1. Tree Inventory

Location: 4000 Riverside Drive, Ottawa

Date: 22 September 2025
Surveyors: CB

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	CRZ	Ownership	Comments	Action	Reason for Removal
1084	Blue Spruce	*Picea pungens*	20	P-F	P	P	90	1	2	Private		Retain	
1085	Blue Spruce	*Picea pungens*	25	G	G	G		2	2.5	Private		Retain	
1086	Blue Spruce	*Picea pungens*	21	G	G	G		2	2.1	Private	Exposed roots (L), poor form (L)	Remove	Significant CRZ encroachment for new drive aisle
1087	Trembling Aspen	*Populus tremuloides*	12	P-F	F	F		2.5	1.2	Neighbour	Rot (H), asymmetrical crown (M)	Retain	
1088	Red Pine	*Pinus resinosa*	13	F	F	F		3	1.3	Private	Lean (M)	Retain	
1089	Red Pine	*Pinus resinosa*	15.5	F-G	G	F		3	1.55	Private	Lean (L)	Retain	
1090	Red Pine	*Pinus resinosa*	14	F-G	G	F		3	1.4	Private	Lean (L)	Retain	
1091	Red Pine	*Pinus resinosa*	16.5	F-G	G	F		3	1.65	Private	Lean (L)	Retain	
1092	Red Pine	*Pinus resinosa*	14.5	F-G	G	F		3	1.45	Private	Lean (L)	Retain	
1093	Hackberry	*Celtis occidentalis*	25.5, ~18, 10	G	G	G		6	2.55	City	Union at base	Retain	
1094	Austrian Pine	*Pinus nigra*	22	F-G	G	G		3	2.2	City	Crook (L), pruning wounds (L)	Retain	
1095	Austrian Pine	*Pinus nigra*	24	F-G	G	G		3	2.4	City	Sapsucker damage (L), pruning wounds (L)	Retain	
1096	Austrian Pine	*Pinus nigra*	25.5	F	P-F	P	60	3	2.55	City	Sweep (L), asymmetrical crown (L), deadwood (M)	Retain	
1097	Austrian Pine	*Pinus nigra*	20	F	P-F	F	30	3.5	2	City	Crook (H), pruning wounds (L), poor form (M)	Retain	

1098	Austrian Pine	*Pinus nigra*	24	F-G	G	F-G		3.5	2.4	City	Sapsucker damage (L), pruning wounds (L)	Retain	
1099	Freeman Maple	*Acer x freemanii*	30	F-G	F-G	F-G		5	3	City	Epicormic branching (L), vertical scaffolding limbs (L), exposed roots (L)	Retain	
1100	Eastern Cottonwood	*Populus deltoides*	50.5, 36	F	F	F-G		10	5.05	City	V-union at 1m, asymmetrical crown (L)	Retain	
1101	Blue Spruce	*Picea pungens*	25	F-G	F	F	20	2	2.5	Private	Pruning wounds (L), exposed roots (L)	Remove	Conflict with new drive aisle
1102	Japanese Tree Lilac	*Syringa reticulata*	10	P-F	F	P-F		2	1	Private	Pruning wounds (M), stem wound (H) with rot (H)	Retain	
1475	Freeman Maple	*Acer x freemanii*	30.5	F-G	F	F		3.5	3.05	City	Epicormic branching (L), vertical scaffolding limbs (M), exposed roots (L), seam (L)	Retain (injure)	
1476	Freeman Maple	*Acer x freemanii*	23	F-G	F-G	F-G		2	2.3	City	Pruning wounds (L), union at 2.5, epicormic branching (L) seam (L), vertical scaffolding limbs	Retain	
1477	Austrian Pine	*Pinus nigra*	33.5	F	F	F-G		3	3.35	City	Union at 2.5m, pruning wounds (L), lean (vL)	Retain	
1478	Austrian Pine	*Pinus nigra*	27	G	G	F		3	2.7	City	Pruning wounds (L), sapsucker damage (L)	Retain	
1479	Austrian Pine	*Pinus nigra*	23.5	F-G	F-G	F-G		3	2.35	City	Crook (L), pruning wounds (L)	Retain	
1480	Austrian Pine	*Pinus nigra*	26	F-G	F-G	F-G		3	2.6	City	Lean (L), pruning wounds (L)	Retain	
1481	Freeman Maple	*Acer x freemanii*	20	P-F	P-F	P-F	30	2.5	2	City	Rot throughout main bole (H), epicormic branching (L), pruning wounds (L)	Retain	
1482	Freeman Maple	*Acer x freemanii*	23.5	G	G	F-G		3	2.35	Private	Epicormic branching (L), pruning wounds (L)	Retain	
1483	Blue Spruce	*Picea pungens*	~17	G	G	F	15	1.5	1.7	City	Leader dead, tree is 1m east of point	Retain	

1484	Freeman Maple	*Acer x freemanii*	21.5	F-G	F-G	F-G		3	2.15	Private	Exposed roots (M), stem wound (L), epicormic branching (L)	Retain	
1485	Freeman Maple	*Acer x freemanii*	24	F-G	F-G	F-G		3.5	2.4	Private	Exposed roots (L), epicormic branching (L), vertical scaffolding limbs (L)	Retain	
1486	White Spruce	*Picea glauca*	8	F-G	F	F	10	1.5	0.8	Neighbour	Lost leader, poor form (M)	Retain	
1487	Freeman Maple	*Acer x freemanii*	25	F-G	F-G	F-G		3	2.5	Neighbour	Exposed roots (L), epicormic branching (L), vertical scaffolding limbs (L)	Retain	
1488	White Spruce	*Picea glauca*	6	F-G	F	F	10	0.5	0.55	Neighbour	Two leaders	Retain	
1489	Freeman Maple	*Acer x freemanii*	21	F-G	F-G	F-G		3.5	2.1	Neighbour	Seams (L), epicormic branching (L), vertical scaffolding limbs (L), exposed roots (L)	Retain	
1490	Freeman Maple	*Acer x freemanii*	24	F	F	F		3.5	2.4	Neighbour	Frost crack (H), exposed roots (L), epicormic branching (L), union at 3m, poor form (L)	Retain	
1491	Freeman Maple	*Acer x freemanii*	21.5	P-F	P-F	F		3.5	2.15	Neighbour	Epicormic branching (L), growth deficit (L), splitting v-union in crown with included bark (M)	Retain	
1492	Blue Spruce	*Picea pungens*	~23	G	G	G		3	2.3	City		Retain	
1493	Blue Spruce	*Picea pungens*	20.5	G	G	G		2.5	2.05	City		Retain	
1494	Ornamental Pear	*Pyrus calleryana*	12	F	G	F		2	1.2	Neighbour	Pruning wounds (L), rot (L)	Retain	
1495	Austrian Pine	*Pinus nigra*	13	G	F-G	G		2	1.3	Neighbour	Crook (L)	Retain	
1496	Austrian Pine	*Pinus nigra*	19.5	F	F	G		2.5	1.95	Neighbour	Pruning wounds (L), Co-dominant at 2m	Retain	
1497	White Spruce	*Picea glauca*	~21	G	G	G		2	2.1	Neighbour		Retain	

1498	Ornamental Pear	*Pyrus calleryana*	12	F-G	G	G		2	1.2	Neighbour	Pruning wounds (L), girdling guy wire (L)	Retain	
1499	Ornamental Pear	*Pyrus calleryana*	9.5	F-G	G	G		2	0.95	Neighbour	Pruning wounds (L), girdling guy wire (L)	Retain	
1500	Japanese Tree Lilac	*Syringa reticulata*	16.5	F	F	P-F	15	2	1.65	Private	Stem wound (H) with rot, v-union at 1.3m	Retain	
P1	Hackberry	*Celtis occidentalis*	~18-27	G	G	G		4-6	1.8-2.7	City	4 trees	Retain	

Codes		
DBH	Diameter at Breast Height	*(cm)*
TI	Trunk Integrity	*(G, F, P)*
CS	Crown Structure	*(G, F, P)*
CV	Crown Vigor	*(G, F, P)*
CDB	Crown Die Back	*(%)*
DL	Dripline	*(metres)*
CRZ	Critical Root Zone	*(metres)*
~ = estimate; (VL) = very light; (L) = light; (M) = moderate; (H) = heavy		

Appendix A. Photographs of Trees

Image 1. Trees 1084, 1085, 1500, 1086 (Left- right)

Image 2. Tree 1087

Image 3. Tree 1088 and 1089 (Left to right)

Image 4. Trees 1090 and 1091

Image 5. Trees 1091, 1092, 2 dead trees (Left to right)

Image 6. Tree 1093

Image 7. Trees 1094-1098 (Left to right). P1 in background

Image 8. Tree 1099


Image 9. Tree 1100


Image 10. Tree 1101 (Right), Dead tree (Centre) and 1102 (Left)


Image 11. Trees 1475 (Right) and 1476 (Left)


Image 12. Tree 1477-1480 (Left to right)


Image 13. Tree 1481

Image 14. Trees 1482

Image 15. Tree 1483

Image 16. Trees 1484 and 1485 (Right to left)

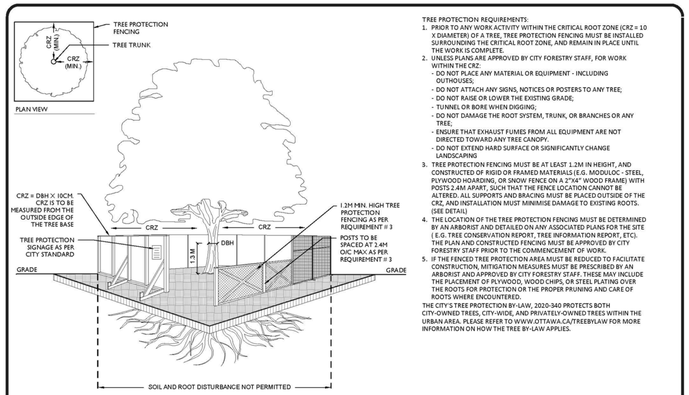
Image 17. Trees 1486-1490 (Left to right)

Image 18. Trees 1490, 1492, 1493, 1491 (Left to right)

Image 19. Trees 1494-1496 (Right to left)

Image 20. Trees 1497 and 1498 (Right to left)

Image 21. Tree 1499



TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
   - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
   - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
   - DO NOT RAISE OR LOWER THE EXISTING GRADE;
   - TUNNEL OR BORE WHEN DIGGING;
   - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
   - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
   - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

Ottawa

TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE:	NTS
DATE:	MARCH 2021
DRAWING NO.:	1 of 1

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 negotiation. The applicant would be required to replace such trees to the satisfaction of the City of Ottawa.

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:

For City-owned Trees:

Tree protection barriers for trees situated on the City road allowance where visibility must be maintained, can be 1.2m (4ft.) high and consist of chain link, or orange plastic web snow fencing on a 2" x 4" wood frame. All supports and bracing used to secure the barrier should be located outside the TPZ. All supports and bracing should minimize damage to roots outside the TPZ. Where some fill or excavate has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the TPZ. If the TPZ needs to be reduced to facilitate construction access, the tree protection barrier must be maintained at a lesser distance and the exposed TPZ protected with plywood and wood chips. This must first be approved by the City of Ottawa.

For trees on private property situated on or adjacent to construction sites:

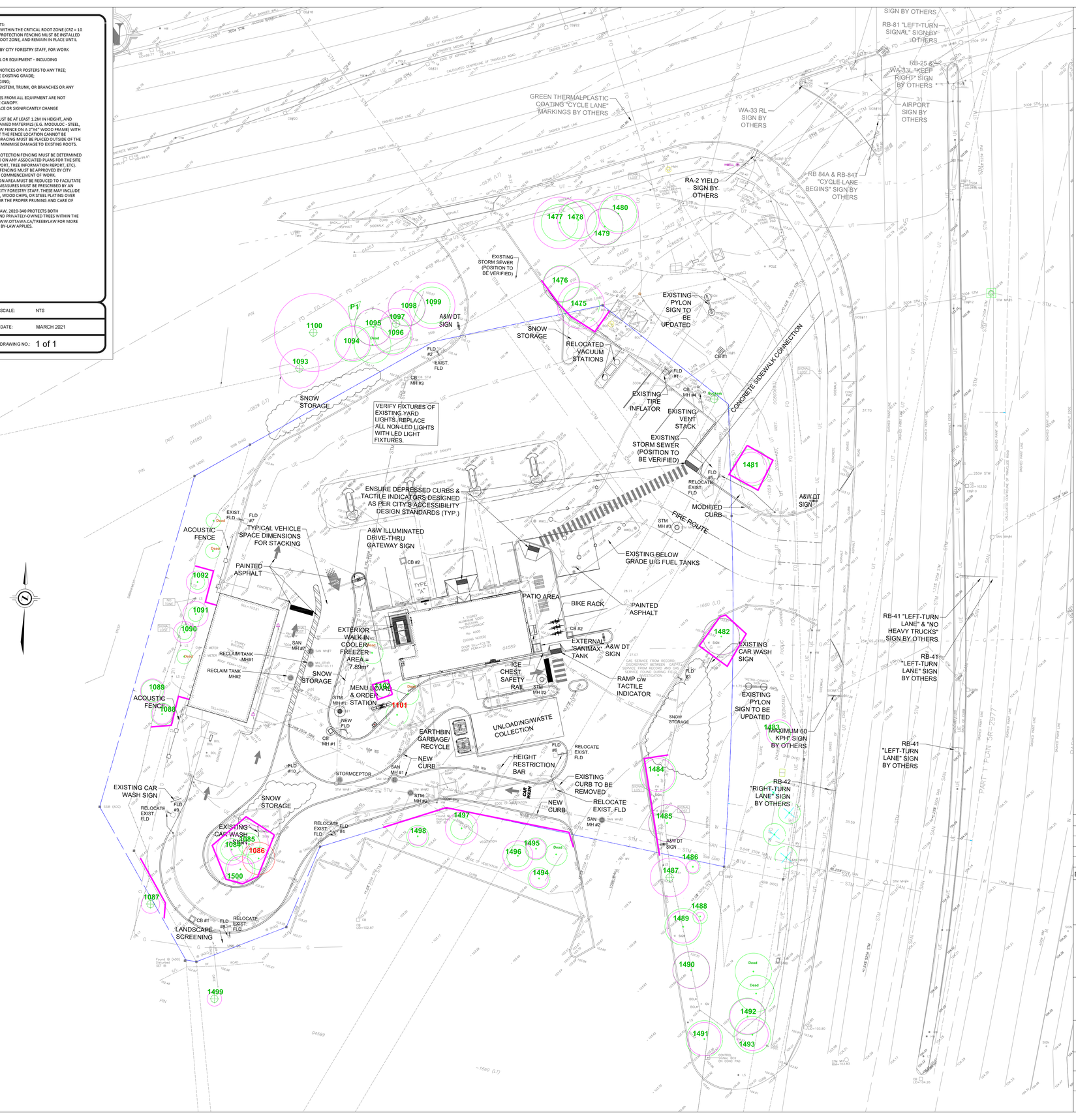
Tree protection barriers must be installed around trees to be protected using plywood clad hoarding or an equivalent approved by the City of Ottawa. All supports and bracing to safely secure the barrier should be outside the TPZ. All such supports and bracing should minimize damage to roots outside the TPZ.

General Note:

Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed and written notice provided to the City of Ottawa. 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. Written notice must be provided to the City of Ottawa prior to the removal of the tree protection barriers.

ARBORICULTURAL WORK:

Any roots or branches which extend beyond the TPZ indicated on this plan which require pruning, must be pruned by a qualified Arborist or other tree professional as approved by the City of Ottawa. 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 of Ottawa to be pruned must first be exposed by hand digging or by using a low pressure hydro vac method. This will allow a proper pruning cut and minimize tearing of the roots. The Arborist/tree professional retained to carry out crown or root pruning must contact the City of Ottawa no less than 48 hours prior to conducting any specified work.



LEGEND

Tree Inventory

Refer to Table 1 of report dated 25 September 2025 for complete tree inventory information. All trees greater than 10cm DBH on and within six metres of the subject property were included in the inventory.

Tree Removals

The removal of two trees will be required to accommodate the proposed development and/or due to their condition. Additional dead trees are also identified for removal. Tree removals are indicated with RED and ORANGE labels.

Tree Preservation

Preservation of all other tree resources will be possible with appropriate tree protection measures. Trees identified for preservation are indicated with GREEN labels. Minimum Tree Preservation zones and required Preservation Fencing are indicated in MAGENTA. TPZ circles represent minimum distances for construction and grading near trees.

Tree Label (RED), removal required due to development	X
Tree Label (ORANGE), removal recommended due to condition	X
Tree Label (GREEN), preservation recommended	X
Critical Root Zone (CRZ) (MAGENTA CIRCLE) CRZ = 10cm x DBH	
CRZ of tree identified for removal (shown for select trees)	
Tree preservation fencing location	
Tree location identified by KFCI's GPS	
Tree on survey but no longer exists	

No.	Issue/Revisions	Date	By
1	Report Submission	25 Sept. '25	CB
2	Figure Revision (new base)	7 Nov. '25	NB
3	Figure Revision (new base)	17 Dec. '25	NB

Base Data: J.D. Barnes Limited (topo), K Paul Architect Inc.

KUNTZ FORESTRY CONSULTING Inc.
146 Lakeshore Road West
PO Box 1267 Lakeshore W PO
Oakville ON L6K 0B3
t: 289 837 1871
e: consult@kuntzforestry.ca
web: www.kuntzforestry.ca

Client
IGP Realty Advisors Inc.
19 Galsworthy Avenue
Toronto, ON M1R 2N5

Property
4000 Riverside Drive
Ottawa, Ontario

Tree Inventory & Preservation Plan

Project	P4752
Date	25 September 2025
Scale	1:250
Figure	1