

110394936 CANADA INC.

Tree Conservation Report

2940, 2944, and 2946 Baseline Road

CIMA+ file number: Z0017558
August 15, 2024 – Review 003



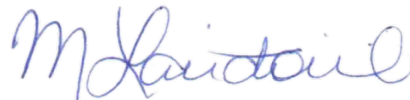
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Amal Siddiqui
Biologist



Michelle Lavictoire
Senior Project Manager/ Senior
Biologist



600–1400 Blair Towers Place, Ottawa, ON
Canada K1J 9B8

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Table of Involved Resources

The following individuals have been involved in the study and writing of the report as technical experts within the project team:

Name	Discipline
Michelle Lavictoire	Senior Biologist/Senior Project Manager (B.Sc., M.Sc.), Final Review & Update
Casey Little	Biologist (GDipEM), Terrestrial Field Work & Reporting
Amal Siddiqui	Biologist (B.Sc., M.F.C), Technical Reporting & Update

Review and submission register			
Review No.	Reviewed by	Date	Description of the change or submission
000	ML	2023-04-25	QA/QC
001	CL	2023-05-15	Added photo of Tree #14
002	ML, AS	2024-07-31	Updated TCR with proposed site plan
003	ML, AS	2024-08-15	Updated TCR Maps with Tree Protection Fencing

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1. Introduction

CIMA+ has been retained by 110394936 Canada Inc. (Brigil) to prepare an update to the Tree Conservation Report (TCR) completed in 2015 by Bowfin Environmental Consulting Inc. (Bowfin) for the planned development at 2940 Baseline Road, Ottawa, ON K2H 1B1. Note that Bowfin merged with CIMA+ in 2022. Upon communication with the City of Ottawa forester, too much time has elapsed from when the original inventory took place, thus requiring an update to the inventory and associated reporting. This report follows the *City of Ottawa Tree Conservation Report Guidelines* (City of Ottawa, 2021). The field work was completed by Casey Little, who has an Ecosystems Management Diploma and 16 years of experience completing natural environment assessments, including tree inventories. Ms. Little is also a certified Butternut Health Assessor (#530), is trained and certified in Ecological Land Classification (ELC) for Southern Ontario, and Ontario Wetland Evaluation System (OWES).

1.1 Project Location and Description

The subject lands are roughly 2.4 ha and consist of three properties situated at 2940, 2944, and 2946 Baseline Road, Ottawa ON (UTM 18T 437391 m N, 5020475 m E, and Latitude 45.3350438, Longitude - 75.7990933). They form part of Lot 35 Concession 3 in the City of Ottawa. The western edge of the property is bordered by Sandcastle Drive and the northern edge by Baseline Road. The site is currently fully developed with residential and commercial properties in the northern parcel, with the section to the south currently under active construction. The proposal calls for the redevelopment of the parcels to the southeast, southwest, and northwest into a mix of condominiums and commercial buildings. As the property is already fully developed, there are no natural heritage features on the subject lands. The topography is flat though the southern half is lower in elevation than the adjacent lands. Refer to **Figure 1** below to view the Site Location.

1.2 Objective

The purpose of this TCR is to provide an update to the 2015 TCR and determine which woody vegetation remaining on site is to be retained and protected. In the paragraphs below, we have outlined the field methodology and findings of the tree inventory. This report will help determine the project's potential impacts and provide general recommendations to avoid and/or mitigate tree loss and injury.

2. Limitations

The assessment presented in this report has been made using accepted standard arboriculture techniques as outlined in the *Council of Tree and Landscape Appraisers Guide for Plant Appraisal, 10th Edition, Second Printing (2020)*. These techniques involve visual examination of the above-ground parts of each tree or trees in each group. The trees observed were not climbed, cored, or dissected, and excavation for detailed root crown inspection was not performed. Since some symptoms may only be present seasonally, the extent of observations that can be made may be limited by the time of year the inspection took place.

As trees are living organisms, their health and vigour continually change over time due to seasonal variations, changes in site conditions, and other factors. For this reason, the assessment presented in this

report is valid at the time of inspection, and no guarantee is made about the continued health of trees that are deemed to be in good condition. It is recommended that the trees be reassessed periodically to identify changes in condition. While every standing tree has the potential for failure and therefore poses some risk, a tree assessment is a good indication of present health and potential problems that could arise in the future.

CIMA+ has prepared this report for the sole use of the client. Any use of this report by a third party, as any decision based on this report, is the singular responsibility of the third party. **CIMA+** will not be held responsible for eventual damages towards a third party resulting from decisions taken, or based, on this report.

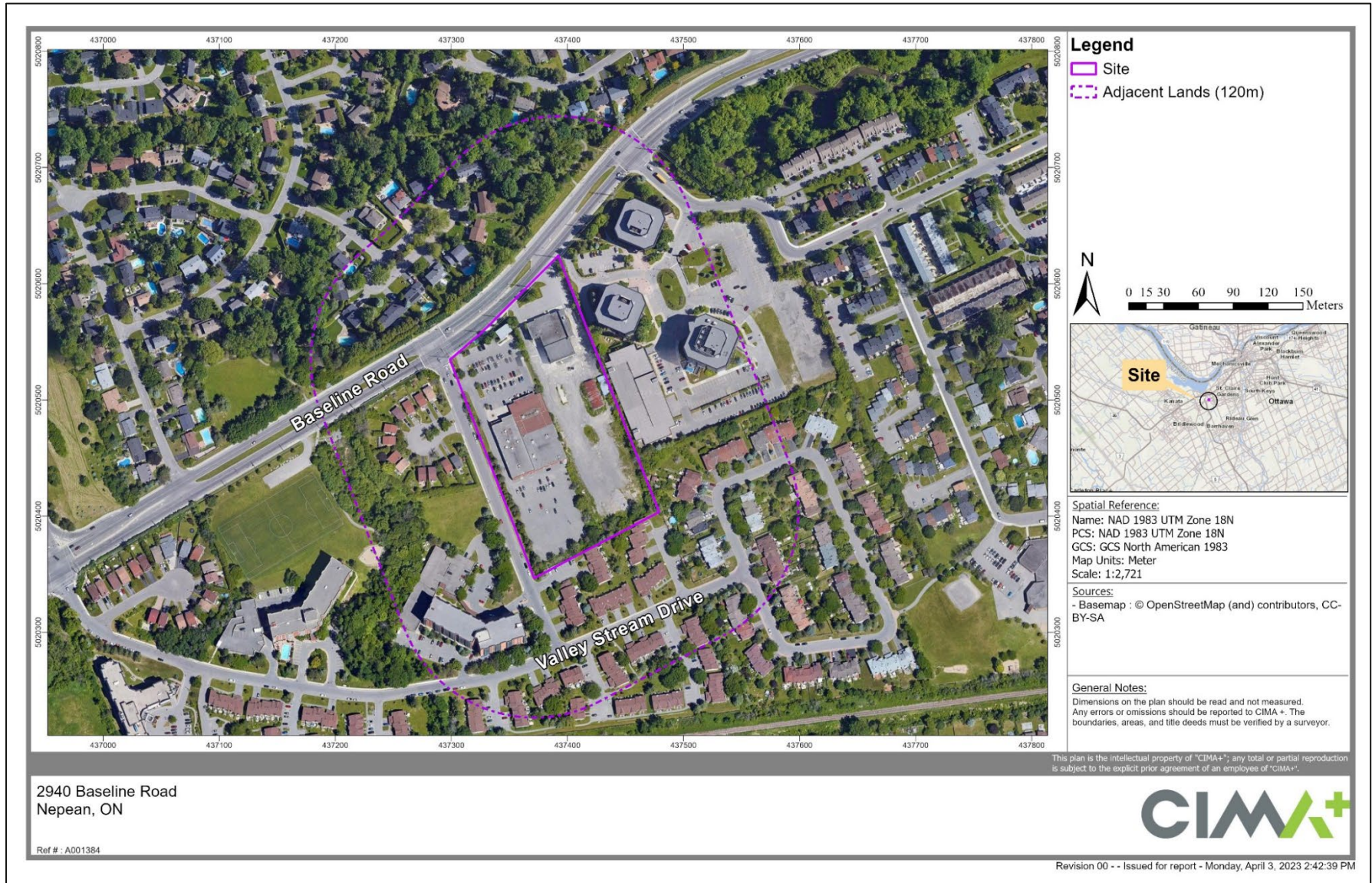


Figure 1: Site Location

3. Methodology

The tree inventory was undertaken on April 4, 2023. Trees were numbered, identified, measured, and assessed for condition. Information collected on the individual trees included:

- + Species;
- + Diameter at breast height (DBH);
- + Approximate crown spread;
- + Height; and,
- + Condition

The tree inventory table containing this information is included in **Appendix A** along with figures depicting the locations of the numbered trees assessed. The assessment methodology is outlined in the sections below.

3.1 Tree Size

Size refers to trunk diameter at breast height (DBH or caliper) measured in centimetres at 1.4 m above the ground. Where trees had more than one trunk from the base, the size of each trunk was recorded. Where trees forked to codominant trunks the diameter was measured at the narrowest point below the fork.

3.2 Observations

Several structural defects and health problems are included in the Tree Inventory and Assessment Table (**Appendix A**). The following list provides an explanation of the short forms used in the table of the top eight (8) deficiencies observed on Site:

- + DB - Dieback refers to the ends of branches dying, which is often associated with root problems.
- + SMD - Small dead branches are an indicator of crown dieback and can be an early sign of stress.
- + MBR - When a tree has multiple branches from the same point of attachment, the branches usually have characteristics of weakly attached branches.
- + COD - Codominant leaders (2 trunks or branches of approximately equal size) often have narrow branch angles and are associated with weak branch attachment. Strong branch attachments occur between 2 limbs of unequal size with enough space for branch enlargement and formation of a branch bark ridge.
- + INC - Included bark is bark that has become embedded in a crotch where limbs join and causes weakened branch attachments. As the trunk and branch increase in diameter, the bark of each stem in the tight crotch begin to push apart, increasing the likelihood of failure.
- + SC – Scarring or wounds are areas on a tree where the bark has been stripped away to the wood that had been underneath that bark, and the bark has grown up scar tissue around the sides of the wound.

- + NRF - No root flare refers to the base of the trunk where it widens as it transitions to the root system.
- + MEC - Mechanical Damage is a generalized term to describe damage to vegetation from using equipment and from weather related events. Damage to vegetation from equipment can be simple carelessness or incorrect use of the equipment.

3.3 Tree Condition

Each tree was given an overall health condition rating of: Excellent, Good, Fair, Poor, or Dead. The following is a summary of how the ratings are determined:

- + EXCELLENT: No apparent health problems; good structural form.
- + GOOD: Minor problems with health and/or structural form.
- + FAIR: Significant problems with health and/or structural form.
- + POOR: Major problems with health and structural form.
- + DEAD: Dead.

3.4 Tree Protection

The minimum Critical Root Zone (CRZ) of each tree canopy is illustrated on the drawings to help determine possible injury and branch pruning that may be required (**Appendix A**). The CRZ was determined using the *City of Ottawa’s Tree Conservation Report Guidelines* (City of Ottawa, 2021). The CRZ is established 10 centimetres from the trunk of a tree for every centimetre of trunk DBH measured in a radius around the tree. The CRZ is calculated as DBH x 10 cm. Note when the CRZ is less than 1m, it cannot be seen at the scale on the Maps. Instead, a summary table has been provided on the Maps to indicate the tree number and CRZ to be applied.

The Comments section of the Tree Inventory Table also includes notes about tree form and canopy location that can help determine any pruning that may be required to accommodate construction equipment. Tree Impact (retain, transplant, or removal) has been determined and is included in the Tree Inventory and Assessment Table in **Appendix A**.

4. Results

The dates, timing, and environmental conditions at the time of the assessments are presented below in **Table 1**.

Table 1: Site Investigation Details

Date	Start/End Time	Field Surveys	Weather Conditions
2023/04/04	0930 - 1430 hrs	Visual assessment of all trees ≥10 cm dbh on-site	Temperature: 5°C Cloud cover / Precip: mixed sun/clouds, moderate wind.

The entire subject lands are developed with residential and commercial buildings surrounded by paved and gravel parking lots. The northeast parcel contains a newly built residential apartment building, and the parcel in the northwest contains a two-storey commercial building with surrounding paved parking areas. These areas have numerous newly planted trees, between 3 cm and 5 cm, along the western edge of Sandcastle Drive, northern edge of Baseline Road, and within the paved parking areas. The lands to the southeast are currently in active construction, while the lands to the southwest are being used to store construction trailers and equipment. Mature trees border the southern extent of the property. All trees included in the 2015 TCR that were situated between the east and west parcels have been removed (see Figures in Appendix). There are trees remaining along the eastern edge of the property, but active construction prevented these trees from being surveyed. There is no natural habitat on-site. The adjacent lands to the east and south are fully developed (commercial and residential, respectively). Most of the mature trees along the west side (Sandcastle Drive) have been removed to accommodate site access to the construction site to the south.

A total of 35 individual trees, and two (2) tree groupings were assessed as part of this inventory within the site boundaries. The majority of the trees surveyed were alive except for two (2) newly planted white spruce trees located next to the snow storage area, which were dead. The most common species were white spruce, serviceberry, common hackberry, and basswood. The condition of the trees on site ranged from Good to Dead.

A summary of the trees surveyed on site is provided in **Table 2** below.

Table 2: Summary of Tree Inventory

Species	Count	Size Range (DBH cm)	Height Range (m)	Crown Spread (m)
Individual Trees				
White spruce	6	3-69	3-21+	1-9
Basswood	4	11-85	8-15	2-11
Common hackberry	4	4-5	0-3	1-2
Serviceberry	4	3-4	0-3	1-2
Amur maple	3	3-4	0-3	1
Skyline thornless honey locust	3	4-5	4-7	1
Eastern white pine	2	18-22	4-11	3-4
Ivory silk Japanese lilac	2	3	0-3	1
Scots pine	2	32-36	12-20	5-6
Sugar maple	1	19	8-11	3
Oakleaf mountain ash	1	70	8-11	5
Norway spruce	1	37	16-20	5
Large-tooth aspen	1	24	8-11	4
Green ash	1	21	4-7	6
Total	35	3-85	0-21+	1-11

Species	Count	Size Range (DBH cm)	Height Range (m)	Crown Spread (m)
Tree Groupings				
Eastern white cedar	2	18	8-11	7-10
Total	2	18	8-11	7-10

5. Impact Assessment

An impact assessment was undertaken to determine impacts to trees within the site due to the proposed project construction. Trees recommended for removal include trees within or outside the limit of work that would not be able to withstand construction-related impacts, or trees that were dead or in poor health. Trees identified as being retained are expected to be minimally damaged by the project and are proposed to be protected through mitigation measures outlined below. Trees identified as being transplanted are the newly planted saplings recommended for relocation and incorporation into the Landscape Design Plans for the site.

The results of the impact assessment are summarized below in **Table 3**. These details are also included in the Tree Inventory and Assessment Table and Figures included in **Appendix A**.

Based on the species and conditions of the trees located within the site and the extent of the grading limits of the proposed project design it is recommended to:

- + Where feasible retain 14 tree individuals and the two (2) tree groupings.
- + Where feasible transplant 18 trees; and
- + Remove the three (3) trees that are in poor health and/or dead.

It should be noted that the 18 individual trees proposed for transplant are all newly planted saplings. It should also be noted that the one (1) oakleaf mountain ash (Tree #14 - **Appendix A**) was assessed as Fair due to its poor structure and crotch decay. The city has requested this tree be retained. **Photo 1** below displays the deficiencies of this individual.

Table 3: Impact Assessment for Trees on Site

Trees to be Removed	Trees to be Transplanted	Trees/Groupings to be Retained
3	18	16



Photo 1 : View of crotch decay and poor structure of Tree #14 – Oakleaf Mountain Ash

6. Mitigation Measures and Construction Management

6.1 Tree Protection Measures

The most typical construction damage to trees is root damage from compaction and severance. While the drip line of a tree's canopy is typically thought to be associated with the root area, the root zones can extend significantly beyond the drip line of the tree, sometimes up to 2 or 3 times the height of the tree. Some of the trees inventoried are growing close to the edge of the proposed construction and will be at risk of contact with, and damage from, heavy equipment. To protect trees, grade changes and construction activities that could cause soil compaction should generally be kept away from trees as much as possible.

In order to successfully preserve trees that are recommended for on-site retention, the following series of mitigation measures is recommended. These recommended measures largely center on the minimum CRZ of trees (The CRZ is calculated as $DBH \times 10 \text{ cm}$), as defined by the City's *Tree Conservation Report Guidelines*. The following measures are being recommended to protect the CRZ of all trees slated for retention and/or impact:

- + Delineation of the disturbance limits within work areas will be clearly defined on drawings and on the site prior to construction;
- + Install Tree Protection Fencing prior to commencement of construction activities, and retain fencing until construction activities have been completed, as per City of Ottawa's Tree Protection (By-law No. 2020-340), Part VI:

- Tree protection fencing shall be at least 1.2 metres in height (or as per the approved Tree Conservation or Tree Information Report) and installed in such a way that the fence cannot be altered. It is to be installed no closer than the outer edge of the CRZ. Other such measures as required by the General Manager shall be implemented to protect the tree.
- + Do not place any material or equipment within the CRZ of a tree;
- + Do not raise or lower the existing grade within the CRZ of a tree;
- + Do not extend any hard surface or significantly change landscaping;
- + If the construction will have to encroach into a tree's minimum CRZ, installing a temporary layer of 150 mm deep partially composed wood chips mulch over the root zone can help to protect roots from compaction damage, and conserve soil moisture levels;
- + Equipment and materials should not be stored near trees;
- + Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy;
- + Do not attach any signs, notices, or posters to trees;
- + Ensure that site clearing is carried out only in areas where it is specifically required, and that the areas to be cleared are carefully and clearly delineated.

6.2 Tree and Root Pruning

- + Do not damage the root system, trunk, or branches of any tree; if any roots are encountered during excavation while working outside the CRZ, they should be cut off cleanly with sharp pruning tools rather than allow them to be torn by large equipment; clean cuts will help to minimize decay and entry points for disease;
- + All exposed roots of trees to be retained should be covered in a minimum of 5 cm of firm soil within 24 hours of exposure;
- + If root pruning is implemented, the crown of the tree should be reduced proportionately under the direction of a Certified Arborist or Registered Forester, to decrease wind sail. Pruning should be kept to thinning cuts (no major limb removal), and crowns should be monitored, and maintenance carried out for two (2) years after root pruning to remove any dieback under the direction of a Certified Arborist or Registered Forester;
- + If branches are likely to hang in the way of passing equipment, the branches should be pruned by a Certified Arborist or Registered Forester to avoid tearing and undue injury to the tree;
- + All pruning work must be performed under the supervision and guidance of a qualified tree professional in accordance with the latest ANSI A300 Pruning Standards and best management practices identified by the International Society of Arboriculture.

6.3 Transplanting

There are numerous newly planted trees within the northern parcel of the site that are within the grading limits of future phases of work. If feasible, and as directed by the Landscape Architect, transplant individual trees to locations where they will be incorporated into the Landscape Design Plan. To successfully preserve trees that are recommended for transplant, the following series of mitigation measures is recommended.

- + Avoid damage to the root system, trunk, and branches of trees; if any roots are encountered during excavation, they should be cut off cleanly with sharp pruning tools rather than allow them to be torn by large equipment; clean cuts will help to minimize decay and entry points for disease;
- + Root prune in the spring or fall prior to season of transplanting. Transplanting should take place when the trees are dormant;
- + Before digging the tree, tie up the branches to prevent damage. Mark a branch that faces north so the tree can be properly oriented when re-planted. Mark the trunk where it meets the soil so that this mark is an inch above the soil line of the planting hole;
- + Dig the hole for the tree 50 percent wider than the root system so exposed roots can be fully expanded and arranged in their natural position;
- + Move the tree using only the root ball. Avoid using the tree trunk as a “handle” to move trees, which can break tree roots and damage the trunk.
- + Place the plant in the hole at or slightly above ground level, never below. If plants are placed too deep, the roots will suffocate from a lack of oxygen;
- + While holding the tree in the proper position (at the center of the hole, at the proper depth and with the tagged side facing north) add a mix of excavated material and topsoil to the hole, gently working it among the roots. After all the soil has been put in the hole, water generously. Once the water has drained (settling the soil and eliminating air pockets), add the topsoil. Tamp the soil lightly, but do not tamp so heavily as to compact the soil. Water again to settle the topsoil;
- + Ensure adequate water. Try to maintain constant moisture (not saturation) of the root ball;
- + Mulch newly planted trees with 100 mm compacted depth of bark mulch. Keep the mulch several cm from the tree trunk;
- + Prune only dead, broken, crossed, or rubbing branches.
- + Establish tree protection zones (TPZs) around new trees during construction activities; and
- + Inspect newly planted trees regularly to evaluate their condition and maintenance needs.

7. Permits and Approvals

The City of Ottawa’s Tree Protection By-law No. 2020-340 describes the rules that govern tree ownership in Ottawa and the responsibility of tree maintenance, including administration and enforcement. As per

Part IV: Sections 42 – 44 Prohibition: *No person shall injure or destroy a tree without a permit.* Sections 45 to 48 - Application for tree permit stipulates the process to apply for a permit under this by-law.

Therefore, it is recommended that consultation should be undertaken with the City prior to construction to confirm the requirements for tree removal permits associated with the municipal tree protection by-law. Where required, tree removal permits must be obtained from the City prior to the start of construction.

8. Certification and Closure

We certify that all the statements of fact in this assessment are true, complete, and correct to the best of our knowledge and belief, and that they are made in good faith.

A

Appendix A: Tree Inventory & Assessment Table

APPENDIX A: 2940, 2944, 2946 Baseline Road Tree Inventory and Assessment Table

Tree/Tree Group No.	Common Name	Scientific Name	No. Stems	dbh (cm)	Height (m)	Crown Spread (m)	Structural Defects ⁱ								Overall Condition ⁱⁱ	Comments	Ownership	Recommendation	CRZ (m)
							DB	MBR	SC	INC	SMD	COD	NRF	MEC					
1	American basswood	<i>Tilia americana</i>	8	85	12-15	11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good	Behind site trailer. Construction equipment within drip line	Private 2946 Baseline Rd	Retain	8.5
2	American basswood	<i>Tilia americana</i>	1	12	8-11	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	Behind site trailer	Private 2946 Baseline Rd	Retain	1.2
3	American basswood	<i>Tilia americana</i>	1	11	8-11	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good	Behind site trailer	Private 2946 Baseline Rd	Retain	1.1
4	Scots pine	<i>Pinus sylvestris</i>	1	36	16-20	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Good	Behind site trailer	Private 2946 Baseline Rd	Retain	3.6
5	White spruce	<i>Picea glauca</i>	1	69	21+	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Behind site trailer	Private 2946 Baseline Rd	Retain	6.9
6	White spruce	<i>Picea glauca</i>	1	47	21+	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Behind site trailer. Growing into chain link fence.	Private 2946 Baseline Rd	Retain	4.7
7	Largetooth aspen	<i>Populus grandidentata</i>	1	24	8-11	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fair	Behind site trailer. Growing into fence. Covered in grapevine.	Private 2946 Baseline Rd	Retain	2.4
8	Scots pine	<i>Pinus sylvestris</i>	1	32	12-15	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good	Outside of fence	Private 2946 Baseline Rd	Retain	3.2
9	Eastern white pine	<i>Pinus strobus</i>	1	18	4-7	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Behind fence. Tree tag #693	City	Retain	1.8

Tree/Tree Group No.	Common Name	Scientific Name	No. Stems	dbh (cm)	Height (m)	Crown Spread (m)	Structural Defects ⁱ								Overall Condition ⁱⁱ	Comments	Ownership	Recommendation	CRZ (m)
							DB	MBR	SC	INC	SMD	COD	NRF	MEC					
10	Eastern white pine	<i>Pinus strobus</i>	1	22	8-11	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fair	Behind fence. Tree tag #691	City	Retain	2.2
11	Norway spruce	<i>Picea abies</i>	1	37	16-20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good		Private	Retain	3.7
12	Skyline thornless honeylocust	<i>Gleditsia triacanthos</i> 'Skyline'	1	5	4-7	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.5
13	Skyline thornless honeylocust	<i>Gleditsia triacanthos</i> 'Skyline'	1	4	4-7	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.4
14	Oakleaf mountain ash	<i>Sorbus x thuringiaca</i>	1	70	8-11	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fair	Poor structure. Crotch decay.	Private 2946 Baseline Rd	Retain	7
15	Sugar maple	<i>Acer saccharum</i>	1	19	8-11	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Poor	Severe Dieback	Private 2946 Baseline Rd	Retain	1.9
16	Skyline thornless honeylocust	<i>Gleditsia triacanthos</i> 'Skyline'	1	4	4-7	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good		Private 2946 Baseline Rd	Transplant	0.4
17	Amur maple	<i>Acer ginnala</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
18	Amur maple	<i>Acer ginnala</i>	1	4	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.4
19	White spruce	<i>Picea glauca</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.3
20	Amur maple	<i>Acer ginnala</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
21	White spruce	<i>Picea glauca</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dead	Newly planted in area where snow was deposited.	Private 2946 Baseline Rd	Remove	0.3
22	White spruce	<i>Picea glauca</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dead	Newly planted in area where snow was deposited.	Private 2946 Baseline Rd	Remove	0.3

Tree/Tree Group No.	Common Name	Scientific Name	No. Stems	dbh (cm)	Height (m)	Crown Spread (m)	Structural Defects ⁱ								Overall Condition ⁱⁱ	Comments	Ownership	Recommendation	CRZ (m)
							DB	MBR	SC	INC	SMD	COD	NRF	MEC					
23	White spruce	<i>Picea glauca</i>	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.3
24	American Basswood	<i>Tilia americana</i>	1	29	8-11	6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Good	Metal sign attached to trunk	City	Retain	2.9
25	Ivory silk Japanese lilac	<i>Syringa reticulata</i> 'Ivory Silk'	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
26	Ivory silk Japanese lilac	<i>Syringa reticulata</i> 'Ivory Silk'	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
27	Serviceberry	<i>Amelanchier</i> spp	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
28	Serviceberry	<i>Amelanchier</i> spp	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
29	Serviceberry	<i>Amelanchier</i> spp	1	3	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	City	Transplant	0.3
30	Green ash	<i>Fraxinus pennsylvanica</i>	7	21	4-7	6	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Poor		City	Remove	2.1
31	Common hackberry	<i>Celtis occidentalis</i>	1	5	0-3	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.5
32	Common hackberry	<i>Celtis occidentalis</i>	1	5	0-3	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.5
33	Common hackberry	<i>Celtis occidentalis</i>	1	5	0-3	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.5
34	Common hackberry	<i>Celtis occidentalis</i>	1	4	0-3	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.4
35	Serviceberry	<i>Amelanchier</i> spp	1	4	0-3	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good	Newly planted	Private 2946 Baseline Rd	Transplant	0.4

Tree/Tree Group No.	Common Name	Scientific Name	No. Stems	dbh (cm)	Height (m)	Crown Spread (m)	Structural Defects ⁱ								Overall Condition ⁱⁱ	Comments	Ownership	Recommendation	CRZ (m)
							DB	MBR	SC	INC	SMD	COD	NRF	MEC					
Group 1	Eastern white cedar	<i>Thuja occidentalis</i>	4	18	8-11	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good		Private 2946 Baseline Rd	Retain	1.8
Group 2	Eastern white cedar	<i>Thuja occidentalis</i>	13	18	8-11	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Good		Private 2946 Baseline Rd	Retain	1.8

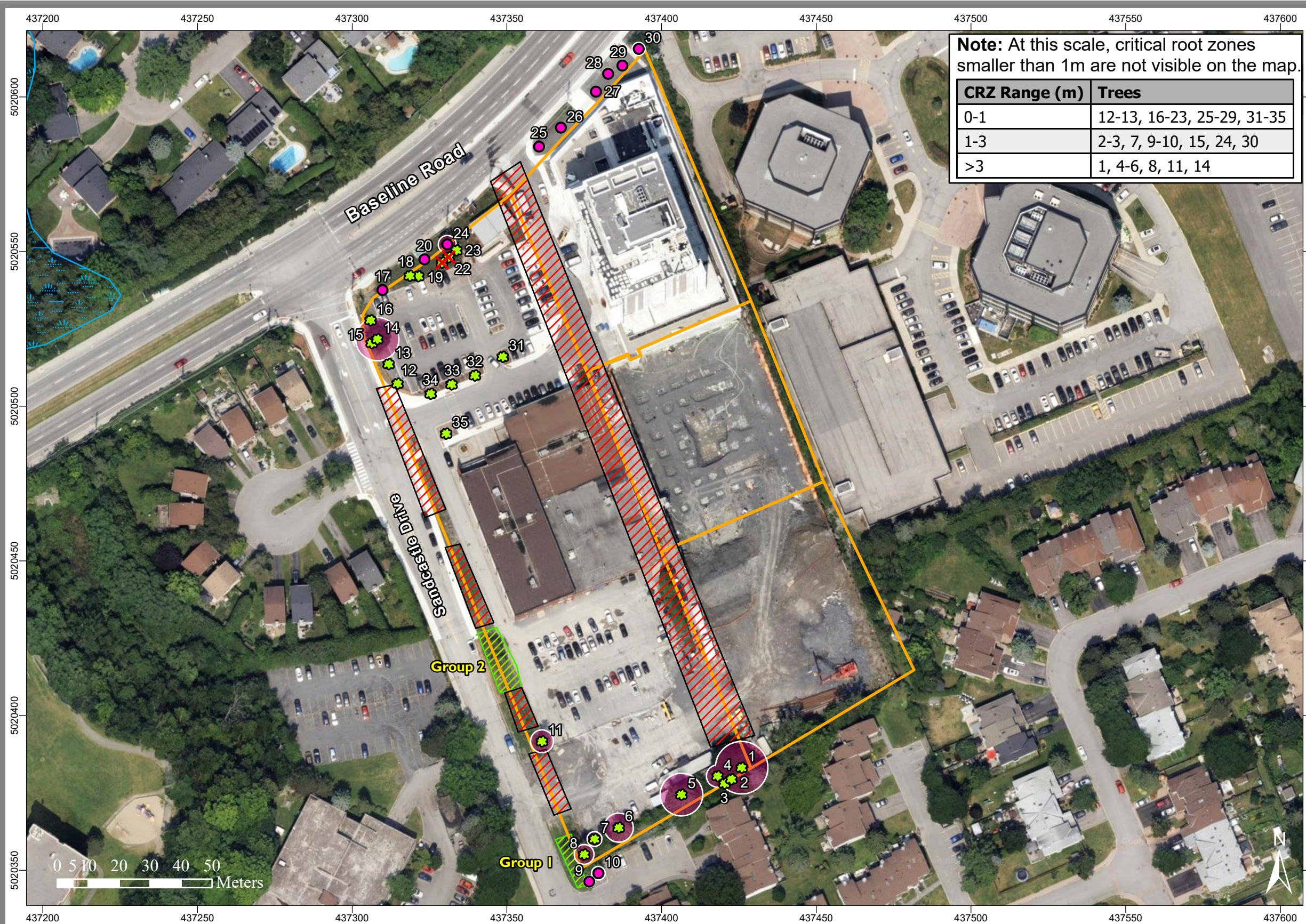
ⁱ DB - Dieback refers to the ends of branches dying, which is often associated with root problems.
 SMD - Small dead branches are an indicator of crown dieback and can be an early sign of stress.
 MBR - When a tree has multiple branches from the same point of attachment, the branches usually have characteristics of weakly attached branches.
 COD - Codominant leaders (2 trunks or branches of approximately equal size) often have narrow branch angles and are associated with weak branch attachment. Strong branch attachments occur between 2 limbs of unequal size with enough space for branch enlargement and formation of a branch bark ridge.
 INC - Included bark is bark that has become embedded in a crotch where limbs join and causes weakened branch attachments. As the trunk and branch increase in diameter, the bark of each stem in the tight crotch begin to push apart, increasing the likelihood of failure.
 SC - Scarring or wounds are areas on a tree where the bark has been stripped away to the wood that had been underneath that bark, and the bark has grown up scar tissue around the sides of the wound.
 NRF - No root flare refers to the base of the trunk where it widens as it transitions to the root system.
 MEC - Mechanical Damage is a generalized term to describe damage to vegetation from using equipment and from weather related events. Damage to vegetation from equipment can be simple carelessness or incorrect use of the equipment.

ⁱⁱ Excellent: No apparent health problems; good structural form.
 Good: Minor problems with health and/or structural form.
 Fair: Significant problems with health and/or structural form.
 Poor: Major problems with health and structural form.
 Dead: Dead.

B

Appendix B: Maps 1 and 2





Note: At this scale, critical root zones smaller than 1m are not visible on the map.

CRZ Range (m)	Trees
0-1	12-13, 16-23, 25-29, 31-35
1-3	2-3, 7, 9-10, 15, 24, 30
>3	1, 4-6, 8, 11, 14

Legend

- Property Line (geoOttawa, 2024)
- Unevaluated Wetland
- Trees Already Removed
- Tree Groups to be Retained
- Tree Ownership**
- City
- Private
- Dead Individuals
- Critical Root Zone



Spatial Reference:
 Name: NAD 1983 UTM Zone 18N
 PCS: NAD 1983 UTM Zone 18N
 GCS: GCS North American 1983
 Map Units: Meter
 Scale: 1:1,303

Sources:
 - Basemap : © OpenStreetMap (and) contributors, CC-BY-SA
 - Site Plan (Neuf Architects, July 17, 2024)
 - geoOttawa
 - Land Information Ontario

General Notes:
 Dimensions on the plan should be read and not measured. Any errors or omissions should be reported to CIMA+. The boundaries, areas, and title deeds must be verified by a surveyor.

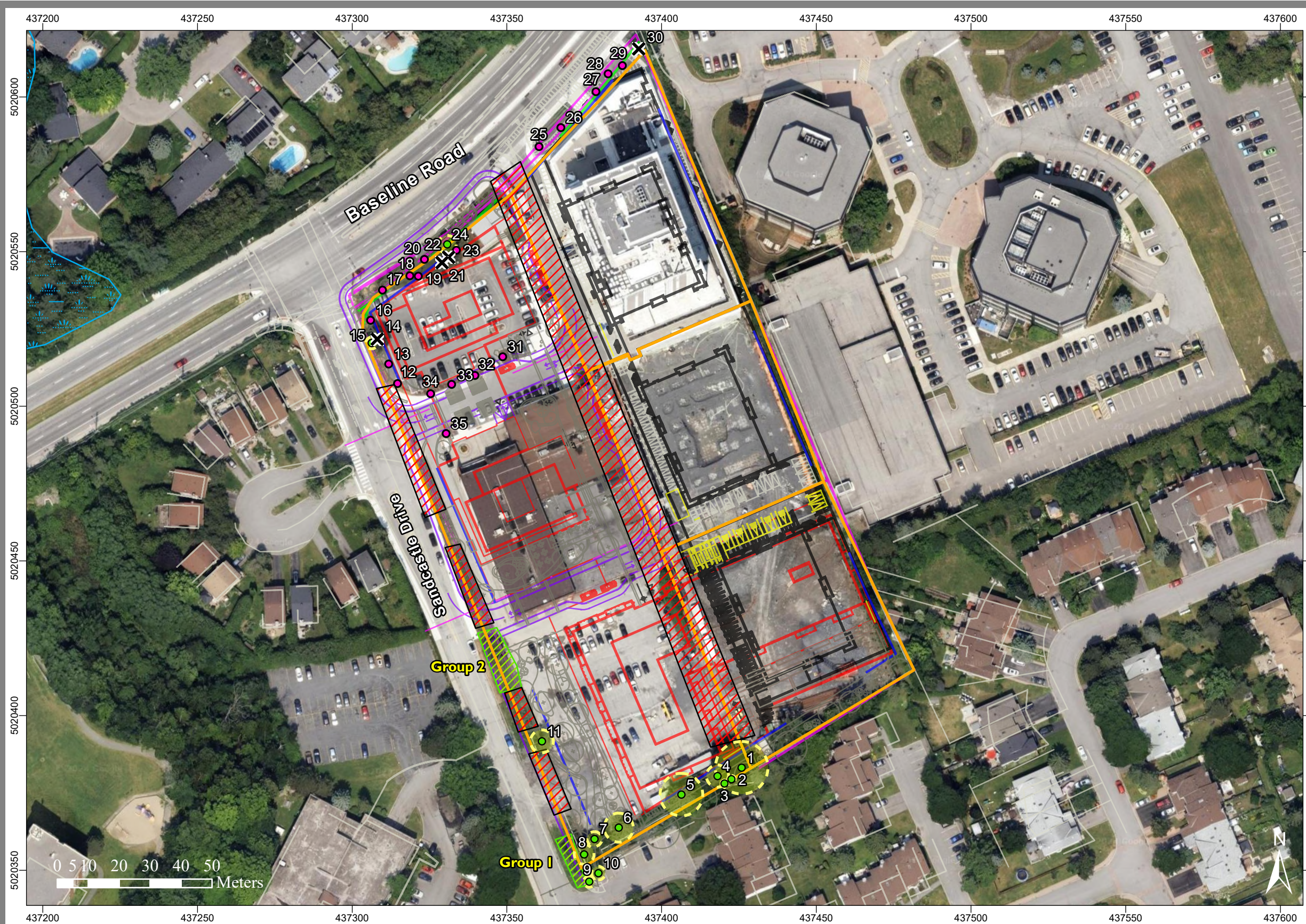
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Legend

- Property Line (geoOttawa, 2024)
- Unevaluated Wetland
- Trees Already Removed
- Tree Groups to be Retained
- Trees to be Retained
- Trees Proposed for Transplant
- X Trees to be Removed
- Tree Protection Fencing
- Critical Root Zone

Note: At this scale, critical root zones smaller than 1m are not visible on the map.

CRZ Range (m)	Trees
0-1	12-13, 16-23, 25-29, 31-35
1-3	2-3, 7, 9-10, 15, 24, 30
>3	1, 4-6, 8, 11, 14

Spatial Reference:
 Name: NAD 1983 UTM Zone 18N
 PCS: NAD 1983 UTM Zone 18N
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 Map Units: Meter
 Scale: 1:1,303

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