

Mr. Phil Thibert
Brigil
98 rue Lois
Gatineau, QC J8Y 3R7

April 2, 2021

Re.: Tree Conservation Report for 180 Prestige Circle - Petrie II - Block 8

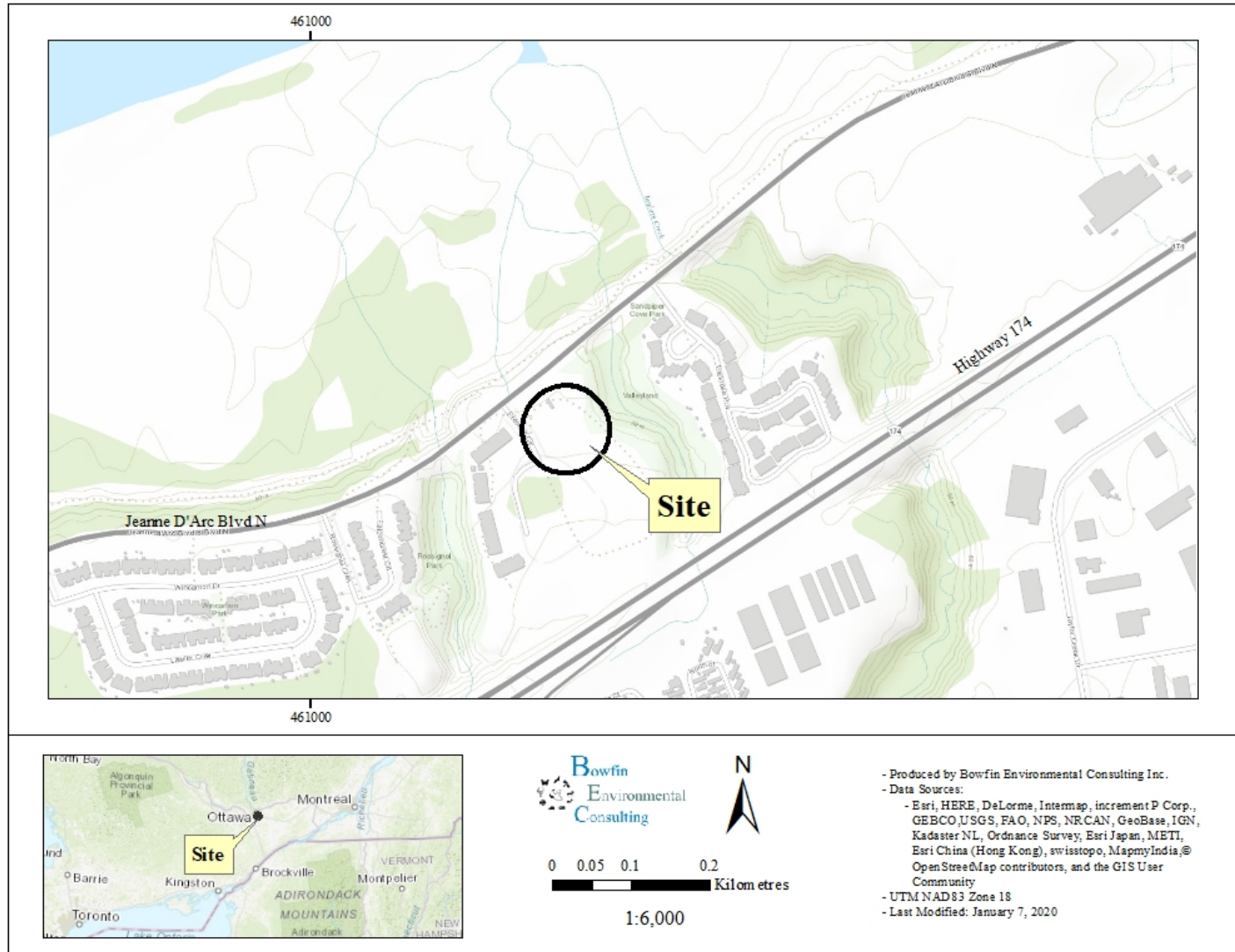
Mr. Thibert:

Bowfin Environmental Consulting Inc. (Bowfin) was retained by Brigil, here after referred to as the proponent, to prepare a Tree Conservation Report for the proposed residential development at 180 Prestige Circle. This report follows the *City of Ottawa Tree Conservation Report Guidelines*. The field work was completed by Cody Fontaine who has his Fisheries and Wildlife Technology Degree and has 10 years of experience completing field work. Mr. Fontaine is also a certified Butternut Health Assessor (#723). The project and field work were overseen by Michelle Lavictoire who has a M.Sc in Natural Resource Sciences and over 20 years of experience in completing natural environment assessments. The intention of the report is to determine what woody vegetation should be retained and protected on site. In the paragraphs below, we have outlined the background and project description, field methodology and findings and recommendations. The following report from 2020 has been updated with the more recent site plan information.

BACKGROUND AND PROJECT DESCRIPTION

The subject lands are roughly 0.7 ha situated to the south of Jeanne D'Arc Boulevard North on 180 Prestige Circle (Figure 1). The proposal calls for the redevelopment of this parcel into residential apartments. The site was snow covered during the time of the visit however an Environmental Impact Statement (EIS) was prepared by Bowfin (separate cover) that indicates that the only natural features are those associated with the ravine along the east side of the site.

Figure 1: Location of Site



METHODOLOGY

One site visit was undertaken on January 8th, 2020 by Cody Fontaine. The weather conditions consisted of overcast skies and a light breeze. The air temperature ranged from -3°C in the morning to 1°C by early afternoon. The ground was snow covered. During this visit the individual trees were assessed and a description of the environmental value of the trees within the site and their ecological function recorded. The inventory took place on and within 10 m of the Site. The buffer of 10 m was chosen as the diameter-at-breast-height (dbh) of most trees were less than 30 cm and the critical root zone, as defined by the City, is 10x the dbh (as such a crz of 3 m would be sufficient to protect most individuals). The additional distance was used as a buffer because the accuracy of the hand-held GPS is typically ± 3 m. Larger individuals noted further than 10 m from the site were also inventoried. Information collected on the individual trees included:

- Their location (GPS coordinates, NAD83);
- Height of the individual;
- Identified to species for native specimens;
- Diameter at breast height (dbh);
- Presence/absence of Butternuts; and
- Health (Note: The visit took place in winter, assessment of health was made based on the condition of the twigs and bark on the tree).

This information is appended at the end of this letter and the locations of the individual trees are shown on Figures 2 and 3.

Nomenclature used in this report follows the Southern Ontario Plant List (Bradley, 2007) for both common and scientific names which are based on Newmaster *et al.* (1998). Authorities for scientific names are given in Newmaster *et al.* (1998).

EXISTING CONDITIONS

The Site itself was previously cleared with a few remaining individual trees. The adjacent lands to the west and south of the property contained residential/apartment buildings with Prestige Circle bordering the western edge. Jeanne D'Arc Boulevard bordered the northern edge of the site. Additional information on the habitat is found in the EIS.

There were 55 trees with a diameter greater than 10 cm on or within 10 m of the Site. The majority of the trees had a diameter of <30 cm. Two larger trees were noted: No. 50 (Bur Oak, 95 cm) and No. Tree 54 (White Pine, 83 cm). These larger individuals were all more than 10 m from the area to be cleared and will not be impacted (Figure 2). The most common species were: American Elm, Bur Oak and White Ash. A summary of these is provided in Table 1. Details are

appended to this letter (Table 3). Most of the trees were healthy however there were a few trees that have fallen over or have some twig dieback. It is noted that the 2015 site investigations noted that many of the White Ash were dead or dying, these had either fallen over or could not be differentiated from the live trees under the winter conditions.

Also noted on the figures, are the non-native (apple and lilac) shrubs planted along Prestige Circle by the City. These are anticipated to be impacted; all were shrubs and <10 cm in diameter.

Table 1: Summary of Individual Trees On-site

Species	Count	Size Range (DBH in cm)	Height Range (m)	No. Live	No. Unhealthy	No. Dead
American elm	24	10-27	1-12	16	1	7
Bur oak	23	11-95	6-15	21	2	0
White ash	6	10-40	4-13	5	0	1
White Pine	1	83	15	1	0	0
Unknown (dead)	1	20	3	0	0	1
Total	55	10-95	1-15	43	3	9

Table 2: Summary of Natural Elements to Consider

Item	Present in Area to be Cleared	Present in Adjacent Lands
Surface water features	No	No (see EIS)
Steep slopes, including valley and escarpments	No	Bellevue Ravine (see EIS)
Valued woodlot (UNF, NEA, UNAEES)	No	No (see EIS)
Significant woodlands in Rural Areas	n/a	n/a
Greenspace linkages as identified in the Greenspace Master Plan	No	No
High quality, specimen trees	No	Bur Oak (dbh 95 cm); White Pine (dbh 83 cm) (Figure 3)
Rare communities or other unique ecological features	No	No (see EIS)
Species at Risk and their habitat	Potential (see EIS)	Potential (see EIS)



Photo 1: Looking north from the center of the Site (January 8, 2020)



Photo 2: Looking east from the center of the Site (January 8, 2020)



Photo 3: Looking west from the center of the Site (January 8, 2020)

Figure 2: Location of Trees ≥ 10 cm and Natural Features

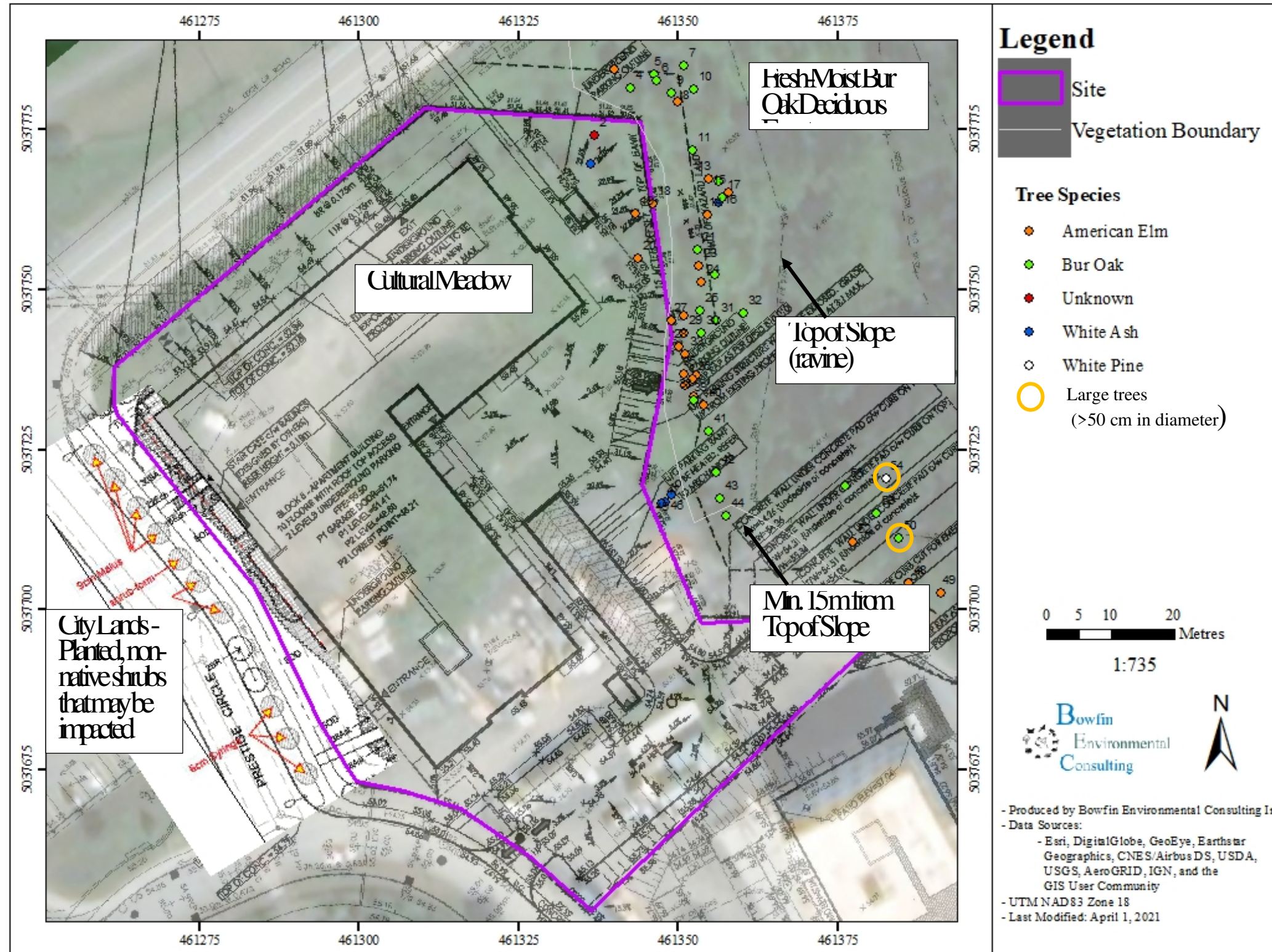
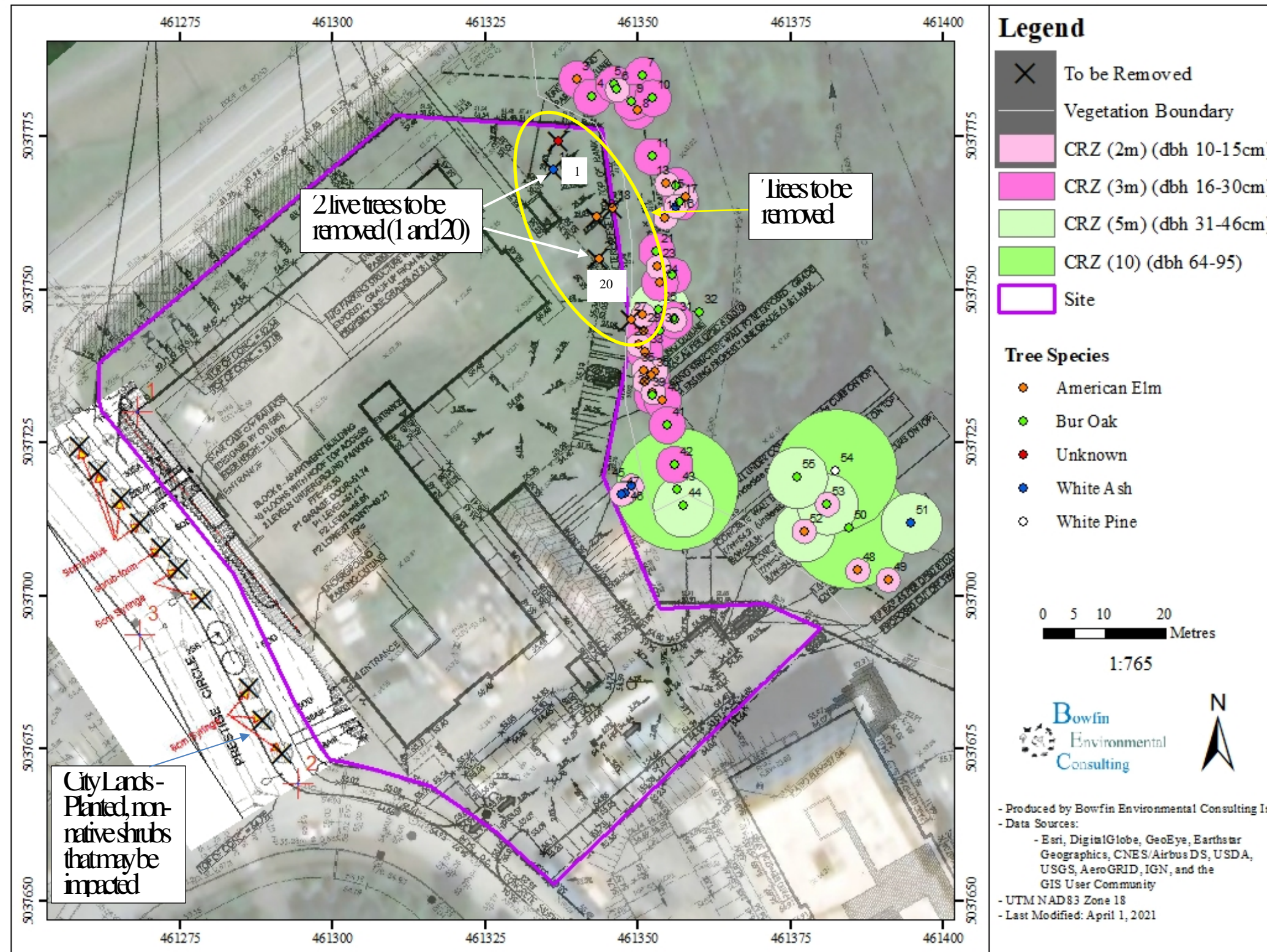


Figure 3: Identification of Trees to be Removed/Retained



RECOMMENDATIONS

Summary of Findings

This development (approximately 0.7 ha) is found at 180 Prestige Circle. The Site was a cultural meadow with a six individual trees that were ≥ 10 cm. A deciduous forest was situated in the adjacent lands to the east (Fresh-Moist Bur Oak Deciduous Forest). The most common tree species were American Elm, Bur Oak and White Ash. Apart from the White Ash, most of the trees were healthy with the exception of the ash and a few broken trees or individuals showing twig dieback. All but two specimens have a diameter of less than 50 cm. These larger trees were concentrated at the southeast end outside of the 10 m adjacent lands (Figure 2).

Six trees within the site will be removed but of these only two were alive (individuals 1 and 20 (Figure 3). Because of the small size of the site, it is not possible to save these two individuals. The trees to be removed are:

- White Ash
 - No. 1, dbh 15 cm – Live (highlighted on Figure 3)
- American Elm
 - No. 18, dbh 12 cm – Dead
 - No. 19, dbh 18 cm – Dead
 - No. 20, dbh 20 cm – Live (highlighted on Figure 3)
 - No. 27, dbh 20 cm - Dead
- Unknown
 - No. 2, dbh 20 cm - Dead

All other trees will be retained. Note that there are a few planted shrubs (non-natives) along the sidewalk of Prestige Circle, owned by the City, that will likely be impacted. These have been shown on the figures.

There are also four live trees whose critical root zone (crz) (defined by the City of Ottawa as 10x the dbh) were in or immediately next to the edge of the development [individuals 25 (bur oak, dbh 36 cm), 28 (American elm, dbh 15 cm), 33 (American elm, dbh 19 cm) and 47 (white ash, dbh 11 cm)]. To prevent harming of these additional trees it is recommended that the snow fencing (see mitigation measures) be brought in, away from the crz in the two locations. The locations in question are seen on Figure 4.

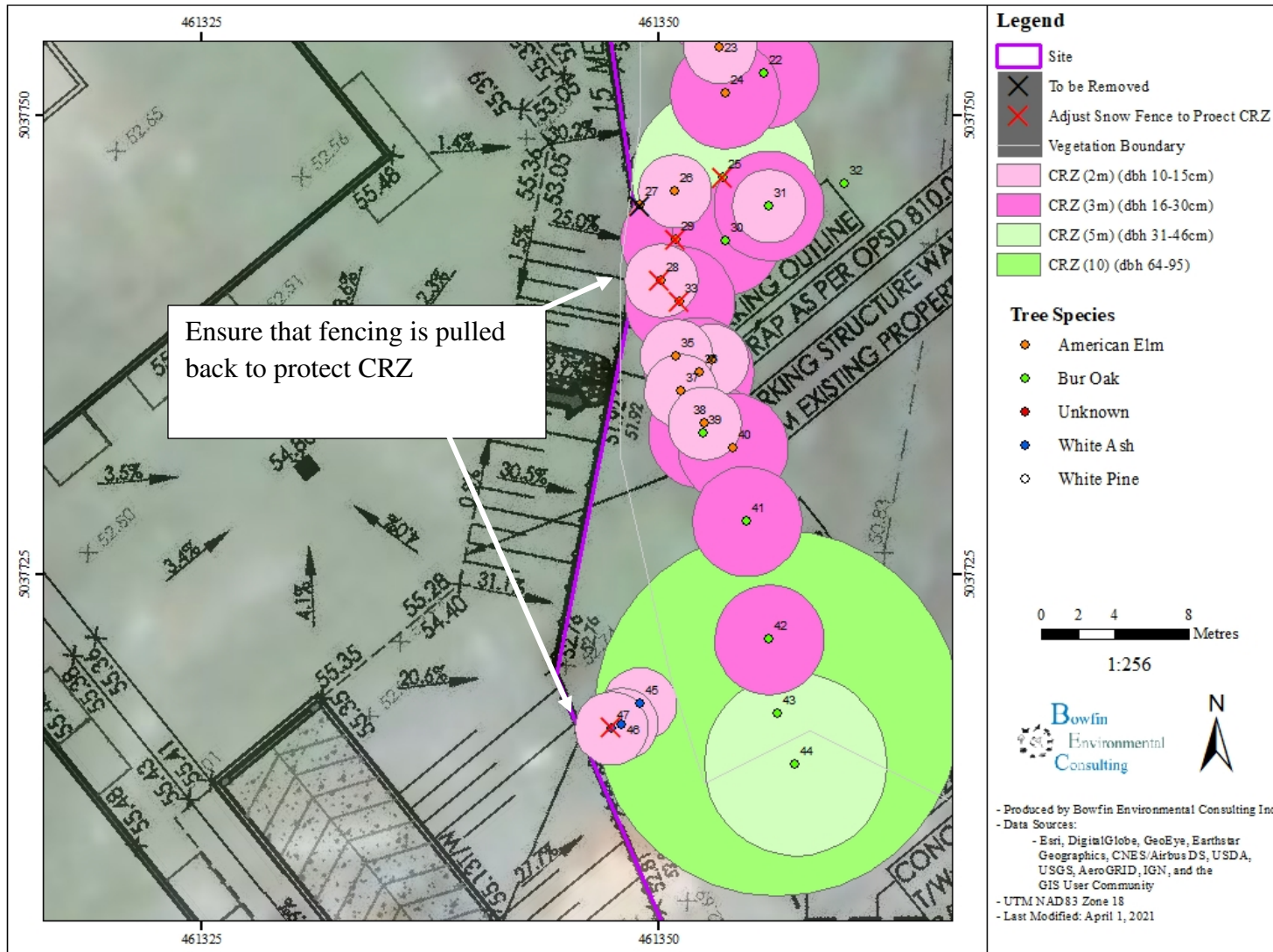
Mitigation measures:

- A tree permit is needed before trees ≥ 10 cm in diameter can be removed from site.
- Sturdy fencing will be installed on the edge of the Site, which is outside of the Critical Root Zone (crz) (defined by the City as 10 x the DBH) of the adjacent trees, for almost

all of the trees to be retained. There are two locations where the crz of trees to be retained infringes into the Site. In these locations, the fence will be brought in slightly (1-2 m) to ensure that the crz of all trees ≥ 10 cm offsite is protected. To ensure that this measure is followed, the surveying of this portion of the snow fence will be verified by a biologist or arborist prior to the installation of the fence.

- The need of a sturdy snow fence around the Site, with special notes highlighting the two locations where the fence must be adjusted to protect the crz, will be clearly noted on the site plans.
- No work, including clearing of vegetation, grading, use of heavy machinery etc., will take place outside of the area delineated with snow fencing.
- Furthermore, no machinery maintenance or refueling or stockpiling is permitted within 5 m of this fencing.
- Exhaust fumes from all equipment will be directed away from the canopy of the trees to be retained.
- If roots of trees to be retained become exposed during site alterations, they will be buried immediately with soil or covered with filter cloth or woodchips and kept moist until the roots can be buried permanently.
- Any roots that must be cut will be cut cleanly to allow for healing.
- No signs, notices or posters should be attached to any trees;
- The removal of vegetation will occur after September 30 and before April 1 to meet the timing windows stipulated in the EIS (refer to the EIS directly for any changes).
- Any landscape plans will include native trees and shrubs species.

Figure 4: Trees whose CRZ are in or on Edge of the Site



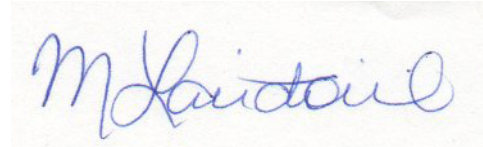
Concluding Statement

No trees requiring retention were identified within the Site.

I trust that this report will meet your requirements. Should you have any questions or comments, please contact the undersigned.

Sincerely,

Bowfin Environmental Consulting Inc.



Michelle Lavictoire,
Biologist / Principal

References

Bradley, David. 2007. Southern Ontario Vascular Plant Species List. Prepared by Southern Science and Information Section, Ontario Ministry of Natural Resources, Peterborough, Ontario. 57pp.

Newmaster, S.G., A. Lehela, P.W.C Uhlig, S. McMurray and M.J. Oldham. (1998). Ontario plant list. Ontario Ministry of Natural Resources, Ontario Forest Research Institute, Sault Ste. Marie, ON, Forest Research Information Paper No. 123. 550 pp. + appendices.

Official Plan of the City of Ottawa. 2009.

Table 3: Individual Tree Details

Tree ID	Species	UTM Coordinates (NAD 83)	DBH (cm)	Height (m)	Health	Ownership	To be Removed (Y/N)	Comments
1	White Ash	18 T 461336 5037770	15	7	Good	Brigil	Y	Many epicormic shoots along main stem
2	Unknown	18 T 461337 5037774	20	3	Dead	Brigil	Y	Broken off
3	American Elm	18 T 461340 5037784	20	8	Good	City of Ottawa	N	
4	Bur Oak	18 T 461342 5037782	30	7	Good	City of Ottawa	N	2 stems (individual dbh not provided)
5	Bur Oak	18 T 461346 5037784	17	7	Good	City of Ottawa	N	
6	Bur Oak	18 T 461347 5037783	14	7	Good	City of Ottawa	N	
7	Bur Oak	18 T 461351 5037785	27	9	Good	City of Ottawa	N	
8	American Elm	18 T 461350 5037779	17	10	Good	City of Ottawa	N	
9	Bur Oak	18 T 461349 5037781	27	11	Good	City of Ottawa	N	
10	Bur Oak	18 T 461352 5037781	19	9	Good	City of Ottawa	N	
11	Bur Oak	18 T 461352 5037772	22	9	Good	City of Ottawa	N	
12	Bur Oak	18 T 461356 5037767	25	11	Good	City of Ottawa	N	
13	American Elm	18 T 461355 5037767	10	8	Good	City of Ottawa	N	
14	American Elm	18 T 461355 5037762	13	8	Dead	City of Ottawa	N	

Tree ID	Species	UTM Coordinates (NAD 83)	DBH (cm)	Height (m)	Health	Ownership	To be Removed (Y/N)	Comments
15	American Elm	18 T 461358 5037765	15	3	Dead	City of Ottawa	N	Broken off
16	White Ash	18 T 461356 5037764	11	4	Dead	City of Ottawa	N	Broken off
17	Bur Oak	18 T 461357 5037764	6-20	10	Good	City of Ottawa	N	3 stems
18	American Elm	18 T 461346 5037763	12	3	Dead	Brigil	Y	Broken off
19	American Elm	18 T 461343 5037762	18	1	Dead	Brigil	Y	Broken off
20	American Elm	18 T 461344 5037755	23	8	Good	Brigil	Y	2 stems (individual dbh not provided)
21	Bur Oak	18 T 461353 5037756	20	7	Good	City of Ottawa	N	
22	Bur Oak	18 T 461356 5037752	17	8	Good	City of Ottawa	N	
23	American Elm	18 T 461353 5037754	11	8	Good	City of Ottawa	N	
24	American Elm	18 T 461354 5037751	16	10	Good	City of Ottawa	N	
25	Bur Oak	18 T 461354 5037747	36	10	Good	City of Ottawa	N	2 stems individual dbh not provided)
26	American Elm	18 T 461351 5037746	14	8	Poor	City of Ottawa	N	Some bark peeling off
27	American Elm	18 T 461349 5037745	20	1	Dead	Brigil	Y	Broken off
28	American Elm	18 T 461350 5037741	15	7	Good	City of Ottawa	N	
29	American Elm	18 T 461351 5037743	16	2	Dead	City of Ottawa	N	Broken off

Tree ID	Species	UTM Coordinates (NAD 83)	DBH (cm)	Height (m)	Health	Ownership	To be Removed (Y/N)	Comments
30	Bur Oak	18 T 461354 5037743	24	10	Good	City of Ottawa	N	
31	Bur Oak	18 T 461356 5037745	11	6	Poor	City of Ottawa	N	Some twig dieback
32	Bur Oak	18 T 461360 5037746	25	8	Poor	City of Ottawa	N	Some twig dieback, 2 stems (individual dbh not provided)
33	American Elm	18 T 461351 5037740	19	8	Good	City of Ottawa	N	
34	American Elm	18 T 461353 5037737	12	8	Good	City of Ottawa	N	
35	American Elm	18 T 461351 5037737	14	2	Dead	City of Ottawa	N	Broken off
36	American Elm	18 T 461352 5037736	11-16	9	Good	City of Ottawa	N	2 stems
37	American Elm	18 T 461351 5037735	11	7	Good	City of Ottawa	N	
38	American Elm	18 T 461353 5037733	12	8	Good	City of Ottawa	N	
39	Bur Oak	18 T 461352 5037733	12-21	8	Good	City of Ottawa	N	3 stems
40	American Elm	18 T 461354 5037732	24	12	Good	City of Ottawa	N	
41	Bur Oak	18 T 461355 5037728	25	8	Good	City of Ottawa	N	
42	Bur Oak	18 T 461356 5037721	23	8	Good	City of Ottawa	N	
43	Bur Oak	18 T 461356 5037717	10-34	10	Good	City of Ottawa	N	3 stems
44	Bur Oak	18 T 461357 5037715	13-24	10	Good	City of Ottawa	N	4 stems

Tree ID	Species	UTM Coordinates (NAD 83)	DBH (cm)	Height (m)	Health	Ownership	To be Removed (Y/N)	Comments
45	White Ash	18 T 461349 5037718	10	6	Good	City of Ottawa	N	
46	White Ash	18 T 461348 5037717	10	6	Good	City of Ottawa	N	
47	White Ash	18 T 461347 5037717	11	5	Good	City of Ottawa	N	
48	American Elm	18 T 461386 5037704	11	6	Good	City of Ottawa	N	
49	American Elm	18 T 461391 5037703	14	7	Good	City of Ottawa	N	
50	Bur Oak	18 T 461385 5037711	95	15	Good	City of Ottawa	N	
51	White Ash	18 T 461395 5037712	40	13	Good	City of Ottawa	N	Some twig dieback
52	American Elm	18 T 461377 5037711	10	5	Good	City of Ottawa	N	
53	Bur Oak	18 T 461381 5037715	46	14	Good	City of Ottawa	N	
54	White Pine	18 T 461383 5037720	57-61	15	Good	City of Ottawa	N	2 stems. 57 DBH stem good health, 61 DBH stem dead with many cavities
55	Bur Oak	18 T 461376 5037719	41	14	Good	City of Ottawa	N	