Minto Communities / Valecraft Homes Ltd.   June 3rd, 2019
200-180 Kent Street / 1455 Youville Drive, Suite 210
Ottawa, ON, K1P 0B6 / Orleans, Ontario, K1C 6Z7

Attn: Beth Henderson, Senior Land Development Manager – Minto Communities
       Danny Page, Manager of Planning and Land Development – Valecraft Homes

RE: Woodlot S-23 Large Tree Inventory – Minto Communities and Valecraft Homes Kanata North Developments

1.0   BACKGROUND AND PURPOSE

McKinley Environmental Solutions (MES) was previously retained by Minto Communities (Minto) to prepare the *Combined Environmental Impact Statement and Tree Conservation Report (Revised) – Minto Communities and 2559688 Ontario Inc. Kanata North Development (936 March Road)* (dated May 2019) (MES 2019a). MES was also previously retained by Valecraft Homes (Valecraft) to prepare the *Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road)* (dated April 2019) (MES 2019b). MES (2019a) was prepared to support the proposed development of the Minto and 2559688 Ontario Inc. Kanata North property (936 March Road) which includes the Southeast Quadrant of the Kanata North Urban Expansion Area (KNUEA). MES (2019b) was prepared to support the proposed development of the Valecraft Kanata North property (1020 & 1070 March Road) which includes the Northeast Quadrant of the KNUEA.

The KNUEA Community Design Plan (CDP) and Environmental Management Plan (EMP) identify that a new Stormwater Management (SWM) pond will be constructed east of the Former CN Railway Corridor in order to provide SWM servicing for both the KNUEA Northeast and Southeast Quadrants (the Minto and Valecraft developments) (Novatech 2016a; Novatech 2016b). The CDP and EMP state that "*The eastern portion of Woodlot S-23 (referred to in the EMP as the 'northeast forest') is the recommended location of the SWM pond that will service the lands east of March Road. The remaining areas of Woodlot S-23 will be retained and conveyed to the City once the detailed design of the SWM pond has been*

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confirmed." The EMP also specifies that the proposed inlet channels to the new SWM pond will be built outside the limits of Woodlot S-23 (Novatech 2016b).

As described in MES (2019a), the Draft Plan of Subdivision for the Minto development identified an approximately 2.4 ha block that is anticipated to include the retained portion of Woodlot S-23 within the Minto property. The anticipated limits of the SWM pond within the Valecraft lands was not identified in MES (2019b), however, it was noted that it is anticipated that the core of Woodlot S-23 will ultimately be retained. For the purposes of this Large Tree Inventory, it is assumed that the retained portion of Woodlot S-23 within the Valecraft lands will be similar in size to the retained portion of the feature within the Minto lands. Both MES (2019a) and MES (2019b) note that the limits of the retained area of Woodlot S-23 will depend on the final detailed design of the SWM pond.

Following review of the Minto Draft Plan of Subdivision Application, the City of Ottawa requested that further detail be provided with regards to the location of large trees within Woodlot S-23, as well as potential impacts to large trees which may result from the proposed SWM pond. The purpose of this letter is to provide a Large Tree Inventory within the portions of the Minto and Valecraft properties that occur east of the Former CN Railway Corridor (including Woodlot S-23 and surrounding recent regrowth habitats). In addition, the health status of the large trees has been documented, and potential impacts on large trees have been quantified, based on the estimated extent of the SWM pond. Lastly, recommendations for tree retention and mitigation are provided.

This letter report is intended to provide supplemental information that expands upon the Combined Environmental Impact Statements (EIS) and Tree Conservation Reports (TCR) prepared for the Minto and Valecraft Kanata North developments. This letter report is intended to be read in conjunction with MES (2019a) and MES (2019b). Refer to MES 2019a and MES 2019b for further detail regarding the proposed developments, the presence of natural heritage features, potential impacts on natural heritage features, and recommended mitigation measures.

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2.0   STUDY AREA OVERVIEW

The Study Area addressed by this Large Tree Inventory includes the portions of the Minto and Valecraft properties that occur east of the Former CN Railway Corridor (Figure 1). The Study Area is approximately 14.6 ha in size. The north side of the Study Area is owned by Valecraft, whereas the south side is owned by Minto. Vegetation communities found within the Study Area are shown in Figure 2. For brevity, the vegetation communities are not described in detail as part of this Large Tree Inventory. A detailed description of each vegetation community, including plant species, photographs, tree species composition, and ages is included in MES (2019a) and MES (2019b).

The northwest portion of the Study Area (Valecraft) is dominated by a Fresh-Moist Poplar Deciduous Forest, which extends into the western part of the Minto property. As described in Section 3.2 of MES (2019b), historic air photos indicate that the majority of trees within the Fresh-Moist Poplar Deciduous Forest are approximately 20 to 30 years of age. The central part of the Valecraft property includes an open Fallow Agricultural Field (Graminoid Meadow) with little tree cover. The eastern part of the Valecraft property includes a young recent regrowth Fresh-Moist Ash – Elm Deciduous Forest. A Deciduous Hedgerow that is dominated by moderately aged Crack Willow occurs along the eastern edge of the Valecraft property, adjacent to March Valley Road.

As described in Section 3.2 of MES (2019a), the oldest trees within the Study Area occur in the western part of the Minto property. Historic air photos indicate that trees within the Fresh-Moist White Cedar – Hardwood Mixed Forest and the Dry-Fresh Sugar Maple – Ash Deciduous Forest are greater than 40 years of age. In contrast, the eastern part of the Minto property includes a recent regrowth Cultural Thicket that includes young recent regrowth stems.

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FIGURE 1: STUDY AREA OVERVIEW
Woodlot S-23 Large Tree Inventory
Minto Communities and Valecraft Homes Kanata North Developments

June 2019

Approximate Valecraft Stormwater Management Area

Approximate Valecraft Retained Area

March Valley Road

Approximate Minto Stormwater Management Area

Former CN Railway Corridor

Approximate Minto Retained Area

Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

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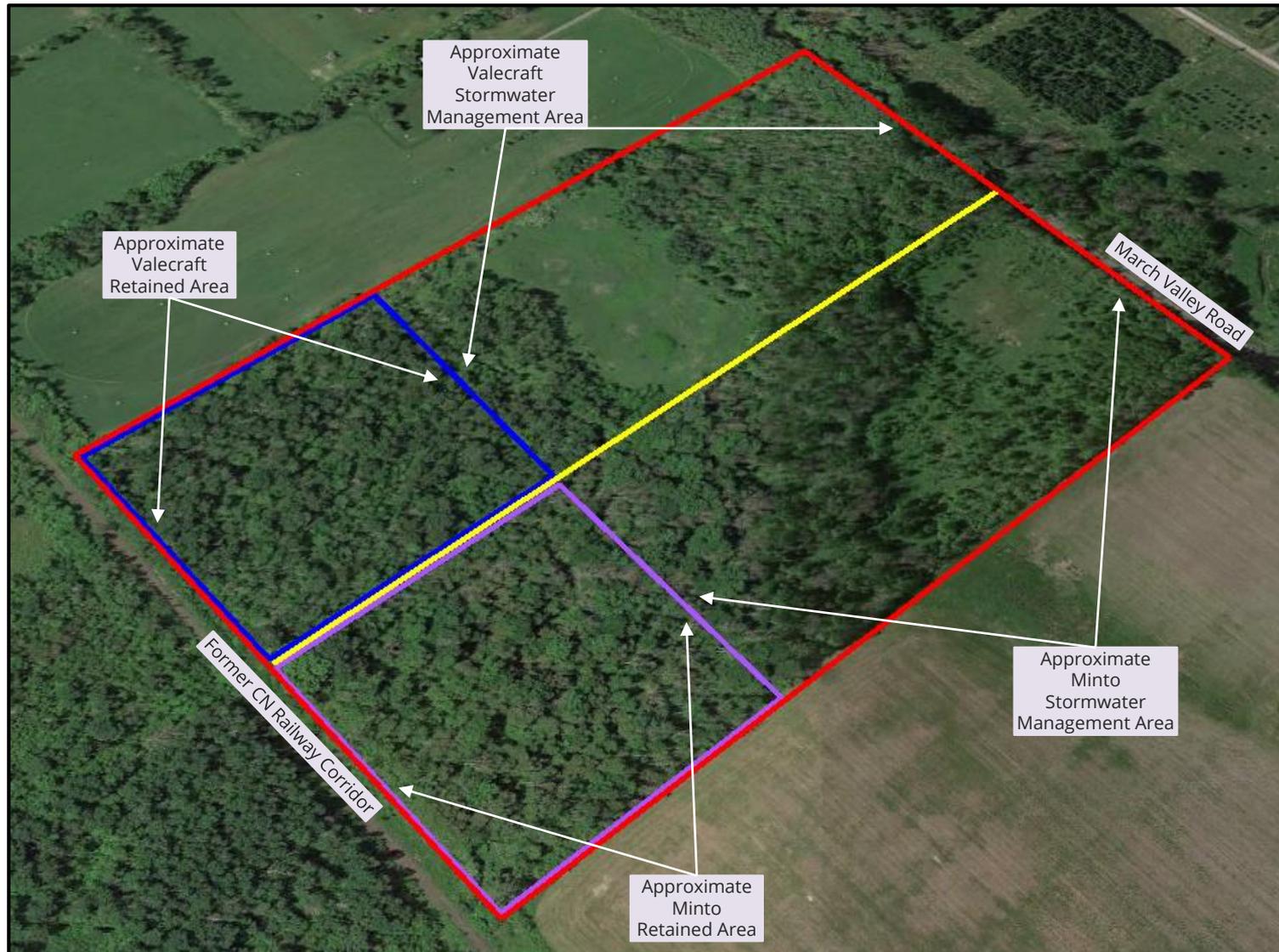
— - Study Area   — - Property Line

FIGURE 2: VEGETATION COMMUNITIES
Woodlot S-23 Large Tree Inventory
Minto Communities and Valecraft Homes Kanata North Developments

Deciduous Hedgerow

Fresh-Moist Ash - Elm Deciduous Forest

Fallow Agricultural Field (Forb Meadow)

Cultural Thicket

March Valley Road

Fresh-Moist Poplar Deciduous Forest

Dry-Fresh Sugar Maple – Ash Deciduous Forest

Former CN Railway Corridor

Fresh-Moist White Cedar – Hardwood Mixed Forest
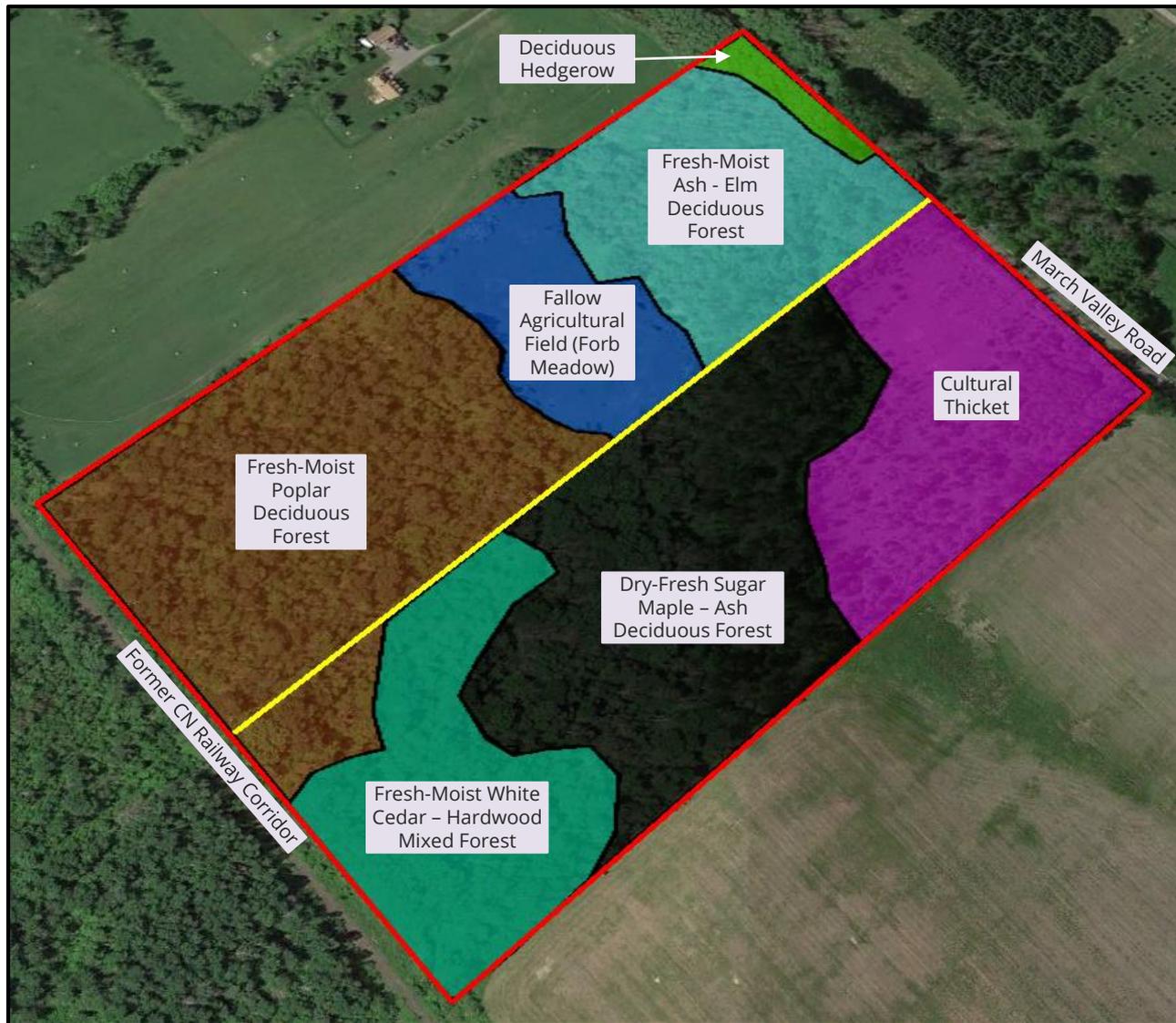
Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

━━━ - Study Area   ━━━ - Property Line

3.0   METHODS

The vegetation communities and trees within the Study Area have previously been assessed in detail as part of the plant surveys and tree inventory described in MES (2019a) and MES (2019b). Refer to MES (2019a) and MES (2019b) for a detailed description of the plant surveys and tree inventory methods that have previously been employed. The previously completed plant surveys and tree inventory included multiple survey visits.

Large trees were defined as any trees that are ≥50 cm diameter at breast height (dbh) in size. In order to complete an inventory of large trees within the Study Area, additional site visits were undertaken on May 27th and May 30th, 2019. Conditions during the site visits included partly cloudy skies and 16 ºC and partly cloudy skies and 21 ºC on May 27th and May 30th (respectively). The site visits were undertaken in the late spring when the majority of trees were leafed out. Large trees were identified by undertaking transects through the Study Area that were spaced 25 m apart. Any trees along the transects that appeared approximately 50 cm in size or greater were measured through the use of a calibrated dbh tape. Trees were also identified to species and their condition was noted.

The condition of Butternut Trees (endangered) was described based on the results of the Butternut Health Assessments (BHAs) that have been completed in the Minto and Valecraft properties (Fleguel 2018a; Fleguel 2018b).

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4.0   LARGE TREE INVENTORY RESULTS

The results of the Large Tree Inventory are summarized below in Table A. Photographs of the trees are included in Appendix A. Large tree locations are shown below in Figure 3. In total, seventy six (76) trees ≥50 cm dbh in size were documented within the Study Area. In total, eleven (11) tree species with specimens ≥50 cm dbh in size were recorded. This included Butternut (21%, 16 trees), White Ash (17%, 13 trees), Bur Oak (15%, 11 trees), Trembling Aspen (12%, 9 trees), White Pine (9%, 7 trees), Sugar Maple (9%, 7 trees), White Cedar (7%, 5 trees), Yellow Birch (4%, 3 trees), Crack Willow (2.5%, 2 trees), Basswood (2.5%, 2 trees), and American Elm (1%, 1 tree). Notably, approximately 32% of the large trees (24 trees) were identified as non-retainable. Non-retainable trees included those that were dead, in poor condition, or those trees identified as Category 1 (Non-retainable) Butternut Trees by Fleguel (2018a) and Fleguel (2018b). Potentially retainable trees included any trees that were found to be in good condition and living during the Large Tree Inventory. The relatively high proportion of non-retainable trees is due to the fact that the two (2) most common species with specimens ≥50 cm dbh in size were Butternut (21%, 16 trees) and White Ash (17%, 13 trees). Butternut Trees are an endangered species, and many Butternuts are in decline due to the effects of the Butternut Canker disease. White Ash trees throughout the Ottawa area are also frequently in decline due to the effects of the invasive Emerald Ash Borer. Extensive evidence of damage to Butternut Trees and White Ash by the Butternut Canker/Emerald Ash Borer was noted throughout the Study Area. Notably, virtually all of the mature White Ash trees within the Study Area showed signs of damage from the Emerald Ash Borer.

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FIGURE 3: LARGE TREE LOCATIONS
Woodlot S-23 Large Tree Inventory
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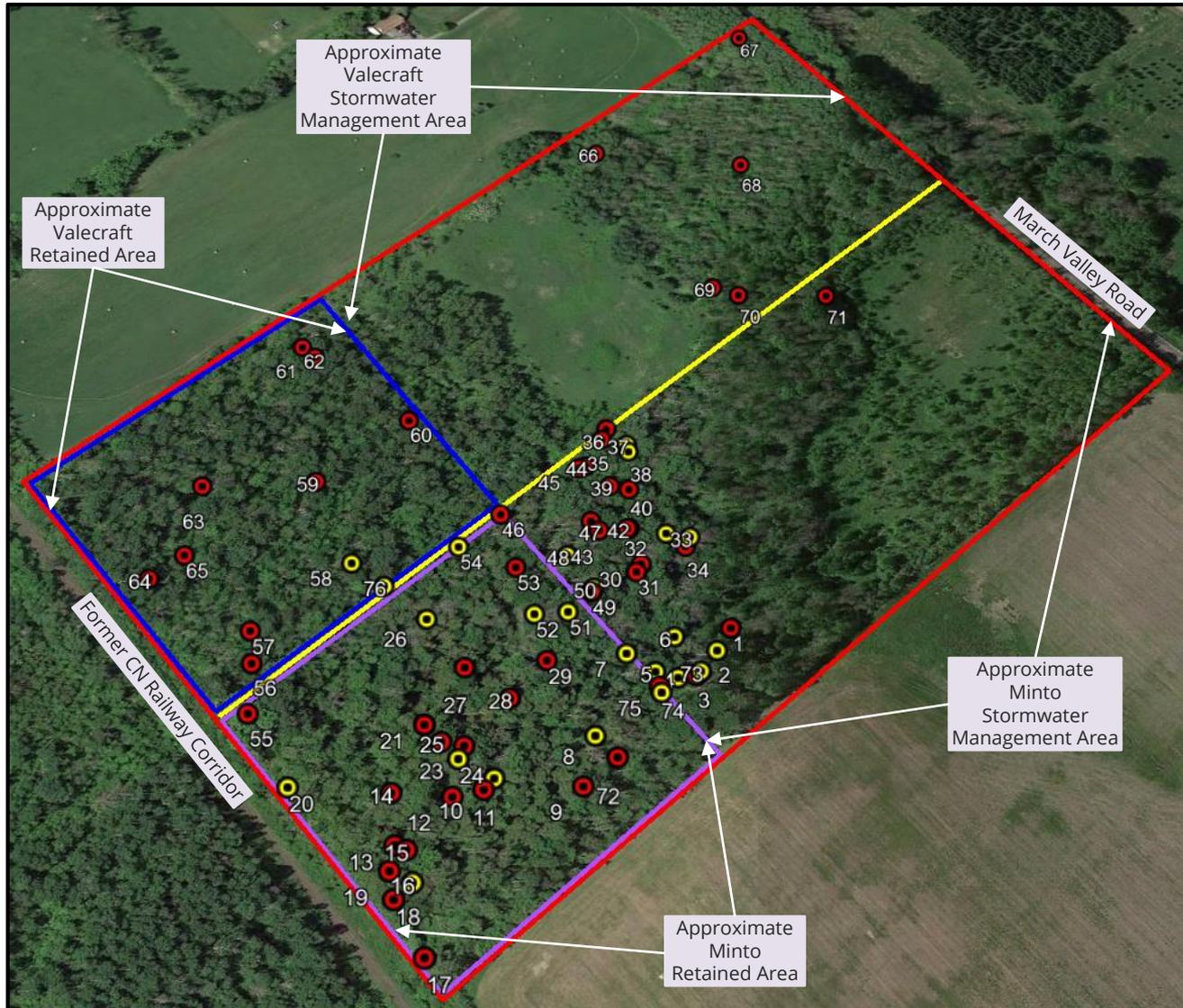
Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate. Potentially retainable trees include those identified in Table A as being in good condition, Category 2 Butternut Trees, and Category 3 Butternut Trees. Non-retainable trees include those identified in Table A as dead, in poor condition, and Category 1 Butternut Trees.

Legend:
— - Study Area — - Property Line ◉ - Potentially Retainable Trees ◉ - Non-Retainable Trees

		Table A: Large Tree Inventory Results			
Tree #	Butternut Health Assessment #	Species	Diameter at Breast Height (dbh)	Condition	Location
1	N/A	Bur Oak (Quercus macrocarpa)	78	Good	SWM Pond
2	N/A	White Ash (Fraxinus americana)	57	Dead	SWM Pond
3	Minto Tree #182	Butternut (Juglans cinerea)	85	Category 3	SWM Pond
4	N/A	White Ash (Fraxinus americana)	57	Dead	SWM Pond
5	N/A	White Ash (Fraxinus americana)	50	Dead	SWM Pond
6	N/A	White Ash (Fraxinus americana)	64	Dead	SWM Pond
7	Minto Tree #187	Butternut (Juglans cinerea)	70	Category 1	Retained Area
8	N/A	White Ash (Fraxinus americana)	86	Dead	Retained Area
9	N/A	White Pine (Pinus strobus)	68	Good	Retained Area
10	N/A	White Cedar (Thuja occidentalis)	54	Good	Retained Area
11	N/A	White Cedar (Thuja occidentalis)	52	Dead	Retained Area
12	N/A	White Cedar (Thuja occidentalis)	59	Good	Retained Area
13	Minto Tree #201	Butternut (Juglans cinerea)	53	Category 3	Retained Area
14	Minto Tree #198	Butternut (Juglans cinerea)	67	Category 3	Retained Area
15	N/A	Bur Oak (Quercus macrocarpa)	69	Good	Retained Area
16	Minto Tree #221	Butternut (Juglans cinerea)	55	Category 1	Retained Area
17	N/A	White Pine (Pinus strobus)	74	Good	Retained Area
18	Minto Tree #202	Butternut (Juglans cinerea)	55	Category 2	Retained Area
19	N/A	White Cedar (Thuja occidentalis)	53	Good	Retained Area
20	Valecraft Tree #85	Butternut (Juglans cinerea)	55	Category 1	Retained Area
21	N/A	Bur Oak (Quercus macrocarpa)	54	Good	Retained Area
22	N/A	Bur Oak (Quercus macrocarpa)	61	Good	Retained Area
23	N/A	Bur Oak (Quercus macrocarpa)	72	Good	Retained Area
24	Minto Tree #196	Butternut (Juglans cinerea)	65	Category 1	Retained Area
25	Minto Tree #197	Butternut (Juglans cinerea)	57	Category 3	Retained Area
26	N/A	White Ash (Fraxinus americana)	59	Dead	Retained Area
27	N/A	Bur Oak (Quercus macrocarpa)	60	Good	Retained Area
28	N/A	Bur Oak (Quercus macrocarpa)	54	Good	Retained Area
29	N/A	Bur Oak (Quercus macrocarpa)	60	Good	Retained Area
30	N/A	Sugar Maple (Acer saccharum)	74	Good	SWM Pond

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Tree #	Butternut Health Assessment #	Species	Diameter at Breast Height (dbh)	Condition	Location
31	N/A	Sugar Maple (Acer saccharum)	59	Good	SWM Pond
32	N/A	White Ash (Fraxinus americana)	70	Dead	SWM Pond
33	N/A	White Ash (Fraxinus americana)	60	Dead	SWM Pond
34	N/A	Basswood (Tilia americana)	51	Good	SWM Pond
35	N/A	White Pine (Pinus strobus)	98	Good	SWM Pond
36	N/A	Bur Oak (Quercus macrocarpa)	50	Good	SWM Pond
37	N/A	White Ash (Fraxinus americana)	52	Dead	SWM Pond
38	N/A	Sugar Maple (Acer saccharum)	74	Poor	SWM Pond
39	N/A	Sugar Maple (Acer saccharum)	73	Good	SWM Pond
40	N/A	White Pine (Pinus strobus)	72	Good	SWM Pond
41	N/A	Sugar Maple (Acer saccharum)	55	Good	SWM Pond
42	N/A	Sugar Maple (Acer saccharum)	54	Good	SWM Pond
43	N/A	Yellow Birch (Betula alleghaniensis)	58	Good	SWM Pond
44	N/A	Yellow Birch (Betula alleghaniensis)	65	Good	SWM Pond
45	N/A	Yellow Birch (Betula alleghaniensis)	60	Good	SWM Pond
46	N/A	White Cedar (Thuja occidentalis)	53	Good	Retained Area
47	N/A	American Elm (Ulmus americana)	76	Good	SWM Pond
48	N/A	White Ash (Fraxinus americana)	53	Dead	SWM Pond
49	N/A	Sugar Maple (Acer saccharum)	120	Good	Healthy Edge Tree
50	N/A	Basswood (Tilia americana)	60	Poor	SWM Pond
51	N/A	White Ash (Fraxinus americana)	58	Dead	Retained Area
52	N/A	White Ash (Fraxinus americana)	90	Dead	Retained Area
53	Minto Tree #235	Butternut (Juglans cinerea)	59	Category 3	Retained Area
54	N/A	White Ash (Fraxinus americana)	76	Dead	Retained Area
55	N/A	Bur Oak (Quercus macrocarpa)	113	Good	Retained Area
56	Minto Tree #228	Butternut (Juglans cinerea)	71	Category 3	Retained Area
57	N/A	Trembling Aspen (Populus tremuloides)	55	Good	Retained Area
58	N/A	Trembling Aspen (Populus tremuloides)	55	Poor	Retained Area
59	N/A	Trembling Aspen (Populus tremuloides)	69	Good	Retained Area
60	N/A	Trembling Aspen (Populus tremuloides)	62	Good	Retained Area

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Tree #	Butternut Health Assessment #	Species	Diameter at Breast Height (dbh)	Condition	Location
61	N/A	Trembling Aspen (Populus tremuloides)	57	Good	Retained Area
62	N/A	Trembling Aspen (Populus tremuloides)	60	Good	Retained Area
63	N/A	Trembling Aspen (Populus tremuloides)	54	Good	Retained Area
64	N/A	Trembling Aspen (Populus tremuloides)	59	Good	Retained Area
65	N/A	Trembling Aspen (Populus tremuloides)	67	Good	Retained Area
66	N/A	Crack Willow (Salix fragilis)	>1m	Good	SWM Pond
67	N/A	Crack Willow (Salix fragilis)	2 Stems - 65/67	Good	SWM Pond
68	N/A	White Pine (Pinus strobus)	60	Good	SWM Pond
69	N/A	White Pine (Pinus strobus)	56	Good	SWM Pond
70	N/A	White Pine (Pinus strobus)	64	Good	SWM Pond
71	N/A	Bur Oak (Quercus macrocarpa)	62	Good	SWM Pond
72	Minto Tree #193	Butternut (Juglans cinerea)	50	Category 3	Retained Area
73	Minto Tree #184	Butternut (Juglans cinerea)	58	Category 1	SWM Pond
74	Minto Tree #185	Butternut (Juglans cinerea)	51	Category 3	SWM Pond
75	Minto Tree #186	Butternut (Juglans cinerea)	53	Category 1	SWM Pond
76	Minto Tree #234	Butternut (Juglans cinerea)	51	Category 1	Retained Area

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5.0   TREE RETENTION

The Kanata North Urban Expansion Area (KNUEA) Environmental Management Plan (EMP) stated that the western portion of Woodlot S-23 is to be retained as a natural heritage feature and conveyed to the City of Ottawa (Novatech 2016b). The limits of the retained area of Woodlot S-23 will depend on the final detailed design of the SWM pond. As described above, the Draft Plan of Subdivision for the Minto development identified an approximately 2.4 ha block that is anticipated to include the retained portion of Woodlot S-23 within the Minto property. The anticipated limits of the SWM pond within the Valecraft lands was not identified in MES (2019b), however, it was noted that it is anticipated that the core of Woodlot S-23 will ultimately be retained. For the purposes of this Large Tree Inventory, it is assumed that the retained portion of Woodlot S-23 within the Valecraft lands will be similar in size to the retained portion of the feature within the Minto lands. Both MES (2019a) and MES (2019b) note that the limits of the retained area of Woodlot S-23 will depend on the final detailed design of the SWM pond.

Per the KNUEA EMP, it is recommended that all trees within the Study Area that occur outside of the limits of the future SWM pond blocks should be preserved. In addition, wherever feasible, trees that occur along the edge of the retained area should also be preserved. Based on the estimated limits of the SWM pond shown above in Figures 1 to 3, the only potentially retainable tree (healthy) that currently occurs along the edge of the SWM pond blocks is Tree #49, which is approximately 4 m from the edge of the anticipated retained area. If feasible and compatible with the SWM pond design, Tree #49 should be preserved adjacent to the edge of the retained area during the development of the SWM pond.

Based on the estimated limits of the SWM pond shown above in Figures 1 to 3, the proposed extent of tree retention will result in retention of approximately 55% of the large trees within the Study Area (this assumes that Tree #49 is preserved along the edge of the retained area). Notably, the extent of tree retention will preserve approximately 58% of the potentially retainable (healthy) large trees within the Study Area. Notably, the retained area will preserve the majority of the Fresh-Moist White Cedar – Hardwood Mixed Forest and a portion of the Dry-Fresh Sugar Maple – Ash Deciduous Forest, which are the two (2) forest communities that are oldest and which include the highest densities of large trees within the Study Area.

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6.0   SIGNIFICANT WOODLOT ASSESSMENT

MES (2019a) and MES (2019b) include a Significant Woodlot Assessment for Woodlot S-23. Both reports note that available evidence suggests that Woodlot S-23 may qualify as a Significant Woodlot due to the presence of a comparatively high density of older trees, the presence of interior forest habitat, and the presence of Significant Wildlife Habitat (due to breeding Eastern Wood Pewee). MES (2019a) and MES (2019b) note the majority of older trees, the interior forest habitat, and occurrences of Eastern Wood Pewee were all present primarily in the western part of Woodlot S-23. In contrast, the eastern portion of the feature is fragmented by additional openings, tree cover is younger, and occurrences of Eastern Pewee were not documented. As such, MES (2019a) and MES (2019b) conclude that the anticipated extent of tree preservation is anticipated to be sufficient to preserve the woodlot's significant features and functions. Refer to MES (2019a) and MES (2019b) for additional detail.

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7.0   TREE PRESERVATION MITIGATION MEASURES

The inlet channels to the new SWM pond will consist of buried pipes, which will be placed outside the limits of the retained portion of Woodlot S-23. Per the tree preservation mitigation measures described below, where feasible, the inlet pipes should be placed beyond the critical root zone of any boundary trees that occur along the edges of the retained portion of Woodlot S-23. This will ensure that the installation of the inlet pipes does not negatively impact the retained portion of Woodlot S-23. The following tree mitigation measures should be implemented to help protect and preserve retained trees:

- Mark the edge of the tree clearing area to ensure only designated trees are removed. Natural areas that are to be retained are to be isolated by sturdy construction fencing or similar barriers at least 1 m in height;
- Protect the critical root zone (CRZ) of retained trees, where the CRZ is established as being 10 cm from the trunk of a tree for every centimeter of trunk dbh. The CRZ is calculated as dbh x 10 cm;
- When trees to be removed overlap with the CRZ of trees to be retained, cut roots at the edge of the CRZ and grind down stumps after tree removal. Do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ;
- If roots must be cut, roots 20 mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling;
- Do not place any material or equipment within the CRZ of any tree;
- Do not attach any signs, notices, or posters to any tree;
- Do not damage the root system, trunk, or branches of any tree;
- Ensure that exhaust fumes from all equipment are directed away from any tree canopy; and
- Disturbed areas of retained natural features should be replanted with locally grown native species.

Additional mitigation measures to address potential impacts to wildlife and Species at Risk during tree clearing are described in MES (2019a) and MES (2019b). The mitigation measures described above are intended to be implemented in conjunction with those described in MES (2019a) and MES (2019b).

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8.0   REPLANTING

In order to mitigate the loss of woody vegetation from tree clearing, trees and shrubs will be replanted selectively surrounding the SWM pond. The planting locations and specific planting requirements will be confirmed by a detailed Landscaping Plan. Plantings should emphasize the use of native trees and shrubs, which may include those identified above (e.g. White Pine, White Cedar, Basswood, Sugar Maple, Bur Oak, and Trembling Aspen). Planting of White Ash or Green Ash trees should be avoided due to the high likelihood that any planted Ash trees will become infested with Emerald Ash Borer.

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9.0   CLOSURE

The Kanata North Urban Expansion Area (KNUEA) Environmental Management Plan (EMP) stated that the western portion of Woodlot S-23 is to be retained as a natural heritage feature and conveyed to the City of Ottawa (Novatech 2016b). The limits of the retained area of Woodlot S-23 will depend on the final detailed design of the SWM pond. As described above, it is anticipated that the core of Woodlot S-23 will ultimately be retained. Based on the estimated limits of the SWM pond shown above in Figures 1 to 3, the proposed extent of tree retention will result in retention of the majority of the healthy large trees found within the Study Area. As described in greater detail in MES (2019a) and MES (2019b), it is anticipated that the extent of tree retention is sufficient to preserve the significant features and functions of Woodlot S-23.

We trust that the above information is sufficient; should you have any questions or require further information, please do not hesitate to contact the undersigned, at your convenience.

Sincerely,

Dr. Andrew McKinley, EP, RP Bio.
Senior Biologist, McKinley Environmental Solutions

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10.0 REFERENCES

Fleguel, Rose (2018a) Butternut Health Assessment – 936 March Road, Kanata.

Fleguel, Rose (2018b) Butternut Health Assessment – 1020 & 1070 March Road, Kanata.

McKinley Environmental Solutions (MES) (2019a) Combined Environmental Impact Statement and Tree Conservation Report (Revised) – Minto Communities and 2559688 Ontario Inc. Kanata North Development (936 March Road).

McKinley Environmental Solutions (MES) (2019b) Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road).

Novatech Engineering Consultants (Novatech) (2016a) Kanata North Community Design Plan.

Novatech Engineering Consultants (Novatech) (2016b) Kanata North Community Design Plan – Environmental Management Plan.

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APPENDIX A – TREE PHOTOS

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Photograph 1: Tree #1 – Bur Oak in good condition (May 27th, 2019).

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Photograph 2: Tree #2 – dead White Ash (May 27th, 2019).

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Photograph 3: Tree #3 – Category 3 Butternut Tree (May 27th, 2019).

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Photograph 4: Tree #4 – dead White Ash (May 27th, 2019).

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Photograph 5: Tree #5 – dead White Ash (May 27th, 2019).

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Photograph 6: Tree #7 – Category 1 Butternut (May 27th, 2019).

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Photograph 7: Tree #8 – dead White Ash (May 27th, 2019).

Photograph 8: Tree #9 – White Pine in good condition (May 27th, 2019).

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Photograph 9: Tree #10 – White Cedar in good condition (May 27th, 2019).

Photograph 10: Tree #11 – dead White Cedar (May 27th, 2019).

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Photograph 11: Tree #12 – White Cedar in good condition (May 27th, 2019).

Photograph 12: Tree #13 – Category 3 Butternut (May 27th, 2019).

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Photograph 13: Tree #14 – Category 3 Butternut (May 27th, 2019).

Photograph 14: Tree #15 - Bur Oak in good condition (May 27th, 2019).

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Photograph 15: Tree #16 – Category 1 Butternut (May 27th, 2019).

Photograph 16: Tree #17 – White Pine in good condition (May 27th, 2019).

Photograph 17: Tree #18 – Category 2 Butternut (May 27th, 2019).

Photograph 18: Tree #19 – White Cedar in good condition (May 27th, 2019).

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Photograph 19: Tree #20 – Category 1 Butternut (May 27th, 2019).

Photograph 20: Tree #21 – Bur Oak in good condition (May 27th, 2019).

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Photograph 21: Tree #22 – Bur Oak in good condition (May 27th, 2019).

Photograph 22: Tree #23 – Bur Oak in good condition (May 27th, 2019).

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Photograph 23: Tree #24 – Category 1 Butternut Tree (May 27th, 2019).

Photograph 24: Tree #25 – Category 3 Butternut Tree (May 27th, 2019).

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Photograph 25: Tree #26 – dead White Ash (May 27th, 2019).

Photograph 26: Tree #27 – Bur Oak in good condition (May 27th, 2019).

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Photograph 27: Tree #28 – Bur Oak in good condition (May 27th, 2019).

Photograph 28: Tree #29 – Bur Oak in good condition (May 27th, 2019).

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Photograph 29: Tree #30 – Sugar Maple in good condition (May 27th, 2019).

Photograph 30: Tree #31 – Sugar Maple in good condition (May 27th, 2019).

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Photograph 31: Tree #32 – dead White Ash (May 27th, 2019).

Photograph 32: Tree #33 – dead White Ash (May 27th, 2019).

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Photograph 33: Tree #34 – Basswood in good condition (May 27th, 2019).

Photograph 34: Tree #35 – White Pine in good condition (May 27th, 2019).

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Photograph 35: Tree #36 – Bur Oak in good condition (May 27th, 2019).

Photograph 36: Tree #37 – dead White Ash (May 27th, 2019).

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Photograph 37: Tree #38 – Sugar Maple in poor condition (May 27th, 2019).

Photograph 38: Tree #39 – Sugar Maple in good condition (May 27th, 2019).

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Photograph 39: Tree #40 – White Pine in good condition (May 27th, 2019).

Photograph 40: Tree #41 – Sugar Maple in good condition (May 27th, 2019).

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Photograph 41: Tree #42 – Sugar Maple in good condition (May 27th, 2019).

Photograph 42: Tree #43 – Yellow Birch in good condition (May 27th, 2019).

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Photograph 43: Tree #44 – Yellow Birch in good condition (May 27th, 2019).

Photograph 44: Tree #45 – Yellow Birch in good condition (May 27th, 2019).

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Photograph 45: Tree #46 – White Cedar in good condition (May 27th, 2019).

Photograph 46: Tree #47 – American Elm in good condition (May 27th, 2019).

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Photograph 47: Tree #48 – dead White Ash (May 27th, 2019).

Photograph 48: Tree #49 – Sugar Maple in good condition (May 27th, 2019).

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Photograph 49: Tree #50 – Basswood in poor condition (May 27th, 2019).

Photograph 50: Tree #51 – dead White Ash (May 27th, 2019).

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Photograph 51: Tree #52 – dead White Ash (May 27th, 2019).

Photograph 52: Tree #53 – Category 3 Butternut (May 27th, 2019).

Photograph 53: Tree #54 – dead White Ash (May 30th, 2019).

Photograph 54: Tree #55 – Bur Oak in good condition (May 30th, 2019).

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Photograph 55: Tree #56 – Category 3 Butternut (May 30th, 2019).

Photograph 56: Tree #57 – Trembling Aspen in good condition (May 30th, 2019).

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Photograph 57: Tree #58 – Trembling Aspen in poor condition (May 30th, 2019).

Photograph 58: Tree #59 – Trembling Aspen in good condition (May 30th, 2019).

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Photograph 59: Tree #60 – Trembling Aspen in good condition (May 30th, 2019).

Photograph 60: Tree #61 – Trembling Aspen in good condition (May 30th, 2019).

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Photograph 61: Tree #62 – Trembling Aspen in good condition (May 30th, 2019).

Photograph 62: Tree #63 – Trembling Aspen in good condition (May 30th, 2019).

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Photograph 63: Tree #64 – Trembling Aspen in good condition (May 30th, 2019).

Photograph 64: Tree #65 – Trembling Aspen in good condition (May 30th, 2019).

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Photograph 65: Tree #66 – Crack Willow in good condition (May 30th, 2019).

Photograph 66: Tree #67 – Crack Willow in good condition (May 30th, 2019).

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Photograph 67: Tree #68 – White Pine in good condition (May 30th, 2019).

Photograph 68: Tree #69 – White Pine in good condition (May 30th, 2019).

Photograph 69: Tree #70 – White Pine in good condition (May 30th, 2019).

Photograph 70: Tree #71 – White Pine in good condition (May 30th, 2019).