Tree Evaluation Report 2

Town of Southborough, MA

Karen Galligan, Superintendent – Public Works Department

147 Cordaville Road

Southborough, MA 01772

NOVEMBER 2021

Tree Technologies, LLC

170 Providence Pike

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PART 1. INTRODUCTION

OBJECTIVE

In spring 2021 *Tree Technologies, LLC*., North Smithfield, RI, was contracted by the Public Works Department Superintendent- Karen Galligan to conduct a tree inventory along eight roads in the Town of Southborough, Massachusetts. The scope of the inventory was limited to public trees or, more specifically, trees growing in the public right of way. The inventory's purpose was (1) to determine the structure, composition and size of the tree population, (2) to identify any hazardous trees and (3) to recommend tree mitigation actions, if feasible. The name, portion and length of each road selected for this inventory project is presented in the following table:

ROAD	START-END	LENGTH IN MILES/FEET
Breakneck Hill Road	Route 9 past BHC land to Route 90	1.00 / 5,280
Chestnut Hill Road	Dairy Farm Road to Main Street	0.62 / 3,274
Deerfoot Road	Clifford Road across Route 9 to #122	0.62 / 3,274
Gilmore Road	Flanders Road to Parkerville Road	0.71 / 3,749
Mount Vickery Road	Middle Road past Route 85 to BH Road	1.00 / 5,280
Sears Road	From Route 30 to Route 85	1.70 / 8,976
Woodbury Road	Woodland Road to Southville Road	0.46 / 2,428
Woodland Road	Route 9 to intersection of BH Road and Oregon	1.08 / 9,504
TOTAL		7.91 / 41,765

METHODOLOGY

The majority of the conclusions in this report are based on field inspection of roadside trees held during June-October 2021. The tree inspections were limited to an external review of major plant parts. A rubber mallet and knife were also used to determine the possible existence of wood decay under the bark of accessible plant parts of each tree. A clinometer was used to measure tree height. Trunk circumference and crown spread measurements were taken with diameter tapes. GPS locations were found using iPhone Google Map Compass Application. Guiding principles found in *Tree Risk Assessment Manual* published by the International Society of Arboriculture- Champaign, IL was used to identify and assess the extent and severity of tree structural defect(s) and to assign condition rating and recommendations of surveyed trees.

INVENTORY RESULTS

Tree survey results are presented in two parts of this report. They are Part 2. Findings and Part 3. Appendices. Part 2. Findings is further divided into two sections. The first section provides a comprehensive analysis of the tree data generated from each road survey. The results are reported by category (i.e, species, size, condition rating, etc.,) using Tables to show easy to follow value totals and percentages. Also, a brief narrative follows each table. The narrative is used to highlight any information of significance found in the table. The final Findings section shows photographic evidence of typical tree and road conditions encountered during the survey. These include tree structural defects, hazardous trees and the potential targets (road, utilities, private property, etc.,) located along the public right of way that could be vulnerable to damage in the event of tree failure.

The Appendices section is composed of Appendix A, B and C1-6. The most important of these is Appendix C7-14. This is where the complete tree inventory for each road can be found. Appendix C is organized in alpha-numeric fashion. For example, the Breakneck Hill Road tree inventory is found in Appendix C7 while Woodland Road in Appendix C14. Each inventory datasheet in Appendix C was

formatted using Microsoft EXCEL application. The datasheet has eleven column headings and the data for each tree is recorded in rows under each heading.

INVENTORY RESULT (continued from page 1).
The column headings are:

- ADDRESS- tree location by various benchmarks)
- TID- tree identification number
- TYPE- species
- GPS- geographical position using satellite driven measurements
- TRC- tree trunk circumference
- HT- tree height
- SPR- tree crown spread
- TFZ- tree fall zone
- TARGETS- area vulnerable to tree strike
- DEFECTS- tree structural defects
- CR- tree condition rating
- REC- tree recommendation
- PH- tree photo linked to TID, or info on tree structure (trunk only=ST) or tree located on private property (PP)

Appendix A and B provide a full description of the column headings and data values. They should be used as companion documents to Appendix C7-14.

Appendix A-Species Code is used to identify the species of tree found during the survey. The datasheet records each tree species using a two letter value (Ex. RO= Red Oak). Appendix A. links the two letter code to the plants common and Latin names (species and genus).

Appendix B- Legend is used to describe and define the column headings (more comprehensively) and the data values. The definitions include formulae (TFZ), and, in the case of Condition Rating, the rationale for the selected values. Finally, for clarity, tree structural defects (DEFECTS) are described in the body of the inventory report for each road in Appendix C7-14.

END OF THIS SECTION

PART 2. FINDINGS – BREAKNECK HILL ROAD

SPECIES: The species composition and number of trees per species in the Breakneck Hill Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	48	49%
Pignut Hickory	Carya glabra	15	16%
White Oak	Quercus alba	10	11%
Red Maple	Acer rubrum	08	09%
Quaking Aspen	Populus tremuloides	04	04%
Black Cherry	Prunus serotina	03	03%
American Beech	Fagus grandifolia	02	02%
Grey Birch	Betula populifolia	02	02%
White Pine	Pinus strobus	01	01%
Pin Oak	Quercus palustris	01	01%
Paper Birch	Betula papyrifera	01	01%
Red Cedar	Juniperus virginiana	01	01%
TOTAL		97	100%

Summary: Survey results indicate there are a total 97 trees growing along Breakneck Hill Road. This total is spread among thirteen tree species. The dominant species, at 48% of the tree population, is the Red oak. While quite diverse, 85% of the tree community consists of only 4 species.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	03	02%	Juvenile
20 – 60”	54	55%	Juvenile
61 – 100”	31	31%	Maturing
101 – 140”	07	08%	Mature
≥141”	02	02%	Post-Mature
Total	97	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 88% are less than 101” in girth (less than 31” DBH).

PART 2. FINDINGS – BREAKNECK HILL ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	23	24%
31 – 50’	72	75%
51 – 70’	02	01%
>70’	00	00%
Total	97	100%

Summary: Only 2 trees are taller than 51 feet on Breakneck Hill Road. Ninety-nine percent are less than 50 feet in height with most trees (72/75%) greater than 30’ but less than 50’.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	77	80%
41 – 60’	18	19%
61 – 80’	02	01%
Total	97	100%

Summary: Table 4 figures reveal that an overwhelming majority of the trees 80% have a canopy spread less than 40 feet. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. Trees with the greatest canopy spread were two Red oaks, one northeast of #77 Breakneck Hill Road and the other northwest of #39. Both trees recorded crowns 80’ wide.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Breakneck Hill Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	33	34%
1,001 – 2,000	47	49%
2,001 – 3,000	13	14%
>3,000	04	03%
Total	97	100%

Summary: The findings indicate that 66% of the trees (64 trees) register tree fall zones greater than 1,000 square feet. Of this grouping, 17 trees, or 17%, have TFZ exceeding 2,001sf. These trees have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Breakneck Hill Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – BREAKNECK HILL ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	21	21%
DW2	11	11%
DW3	00	00%
DW4	04	04%
DW5	06	06%
TC	12	12%
COD	06	06%
COD/TC	04	05%
COD/DW1	04	05%
NONE	29	30%
TOTAL	97	100%

Summary: Findings indicate 29 trees, or 30% of total population, were free of structural defects. Deadwood was the most recorded defect affecting 46 trees. Also, a total of 16 trees exhibited a cavity along their trunk. Finally, 10% of the tree population, or 10 trees, registered multiple defects.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – BREAKNECK HILL ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	59	60%
Fair	20	21%
Poor	11	12%
Dead	07	07%
Total	97	100%

Summary: According to survey results 81% of the total tree population (79 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 18 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Breakneck Hill Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	32	33%
Monitor (M)	11	12%
Sanitation Pruning (PR)	34	35%
PR/Monitor (PR/M)	02	01%
Removal (REM)	18	19%
Total	97	100%

Summary: Findings show there are 18 (19%) mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 36 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (32 trees; 33%) or an annual inspection to monitor (13 trees; 13%) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID 12 – Quaking Aspen- #102SE

TID- 13- Quaking Aspen - #102SE

TID 34- Red Oak - #77 NE

TID 42- Black Cherry - #75NW

TID – 46- Red Oak - #67NW

TID- 59- Red Oak - #51-49NW

TID- 64- American Beech - #45NW

TID- 75- Grey Birch- #29NW

TID- 79- Red Oak- #21NW

TID 92- Red Oak- #38SE

TID- 29- Red Maple- P42-#3NE

TID-38- RedOak- #77NE

TID-73-Paper Birch- #30NE

TID- 76- Grey Birch- #29NW

TID- 90- Red Maple- #22SE

PART 2. FINDINGS – CHESTNUT HILL ROAD

SPECIES: The species composition and number of trees per species in the Chestnut Hill Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	26	36%
White Oak	Quercus alba	22	30%
Sugar Maple	Acer saccharum	10	14%
American Linden	Tilia americana	07	10%
White Ash	Fraxinus americana	03	03%
Red Maple	Acer rubrum	02	02%
Pignut Hickory	Carya glabra	01	01%
Yellow Birch	Betula alleghaniensis	01	01%
Pignut Hickory	Carya glabra	01	01%
Norway Maple	Acer platanoides	01	01%
Crabapple	Malus species	01	01%
TOTAL		74	100%

Summary: Survey results indicate there are a total of 74 trees growing along Chestnut Hill Road. This total is spread among eleven tree species. Two species dominant the tree population. The Red oak with 26 trees and the White oak with 22 trees. They make-up 66% of the total tree population. While quite diverse, 90% of the tree community consists of only 4 species: Red and White oak, Sugar maple and the American linden.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	04	04%	Juvenile
20 – 60”	31	42%	Juvenile
61 – 100”	29	40%	Maturing
101 – 140”	07	10%	Mature
≥141”	03	04%	Post-Mature
Total	74	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 86% are less than 101” in girth (less than 31” DBH). However, there are 3 tree that exceed 141 inches girth. The greatest of these is a Red oak (TID 58) with a trunk circumference of 186 inches.

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	23	31%
31 – 50’	49	67%
51 – 70’	02	02%
>70’	00	00%
Total	74	100%

Summary: Only 2 trees are taller than 51 feet on Chestnut Hill Road. Ninety-eight percent are less than 50 feet in height (72 trees) with most trees (49/67%) greater than 30’ but less than 50’.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	64	87%
41 – 60’	09	12%
61 – 80’	01	01%
Total	97	100%

Summary: Table 4 figures reveal that an overwhelming majority of the trees 87% have a canopy spread less than 40 feet. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. The tree recording the widest crown spread was a Red oak (TID 9). It’s crown measured 84’ in width.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Breakneck Hill Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	26	36%
1,001 – 2,000	40	54%
2,001 – 3,000	07	09%
>3,000	01	01%
Total	74	100%

Summary: The findings indicate that 64% of the trees (48 trees) register tree fall zones greater than 1,000 square feet. Of this grouping, 8 trees, or 10%, have TFZ exceeding 2,001sf. These trees have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Chestnut Hill Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – CHESTNUT HILL ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	12	16%
DW2	06	09%
DW3	00	00%
DW4	06	09%
DW5	11	14%
TC	10	13%
COD	04	06%
COD/DW1	01	01%
COD/DW2	01	01%
NONE	23	31%
TOTAL	74	100%

Summary: Findings indicate 23 trees, or 31% of total population, were free of structural defects. Deadwood was the most recorded defect affecting 37 trees. Also, a total of 10 trees exhibited a cavity along their trunk. Finally, ONLY 2 trees registered multiple defects.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – CHESTNUT HILL ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	37	50%
Fair	12	12%
Poor	14	19%
Dead	11	14%
Total	74	100%

Summary: According to survey results 62% of the total tree population (49 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 25 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Chestnut Hill Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	24	33%
Monitor (M)	04	06%
Sanitation Pruning (PR)	20	26%
PR/Monitor (PR/M)	01	01%
Removal (REM)	25	34%
Total	74	100%

Summary: Findings show there are 25 (34%) mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 21 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (24 trees; 33%) or an annual inspection to monitor (05 trees; 07%) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID –2- Crabapple

TID- 3- White Oak

TID- 4- White Oak

TID- 5- Red Oak

TID-6- Red oak

TID- 7- Red Oak

TID- 9- Red Oak

TID- 10- Red Oak

TID-12- Red Oak

TID- 14- Red Oak

TID- 15- White Oak

TID- 24- White Oak

TID- 26- Sugar Maple

TID- 30- Sugar Maple

TID- 42- Sugar Maple

TID- 44- White Oak

TID- 45- American Linden

TID- 52- White Oak

TID- 57- Red Oak

TID- 61- Red Oak

TID- 70- White Oak

TID- 71- Red Oak

PART 2. FINDINGS – DEERFOOT ROAD

SPECIES: The species composition and number of trees per species in the Deerfoot Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	25	58%
Red Maple	Acer rubrum	08	19%
White Oak	Quercus alba	03	07%
American Linden	Tilia americana	02	05%
White Ash	Fraxinus americana	02	05%
Norway Maple	Acer platanoides	01	02%
American Elm	Ulmus americana	01	02%
Red Cedar	Juniperus virginiana	01	02%
TOTAL		43	100%

Summary: Survey results indicate there are a total of 43 trees growing along Deerfoot Road. This total is spread among eight tree species. The Red oak is the dominant species with 25 trees. The next most populous species is the Red maple with 8 trees. Six species account for the remaining number of trees with none having greater than three specimens.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	01	02%	Juvenile
20 – 60”	29	66%	Juvenile
61 – 100”	08	19%	Maturing
101 – 140”	05	11%	Mature
≥141”	01	02%	Post-Mature
Total	43	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 87% (38 trees) are less than 101” in girth (less than 31” DBH). The tree with the largest trunk girth is a Red Oak (141 inches; TID 5) located southwest of Pole 51 on Deerfoot Road.

PART 2. FINDINGS – DEERFOOT ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	14	33%
31 – 50’	26	61%
51 – 70’	03	07%
>70’	00	00%
Total	74	100%

Summary: Very few tall trees were found on Deerfoot Road. Only 3 measured greater than 51’ in height. The tallest trees are a Red maple- TID 36 and a Red oak- TID 37 southwest of Pole 62. They exceed 60 feet.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	37	86%
41 – 60’	06	14%
61 – 80’	00	00%
Total	97	100%

Summary: The vast majority of trees on Deerfoot Road have crown spreads less than 41 feet. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. Trees with the largest crown widths were three Red oaks (TID 33, 34 & 37). They measured 60 foot crown spreads.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Breakneck Hill Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	17	40%
1,001 – 2,000	17	40%
2,001 – 3,000	08	19%
>3,000	01	01%
Total	43	100%

Summary: The findings indicate that 26 trees (60%) register tree fall zones greater than 1,000 square feet. These trees have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Deerfort Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – DEERFOOT ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	01	02%
DW2	03	07%
DW3	00	00%
DW4	05	12%
DW5	03	07%
TC	03	07%
COD	04	10%
COD/TC	02	04%
COD/DW1	01	02%
NONE	21	49%
TOTAL	43	100%

Summary: Findings indicate 21 trees, or nearly half of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 13 trees. Also, a total of 5 trees exhibited a cavity along their trunk. Finally, ONLY 3 trees registered multiple defects.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – DEERFOOT ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	25	59%
Fair	06	14%
Poor	09	21%
Dead	03	06%
Total	43	100%

Summary: According to survey results 73% of the total tree population (31 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 12 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Deerfoot Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	24	56%
Monitor (M)	03	06%
Sanitation Pruning (PR)	04	10%
PR/Monitor (PR/M)	00	00%
Removal (REM)	12	28%
Total	43	100%

Summary: Findings show there are 12 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 4 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (24 trees; 50%) or an annual inspection to monitor (3 trees) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-1- Red Maple

TID-2-Red Maple

TID-3- Red Oak

TID-4- Red Maple

TID-5- Red Oak

TID-10-White Oak

TID-29- Red Oak

TID-39- White Ash

TID-40- Red Maple

PART 2. FINDINGS – GILMORE ROAD

SPECIES: The species composition and number of trees per species in the Gilmore Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	42	32%
Pignut Hickory	Carya glabra	38	29%
Red Maple	Acer rubrum	17	13%
White Oak	Quercus alba	12	09%
Yellow Birch	Betula alleghaniensis	05	04%
Black Cherry	Prunus serotina	04	03%
Sugar Maple	Acer saccharum	04	03%
Pin Oak	Quercus palustris	03	02%
White Ash	Fraxinus americana	03	02%
American elm	Ulmus americana	02	01%
American Linden	Tilia americana	01	<01%
White Pine	Pinus strobus	01	<01%
Blackgum/Tupelo	Nyssa sylvatica	01	<01%
TOTAL		133	100%

Summary: Survey results indicate there are a total of 133 trees growing along Gilmore Road. This total is spread among thirteen tree species. Four species, Red oak, Pignut hickory, Red maple and White oak, account for 83% of the total tree population. The Red oak is the dominant species with 42 trees. Nine species account 24 of the 133 trees with none having greater than three specimens.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	00	00%	Juvenile
20 – 60”	89	67%	Juvenile
61 – 100”	39	30%	Maturing
101 – 140”	05	03%	Mature
≥141”	00	00%	Post-Mature
Total	133	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 97% (129 trees) are less than 101” in girth (less than 31” DBH). The tree with the largest trunk girth is a Red Oak (126”; TID 53) located at the southern end of Gilmore Road.

PART 2. FINDINGS – GILMORE ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	31	24%
31 – 50’	96	73%
51 – 70’	06	03%
>70’	00	00%
Total	133	100%

Summary: Very few tall trees were found on Gilmore Road. Only 6 trees measured greater than 51’ in height. They are, at 60 feet tall, all Pignut hickories.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	125	94%
41 – 60’	08	06%
61 – 80’	00	00%
Total	133	100%

Summary: Gilmore Road trees are not wide-spreading as the above results indicate. With few exceptions, trees with spreads less than 41’ are the norm. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Gilmore Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	42	31%
1,001 – 2,000	81	61%
2,001 – 3,000	10	08%
>3,000	00	00%
Total	133	100%

Summary: The findings indicate that 91 trees (69%) register tree fall zones greater than 1,000 square feet. These trees have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Gilmore Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – GILMORE ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	15	12%
DW2	12	09%
DW3	00	00%
DW4	13	10%
DW5	07	06%
TC	19	15%
COD	04	10%
COD/TC	02	02%
COD/DW1	02	02%
TC/DW1	01	01%
NONE	58	43%
TOTAL	133	100%

Summary: Findings indicate 58 trees, or 43% of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 50 trees. Also, a total of 22 trees exhibited a cavity along their trunk. Finally, ONLY 5 trees registered multiple defects.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – GILMORE ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	76	58%
Fair	23	18%
Poor	27	20%
Dead	07	04%
Total	133	100%

Summary: According to survey results 76% of the total tree population (99 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 34 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Gilmore Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	58	44%
Monitor (M)	11	09%
Sanitation Pruning (PR)	29	22%
PR/Monitor (PR/M)	01	<01%
Removal (REM)	34	25%
Total	133	100%

Summary: Findings show there are 34 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 30 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (58 trees; 48%) or an annual inspection to monitor (12 trees) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-5- Red Oak

TID- 11- Pignut Hickory

TID- 12- Red Oak

TID-16- Red Oak butt

TID- 1- Red Oak

TID-16- BUTT

TID-20- Pignut Hickory

TID-21- Red Oak

TID-25- Red Oak

TID-30- Black Cherry

TID-38-White Oak

TID- 39- Red Oak

TID-40-Red Oak

TID-44-Red Oak

TID-45-Red Oak

TID-46-White Oak

TID-53-Red Oak

TID-54-Red Oak

TID-58-Red Oak

TID-62-White Oak

TID-68-Red Oak

TID-81-Red Oak

TID-82-Pignut Hickory

TID-87-White Ash

TID-104-Red Maple

TID-106-Red Oak

TID-110-Red Oak

TID-114-Pignut Hickory

TID-116-White Oak

TID-117-White Oak

TID-119-Red Oak

TID-126-White Ash

TID-128-Red Oak

PART 2. FINDINGS – MOUNT VICKERY ROAD

SPECIES: The species composition and number of trees per species in the Mount Vickery Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	34	33%
White Oak	Quercus alba	21	21%
Pignut Hickory	Carya glabra	12	12%
White Pine	Pinus strobus	10	10%
Red Maple	Acer rubrum	08	08%
White Ash	Fraxinus americana	08	08%
Callery Pear	Pyrus calleryana	02	02%
Pin Oak	Quercus palustris	02	02%
Black Cherry	Prunus serotina	02	02%
Sassafrass	Sassafrass albidium	02	02%
TOTAL		101	100%

Summary: Survey results indicate there are a total of 101 trees growing along Mount Vickery Road. This total is spread among ten tree species. More than half of the tree population is oak (58%). Red oak is the dominant species. White oak with 21 trees is the next populous tree type. There are five species with less than 10 members each.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	02	02%	Juvenile
20 – 60”	48	48%	Juvenile
61 – 100”	37	37%	Maturing
101 – 140”	12	11%	Mature
≥141”	02	02%	Post-Mature
Total	133	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 87% (87 trees) are less than 101” in girth (less than 31” DBH). Two trees have trunk girths greater than 141”. They are Red Oaks. One is near Pole 62 (TID-23) and the other is located at 12 Mount Vickery Road (TID-96).

PART 2. FINDINGS – MOUNT VICKERY ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	15	15%
31 – 50’	62	62%
51 – 70’	24	23%
>70’	00	00%
Total	101	100%

Summary: Almost one-quarter of the tree population on Mount Vickery Road is greater than 51 feet in height. Tree data (Appendix C11) indicates most trees in this height class measured 60 feet tall. Still, the vast majority of trees are less than 51 feet tall (77 trees/ 77%).

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	80	80%
41 – 60’	13	12%
61 – 80’	08	08%
Total	101	100%

Summary: The overwhelming majority of trees on Mount Vickery Road have spreading crowns less than 41’. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. But at least 21 trees are much wider in spread with 8 measuring crown widths over 61 feet.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Mount Vickery Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	21	21%
1,001 – 2,000	53	52%
2,001 – 3,000	14	14%
>3,000	13	13%
Total	101	100%

Summary: The findings indicate that 80 trees (79%) register tree fall zones greater than 1,000 square feet. These trees have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Mount Vickery Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ. Finally, there are more trees (13) with greater than 3,000 TFZ found on Mount Vickery Road than on any other road in this study.

PART 2. FINDINGS – MOUNT VICKERY ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	11	11%
DW2	19	19%
DW3	00	00%
DW4	11	11%
DW5	03	03%
TC	15	15%
COD	02	01%
NONE	40	40%
TOTAL	101	100%

Summary: Findings indicate 40 trees, or 40% of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 33 trees. Also, a total of 15 trees exhibited a cavity along their trunk.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – MOUNT VICKERY ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	55	55%
Fair	26	26%
Poor	17	17%
Dead	03	02%
Total	101	100%

Summary: According to survey results 81% of the total tree population (81 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 20 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Mount Vickery Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	42	42%
Monitor (M)	09	08%
Sanitation Pruning (PR)	30	30%
Removal (REM)	20	20%
Total	101	100%

Summary: Findings show there are 20 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 30 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (42 trees; 42%) or an annual inspection to monitor (09 trees) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-1- White Ash

TID-7-White Ash

TID-11-Red Oak

TID-15-Red Oak

TID-19&20-White Pines

TID-21-Red Oak

TID-22-White Ash

TID-25-Red Oak

TID-32-Pignut Hickory

TID-41-Red Maple

TID-49-White Ash

TID-55-Red Oak

TID-58-White Ash

TID-69-Red Oak

TID-74-White Oak

TID-75-Pignut Hickory

TID-78-Red Oak

TID-86-Red Oak

TID-92-Red Oak

TID-69-Red Oak

PART 2. FINDINGS – SEARS ROAD

SPECIES: The species composition and number of trees per species in the Sears Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	69	61%
Pignut Hickory	Carya glabra	11	10%
Burr Oak	Quercus macrocarpa	09	08%
Red Maple	Acer rubrum	05	04%
Black Walnut	Juglans nigra	05	04%
White Oak	Quercus alba	04	03%
White Pine	Pinus strobis	04	03%
American Elm	Ulmus americana	03	02%
American Linden	Tilia americana	03	02%
Black Cherry	Prunus serotina	01	01%
Yellow Birch	Betula alleghaniensis	01	01%
White Ash	Fraxinus americana	01	01%
TOTAL		117	100%

Summary: Survey results indicate there are a total of 117 trees growing along Sears Road. This total is spread among thirteen tree species. Eighty-two trees are oaks; they account for 70% of the tree population. Red oak is the most populous species. There are seven species with less than 5 members each.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	01	01%	Juvenile
20 – 60”	73	64%	Juvenile
61 – 100”	33	29%	Maturing
101 – 140”	07	04%	Mature
≥141”	03	02%	Post-Mature
Total	117	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 94% (107 trees) are less than 101” in girth (less than 31” DBH). The tree with the largest trunk girth is a Red oak (TID-35) located near 86 Sears Road. The tree has a trunk circumference of 180 inches.

PART 2. FINDINGS – SEARS ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	16	14%
31 – 50’	84	71%
51 – 70’	17	15%
>70’	00	00%
Total	117	100%

Summary: Fifteen percent of the tree population on Sears Road is greater than 51 feet in height. An almost equal percentage is less than 30 feet tall. The vast majority of trees is in the middle height class 31-50’.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	97	83%
41 – 60’	17	15%
61 – 80’	03	02%
Total	117	100%

Summary: The overwhelming majority of trees on Sears Road have spreading crowns less than 41’. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. Three trees, all Red oak (TID 17; 23; 35), recorded a crown spread of 80 feet.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Sears Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	28	24%
1,001 – 2,000	65	55%
2,001 – 3,000	16	14%
>3,000	08	07%
Total	117	100%

Summary: The findings indicate that 89 trees (76%) register tree fall zones greater than 1,000 square feet. Also, eight trees have TFZ exceeding 3,000sf with two Red oaks (TID 23 & 35) recording TFZ of 4,800sf. Trees greater than 1000sf have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Sears Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – SEARS ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	27	23%
DW2	10	09%
DW3	00	00%
DW4	04	03%
DW5	07	06%
TC	15	13%
COD	01	01%
NONE	53	45%
TOTAL	117	100%

Summary: Findings indicate 53 trees, or 45% of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 48 trees. Also, a total of 15 trees exhibited a cavity along their trunk.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – SEARS ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	81	70%
Fair	17	15%
Poor	13	11%
Dead	06	04%
Total	117	100%

Summary: According to survey results 85% of the total tree population (98 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 19 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Sears Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	54	45%
Monitor (M)	10	08%
Sanitation Pruning (PR)	31	31%
Removal (REM)	19	16%
Total	117	100%

Summary: Findings show there are 19 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 31 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (54 trees; 45%) or an annual inspection to monitor (10 trees) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-1- Red Oak

TID-4-American Elm

TID-5-Red Maple

TID-13-Red Oak

TID-26-Red Oak

TID-24-White Pine

TID-25-Black Cherry

TID-18-Red Oak

TID-53-Red Oak

TID-62-Red Oak

TID-81-Red Oak

TID-85-Red Oak

TID- 88-Red Maple

TID-95-Burr Oak

TID-97-Red Maple

TID-99-White Ash

TID-100-American Linden

TID-107-Red Oak

TID-113-White Oak

PART 2. FINDINGS – WOODBURY ROAD

SPECIES: The species composition and number of trees per species in the Woodbury Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	21	35%
Pignut Hickory	Carya glabra	15	25%
Red Maple	Acer rubrum	08	14%
White Oak	Quercus alba	06	10%
White Pine	Pinus strobis	06	10%
White Ash	Fraxinus americana	03	05%
Yellow Birch	Betula alleghaniensis	01	01%
TOTAL		60	100%

Summary: Survey results indicate there are a total of 60 trees growing along Woodbury Road. This total is spread among seven tree species. Red oak is the most common tree accounting for 35% of the tree population. Next most populous species is the Pignut hickory, followed by the Red maple.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	03	05%	Juvenile
20 – 60”	43	72%	Juvenile
61 – 100”	12	20%	Maturing
101 – 140”	02	03%	Mature
≥141”	00	00%	Post-Mature
Total	60	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 77% (46trees) are less than 101” in girth (less than 31” DBH). Two trees measure 115 inches in girth, the largest figure recorded in this category. They are a White oak (TID-40) and a Red maple (TID-56).

PART 2. FINDINGS – WOODBURY ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	04	07%
31 – 50’	50	84%
51 – 70’	06	09%
>70’	00	00%
Total	60	100%

Summary: Ninety-one percent (54 trees) of the Woodbury Road tree population is under 51 feet in height. The tallest tree is a 65 foot Red Oak (TID-23) near 30 Woodbury Road.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	53	89%
41 – 60’	07	11%
61 – 80’	00	00%
Total	60	100%

Summary: There are very few wide-spreading trees on Woodbury Road. The typical tree is less than 41 feet in crown spread. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. The tree with the largest crown spread of 60’ was a Red oak (TID-31) located near Pole 50.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Woodbury Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	12	20%
1,001 – 2,000	40	67%
2,001 – 3,000	07	12%
>3,000	01	01%
Total	60	100%

Summary: The findings indicate that 48 trees (80%) register tree fall zones greater than 1,000 square feet. The tree having the largest TFZ, at 3,250sf, is a Red oak (TID-23) located near 30 Woodbury Road. Trees greater than 1000sf have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Woodbury Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – WOODBURY ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	11	19%
DW2	07	12%
DW3	01	01%
DW4	02	03%
DW5	04	07%
TC	02	03%
COD	01	01%
NONE	32	54%
TOTAL	60	100%

Summary: Findings indicate 32 trees, or 54% of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 25 trees. Only 2 trees exhibited a cavity along their trunk.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	44	74%
Fair	08	14%
Poor	05	09%
Dead	03	03%
Total	60	100%

Summary: According to survey results 88% of the total tree population (52 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 8 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Woodbury Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	33	55%
Monitor (M)	01	01%
Sanitation Pruning (PR)	18	30%
Removal (REM)	08	14%
Total	60	100%

Summary: Findings show there are 8 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 18 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (33 trees; 55%) or an annual inspection to monitor (1 tree) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-19-Red Oak

TID-32-Red Oak

TID-48-Red Oak

TID-55-Red Maple

TID-56-Red Maple

TID-59-Red Oak

TID-60-Red Oak

PART 2. FINDINGS – WOODLAND ROAD

SPECIES: The species composition and number of trees per species in the Woodland Road tree population is itemized by common and Latin name below:

TABLE 1: Species Composition

Common Name	Latin name	# of Trees	% of Total
Red Oak	Quercus rubra	18	31%
Pignut Hickory	Carya glabra	08	14%
White Oak	Quercus alba	05	09%
White Pine	Pinus strobis	05	09%
White Ash	Fraxinus americana	05	09%
American Elm	Ulmus americana	04	07%
Red Maple	Acer rubrum	04	07%
Blue Spruce	Picea glauca	03	05%
Yellow Birch	Betula alleghaniensis	03	05%
Black Cherry	Prunus serotina	01	02%
European Beech	Fagus sylvatica	01	02%
TOTAL		57	100%

Summary: Survey results indicate there are a total of 57 trees growing along Woodland Road. This total is spread among eleven tree species. Red oak is the most common tree accounting for 31% of the tree population. Next most populous species with 8 members is the Pignut hickory. Nine species with less than 6 members each account for 55% of the tree population.

TREE SIZE: Tree size can be useful in assessing the general stage of development of individual trees as well as the entire tree stock. Tree height and crown spread are also important for evaluating potential property damage associated with failing trees or their parts. Tables 2, 3, and 4 show results for tree trunk circumference, height and crown spread.

TABLE 2: Tree Trunk Circumference

Size Class In Inches	# of Trees	% of Total	Age Class
≤20”	05	08%	Juvenile
20 – 60”	34	60%	Juvenile
61 – 100”	13	23%	Maturing
101 – 140”	03	05%	Mature
≥141”	02	04%	Post-Mature
Total	57	100%	

Summary: Trunk circumference results indicate that most trees are relatively young and still developing as evidenced by the fact that 91% (52 trees) are less than 101” in girth (less than 31” DBH). Two trees are greater than 141 inches in girth. They include a Red oak (TID-16) and a White oak (TID-25).

PART 2. FINDINGS – WOODLAND ROAD

TABLE 3: Tree Height

Height Class In Feet	# of Trees	% of Total
≤30’	16	28%
31 – 50’	35	62%
51 – 70’	06	10%
>70’	00	00%
Total	57	100%

Summary: Ninety percent (51 trees) of the Woodland Road tree population is under 51 feet in height. The tallest trees measure 60 feet in height. They are Red Oaks (TID-11 & 12) near Pole 27.

TABLE 4: Average Crown Spread

Canopy Spread in Feet	# of Trees	% of Total
≤40’	54	95%
41 – 60’	02	03%
61 – 80’	01	02%
Total	57	100%

Summary: There are very few wide-spreading trees on Woodland Road. The typical tree is less than 41 feet in crown spread. This finding was definitely influenced by many trees growing in close quarters to others, limiting the width of their branches. The tree with the largest crown spread of 80’ was a Red oak (TID-16) located near Pole 24.

TREE FALL ZONE: The potential area in square feet that could be impacted should the tree fail or topple from the base is defined as the Tree Fall Zone (TFZ). It is used to help evaluate targets at risk of injury or damage near the tree. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ). Table 5 shows TFZ results for the Woodland Road inventory.

TABLE 5: Tree Fall Zone

TFZ in Square Feet	# of Trees	% of Total
≤1,000	24	43%
1,001 – 2,000	28	50%
2,001 – 3,000	04	06%
>3,000	01	01%
Total	57	100%

Summary: The findings indicate that 33 trees (57%) register tree fall zones greater than 1,000 square feet. The tree having the largest TFZ, at 4,000sf, is a Red oak (TID-16) located near Pole 24. Trees greater than 1000sf have TFZ’s large enough in area to strike public (roads, utility infrastructure, etc.,) and private (driveways, landscaping, vehicles, etc.,) targets on Woodland Road should they fail at the base. The public targets most at risk are roads; private targets are driveways. Vehicles and citizens using the roads are also at risk from any tree regardless of its TFZ.

PART 2. FINDINGS – WOODLAND ROAD

STRUCTURAL DEFECTS – Only major structural defects affecting the mechanical integrity of the tree were recorded during the survey. They were classified by their location on major tree part- root, trunk, and crown. Four major structural defects were identified on trees. They are: deadwood (DW), trunk-root canker and/or cavity (TC) and co-dominant or multi-stem trunked trees (COD). The deadwood classification includes five values to more accurately portray the percentage of dead, dying, diseased, broken and missing branches in the tree crown (see Appendix B. Legend). The values are: DW1, DW2, DW3, DW4 and DW5 with the percentage and, therefore, the extent and severity of deadwood increasing with the increase in number. In some cases, trees were found to have more than one, or multiple defects. Finally, when no defect was discovered, the tree was assigned the value 'None'.

TABLE 6: Structural Defects

Description	# of Trees	% of Total
DW1	06	10%
DW2	05	09%
DW3	00	00%
DW4	09	15%
DW5	08	13%
TC	06	10%
COD	03	05%
NONE	22	38%
TOTAL	57	100%

Summary: Findings indicate 22 trees, or 38% of the tree population, were free of structural defects. Deadwood was the most recorded defect affecting 28 trees. Fifteen percent (9 trees) of total trees had either co-dominant stems or trunk cavities.

TREE CONDITION RATING - The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are Good, Fair, Poor and Dead. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

PART 2. FINDINGS – WOODLAND ROAD

TABLE 6: Tree Condition Rating

Description	# of Trees	% of Population
Good	33	58%
Fair	05	09%
Poor	12	21%
Dead	07	12%
Total	57	100%

Summary: According to survey results 67% of the total tree population (38 trees) was assigned a Fair or better Condition Rating; some have minor structural defects but all are mechanically stable. Findings also indicate the presence of 19 trees assigned a Poor or worse condition rating; all have serious structural defects and are mechanically unstable.

RECOMMENDATIONS: Five actions are proposed for the Woodland Road tree population. They include: Sanitation Pruning, Monitoring, Removal, No Action and Sanitation Pruning/Monitoring. They are described below:

No Action = no action needed at this time.
Monitoring = inspect tree annually (August-September) to assess change in tree's mechanical stability.
Sanitation Pruning = eliminate deadwood, broken branches and stubs by pruning.
Sanitation Pruning/Monitoring = conduct annual tree inspection after sanitation pruning has been completed.
Removal = remove tree.

TABLE 7: Recommendations

Description	# of Trees	% of Total
No Action (NA)	25	43%
Monitor (M)	02	04%
Sanitation Pruning (PR)	11	20%
Removal (REM)	19	33%
Total	57	100%

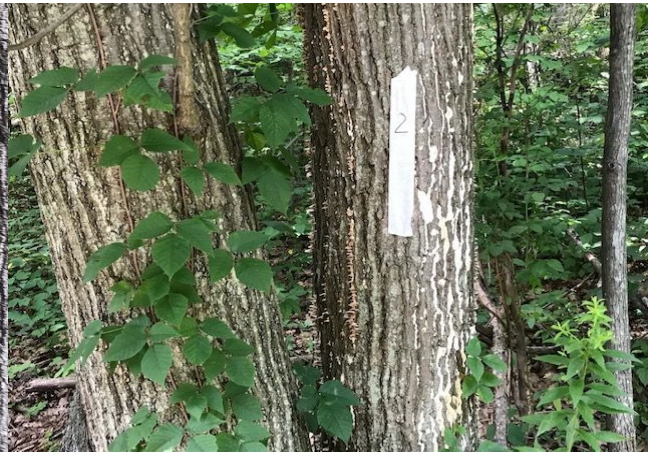
Summary: Findings show there are 19 mechanically unstable trees which cannot be mitigated by arboricultural treatment. It's recommended they be removed by felling. There are also 11 trees with minor structural defects, mostly deadwood, making them unsafe. The action calls for eliminating their hazardous nature by sanitation pruning. The rest of the tree population calls for either no action (25 trees; 43%) or an annual inspection to monitor (2 trees) any change in their Condition Rating.

Photographic evidence of major findings (i.e., road conditions, tree structural defects, recommendations, etc.,) are presented in the next section of this report.

END OF THIS SECTION

TID-3-Red Oak

TID-4-Red Oak



TID-5-Red Oak

TID-8-Yellow Birch

TID-9-White Oak

TID-11-Red Oak

TID-12-Red Oak

TID-13-Red Oak

TID-14-Red Oak

TID-17-White Oak

TID-18-Pignut Hickory

TID-19-White Ash

TID-24-American Elm

TID-26-White Ash

TID-36-White Oak

TID-45-Red Oak

TID-50-Red Oak

TID-55-White Ash

TID-4-Red Oak

APPENDIX A. SPECIES CODE

DATA CODE	COMMON NAME	GENUS	SPECIES
AB	American Beech	Fagus	grandifolia
AE	American Elm	Ulmus	americana
AL	American Linden	Tilia	americana
AP	Common Apple	Malus	X domestica
BC	Black Cherry	Prunus	serotina
BG	Blackgum/Tupelo	Nyssa	sylvatica
bO	Burr Oak	Quercus	macrocarpa
BS	Colorado Blue Spruce	Picea	glauca
CA	Crabapple	Malus	species
CB	Sweet or Cherry Birch	Betula	lenta
CP	Callery Pear	Pyrus	calleryana
EB*	European Beech	Fagus	sylvatica
GB	Grey Birch	Betula	populifolia
HL	Common Honeylocust	Gleditsia	triacanthos
JV/RC	Red cedar	Juniperus	virginiana
NM	Norway Maple	Acer	platanoides
NS	Norway Spruce	Picea	abies
PB	Paper Birch	Betula	papyrifera
PH	Pignut Hickory	Carya	glabra
PO	Pin Oak	Quercus	palustris
QA	Quaking Aspen/Poplar	Populus	tremuloides
RM	Red Maple	Acer	rubrum
RO	Red Oak	Quercus	rubra
SS	Sassafrass	Sassafrass	albidium
SM	Sugar Maple	Acer	saccharum
WA	White Ash	Fraxinus	americana
WO	White Oak	Quercus	alba
WP	Eastern White Pine	Pinus	strobus
YB	Yellow Birch	Betula	alleghaniensis

APPENDIX B. LEGEND FOR USE WITH APPENDIX C

Column 1. Address showing nearest road address or special marker (service pole, etc.,) to numbered tree.
Column 2. GPS. Global position system coordinates of numbered tree (latitude and longitude).
Column 3 & 4 TID/SPECIES. Showing tree identification number and two letter tree identification code. See Appendix A. for complete list of species codes.

Column 5. TRC. Tree trunk circumference in inches as measured at 54" above base of tree.
Column 6. HT. Tree height in feet as measured from bottom to top of tree. Final figures are approximate and recorded in 5 foot increments.
Column 7. SPR. Average crown spread of tree. Calculated by taking the sum of the canopy length in two directions (N-S and E-W) and dividing by 2. Final figures are approximate and recorded in 5 foot increments.

Column 8. TFZ. Tree Fall Zone. The potential area in square feet that could be impacted should the tree fail or topple from the base. The TFZ is calculated by multiplying the tree height by tree average crown spread (TH x SPR = TFZ).
Column 9. TARGET. Any object within the TFZ vulnerable to damage or injury should a tree part of the entire tree fail. W=utility infrastructure; R=road right of way; SP=utility service pole; SMS=speed monitor signal.

Column 10. DEFECT. Finding of the major tree structural defect(s) discovered during survey. See report for full description of each structural defect.

Column 11. CR. Tree Condition Rating. The Tree Condition Rating (CR) is used to evaluate the mechanical stability of the entire tree at the time of inspection. The CR is based on the extent and severity of tree structural defects and how they affect the mechanical stability of the tree. There are four possible tree ratings. They are described below:
Good = no major structural defects; tree is mechanically stable.
Fair = one or more structural defects, mostly minor, which are hazardous but with proper treatment can be mitigated; tree is mechanically stable.
Poor = one of more structural defects, mostly major, which are hazardous and beyond mitigation by treatment; tree is mechanically unstable.
Dead = tree is non-living and demonstrates evidence of major structural failure; tree is hazardous and mechanically unstable.

Column 12. Recommendation. REC. Consultant's recommended action for each tree. Four options are proposed based on findings. They are: NA=No action; PR=prune to mitigate; M= monitor tree via routine inspection; REM=tree removal.

Column 13. Photograph. PH. Shows photographic evidence exists of tree identified for removal. Number in column is linked to tree photo by either TID or picture number in photographic slide bank. The latter is held by Owner in the form of digital thumb drive. Also, this column was used to miscellaneous items not covered by other column headings, such as ST- standing tree butt, PP- private property tree, of TAG- tree marked with metal tag by Town.

APPENDIX C7	BREAKNECK	HILL	ROAD					TREE	INVENTORY		2021	
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
BHCA-SE	Parking Lot											
SE	42.17.03 x 71.31.04	1	CA	6	15	10	150	R	N	G	NA	
#92SE	42.17.02 x 71.31.04	2	RO	63	40	40	1600	R	DW1	G	PR	
#92SE		3	RO	52	50	30	1500	R	COD	G	NA	
#81SW		4	RO	36	40	20	800	R	N	G	NA	
#81SW		5	RO	42	40	30	1200	R	N	G	NA	
#81SW		6	RO	54	40	30	1200	R	DW2	F	PR	
#94SE		7	PH	36	30	30	900	R	N	G	NA	
#94SE-P42		8	RO	75	40	40	1600	W-R	N	G	NA	
#115SE		9	RO	160	50	60	3000	W-R	DW1	G	PR	
#115SE		10	BC	48	30	20	600	R	COD/TC	F	M	
RTE 90	42.16.52 x 71.30.55											
#102SE		11	PO	42	30	20	600	R	DW1	G	PR	
#102SE	42.16.53 x 71.30.56	12	QA	36	30	20	600	R	DW4	P	REM	1
#102SE		13	QA	52	40	20	800	R	DW5	D	REM	2
#102SE		14	QA	18	30	20	600	R	N	G	NA	
#102SE		15	QA	14	30	20	600	R	N	G	NA	
#98SE		16	RO	63	35	25	750	R	TC	F	M	
Woodland	Southern terminus	17	RO	120	50	60	3000	W-R	COD/DW1	F	PR/M	
Sunrise Rd	heading North	18	RO	70	35	30	1050	W-R	N	G	NA	
Sunrise Rd		19	RO	126	50	60	3000	W-R	TC	G	M	
#94NE		20	RO	54	40	20	800	R	N	G	NA	
#94NE		21	RO	45	40	20	800	R	N	G	NA	
#94NE		22	RO	52	35	20	700	R	TC	G	M	
#94NE		23	RO	52	40	20	800	R	N	G	NA	
#94NE	42.16.56 x 71.31.02	24	RO	60	40	30	1200	W-R	N	G	NA	
NE		25	RO	45	40	30	1200	W-R	DW1	F	PR	
NE		26	RO	48+63	50	40	2000	W-R	COD/DW1	G	PR	
P42-3		27	RO	45	50	20	1000	W-R	DW2	F	PR/M	
P42-3NE		28	RO	45+48	50	40	2000	W-R	COD/TC	F	M	
P42-3NE		29	RM	33	20	0	20	R	DW5	D	REM	ST1
#92NE		30	RO	48	50	25	1250	W-R	DW1	G	PR	

APPENDIX C7	BREAKNECK	HILL	ROAD					TREE	INVENTORY		2021	
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
NE		31	WO	48	50	30	1500	W-R	N	G	NA	
P40		32	RO	48	40	20	800	R	DW1	G	PR	
#77		33	PH	46	50	40	2000	W-R	N	G	NA	
NE	42.16.58 x 71.31.04	34	RO	75	50	60	3000	W-R	DW5	D	REM	3
NE		35	BC	60	30	10	300	R	DW4	P	REM	4
NE		36	WO	96	50	60	3000	W-R	DW2	F	PR	
NE		37	RO	100	50	80	4000	W-R	DW2	F	PR	
NE		38	RO	75	15	0	15	R	DW5	D	REM	ST2
NE		39	RO	105	50	30	1500	W-R	DW2	F	PR	
BHCA-NW	Parking Lot	40	WO	57	30	30	900	R	N	G	NA	
BHCA-NW	Parking Lot	41	WO	63	40	30	1200	W-R	TC	F	M	
#75NW	42.17.03 x 71.31.04	42	BC	72	40	30	1200	W-R	COD/TC	P	REM	5
#73NW		43	RO	90	40	50	2000	W-R	DW1	G	PR	
#68NE		44	RO	84	50	60	3000	W-R	DW1	G	PR	
#67NW		45	RO	90	50	50	2500	W-R	N	G	NA	
#67NW	42.17.08 x 71.31.04	46	RO	54	40	30	1200	W-R	TC	P	REM	6
#67NW		47	PH	54	40	40	1600	W-R	N	G	NA	
#67NW		48	WO	69	40	30	1200	W-R	TC	F	M	
#67NW		49	PH	30+39	50	40	2000	W-R	COD	G	NA	
#55NE		50	PH	40	40	30	1200	W-R	N	G	NA	
#55NE		51	PH	54	40	30	1200	W-R	N	G	NA	
#51-49NW		52	RO	63	50	40	2000	W-R	DW1	G	PR	
#51-49NW		53	RO	60	40	30	1200	W-R	DW1	G	PR	
#51-49NW		54	RO	30	30	20	600	R	N	G	NA	
#51-49NW		55	WO	60	40	30	1200	W-R	N	G	NA	
#51-49NW		56	RO	75	50	60	3000	R	DW1	G	PR	
#51-49NW		57	WO	60	50	50	2500	R	DW1	G	PR	
#51-49NW		58	RO	45	35	30	1050	R	DW1	G	PR	
#51-49NW	42.17.19 x 71.30.60	59	RO	64	40	30	1200	W-R	DW4	P	REM	7
#45NW		60	WP	36	40	20	800	R	GN	G	NA	
#45NW		61	RO	60	50	40	2000	W-R	DW1	G	PR	
#45NW		62	WO	44	40	50	2000	W-R	DW1	G	PR	

APPENDIX C7 ADDRESS	BREAKNECK GPS	HILL TID	ROAD SPECIES	TRC	HT	SPR	TFZ	TREE TARGET	INVENTORY DEFECT	CR	2021 REC	PH
#45NW		63	RO	64	50	50	2500	R	N	G	NA	
#45NW	42.17.20 x 71.30.58	64	AB	36	40	20	800	R	TC	P	REM	8
#45NW		65	RO	42+54	60	60	3600	R	COD/DW1	G	PR	
#39NW	View Hill Rd	66	RO	75+90	50	80	4000	R	COD	G	NA	
#35NW	42.17.23 x 71.30.10	67	AB	90	40	40	1600	R	TC	P	REM	9
#34NE		68	WO	72	40	40	1600	R	DW2	F	PR	
#34NE		69	RO	54	50	40	2000	W-R	DW1	G	PR	
#32NE		70	RM	36	30	20	600	R	DW2	F	PR	
#32NE		71	RO	54	40	40	1600	R	DW2	F	PR	
#30NE		72	RO	54+66	60	60	3600	W-R	COD/DW1	G	PR	
#30NE	42.17.25 x 71.31.04	73	PB	36+30	20	0	20	R	COD	P	REM	ST
#29NW		74	RM	42	30	40	1200	W-R	N	G	NA	
#29NW	42.17.25 x 71.31.05	75	GB	42	30	30	900	R	DW4	P	REM	10
#29NW		76	GB	30+18	20	20	400	R	COD	D	REM	ST
#27NW		77	PH	39	40	30	1200	W-R	TC	G	M	
#27NW		78	PH	40	40	20	800	R	N	G	NA	
#21NW	42.17.26 x 71.31.08	79	RO	75+90	50	50	2500	W-R	COD/TC	P	REM	11
P2SE	Hola's Restaurant	80	PH	90	40	40	1600	W-R	TC	G	M	
#11SE		81	PH	51	40	40	1600	W-R	DW1	G	PR	
OPP#11		82	PH	42	40	30	1200	W-R	N	G	NA	
#22SE		83	PH	60	50	30	1500	W-R	DW2	F	PR	
#22SE		84	RM	39	30	30	900	R	DW1	G	PR	
#22SE		85	RM	39	40	30	1200	W-R	N	G	NA	
#22SE		86	WO	69	50	40	2000	W-R	DW1	G	PR	
#22SE		87	PH	30	20	0	20	R	DW5	D	REM	ST
#22SE		88	RM	51	40	40	1600	R	N	G	NA	
#22SE		89	RM	33	20	20	400	R	DW2	F	PR	
#22SE		90	RM	36	25	0	25	R	DW5	D	REM	ST
#32SE		91	RO	66	40	50	2000	W-R	DW1	G	PR	TAG
#38SE	42.17.23 x 71.30.60	92	RO	105	50	40	2000	W-R	TC	P	REM	12
#38SE		93	RO	105	50	50	2500	W-R	TC	F	M	
#48SE		94	PH	27	30	20	600	R	N	G	NA	

APPENDIX C7	BREAKNECK	HILL	ROAD					TREE	INVENTORY		2021	
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#60/P25		95	PH	63	50	40	2000	W-R	DW1	G	PR	
#60SE		96	RO	90	50	50	2500	W-R	DW2	F	PR	
OPP#67	BHCA	97	RC	24+45	20	20	400	R	COD	F	M	
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APPENDIX C8	CHESTNUT	HILL	ROAD					TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
Dairy Farm Rd	heading South											
CHR-SE	42.18.54 x 71.33.34	1	WA	45	50	30	1500	W-R	N	G	N	
CHR-SE	42.18.50 x 71.33.32	2	CA	17	25	30	750	R	DW4	P	REM	1
CHR-SE	42.18.50 x 71.33.31	3	WO	90	40	30	1200	R	DW5	D	REM	2
CHR-SE	42.18.50 x 71.33.30	4	WO	50	40	20	800	R	DW5	D	REM	3
CHR-SE	42.18.49 x 71.33.29	5	RO	42	30	20	600	R	DW5	D	REM	4
CHR-SE	42.18.48 x 71.33.29	6	RO	114	50	40	2000	W-R	DW5	D	REM	5
CHR-SE	42.18.47 x 71.33.28	7	RO	110	50	40	2000	W-R	DW5	D	REM	6
CHR-SE	42.18.47 x 71.33.28	8	WA	24	40	20	800	R	N	G	NA	
CHR-SE	42.18.45 x 71.33.28	9	RO	165	40	80	3200	W-R	DW5	D	REM	7
CHR-SE	42.18.45 x 71.33.27	10	RO	60	15	10	150	R	DW5	D	REM	8
CHR-SE	"	11	RO	69	40	40	1600	W-R	N	G	NA	
CHR-SE	42.18.45 x 71.33.27	12	RO	90	50	40	2000	W-R	TC	P	REM	9
CHR-SE	"	13	RO	45	40	40	1600	W-R	DW1	G	PR	
CHR-SE	42.18.43 x 71.33.25	14	RO	96	40	50	2000	W-R	DW4	P	REM	10
CHR-SE	"	15	WO	82	40	30	1200	W-R	DW5	D	REM	11
CHR-SE	"	16	WO	45	40	20	800	R	DW2	F	PR	
CHR-SE	"	17	RO	168	50	40	2000	W-R	DW1	G	PR	
CHR-SE	"	18	WO	90	50	50	2500	W-R	N	G	NA	
CHR-SE	"	19	WO	72	50	40	2000	W-R	N	G	NA	
CHR-SE	42.18.42 x 71.33.24	20	WO	72	40	40	1600	W-R	DW2	F	PR	
CHR-SE	"	21	WO	72	50	30	1500	W-R	DW1	G	PR	
CHR-SE	"	22	WO	60	40	40	1600	R	DW1	G	PR	
CHR-SE	"	23	WO	96	50	50	2500	W-R	DW1	G	PR	
CHR-SE	42.18.38 x 71.33.21	24	WO	72	40	40	1600	R	TC	P	REM	12
CHR-SE	"	25	AL	40+80	40	40	1600	R	TC	F	M	
CHR-SE	42.18.36 x 71.33.19	26	SM	45	30	30	900	R	DW4	P	REM	13
CHR-SE		27	WO	126	50	60	3000	W-R	N	G	NA	
CHR-SE		28	SM	60	40	30	1200	R	COD/DW2	F	PR/M	
CHR-SE	P5	29	WO	15	20	20	400	R	N	G	NA	
CHR-SE	42.18.34 x 71.33.16	30	SM	48	30	20	600	R	TC	P	REM	14
CHR-SE		31	RO	26+24	30	30	900	R	COD	G	M	

APPENDIX C8	CHESTNUT	HILL	ROAD					TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
CHR-SE	P3	32	SM	45	30	30	900	R	N	G	NA	
CHR-SE		33	NM	6	20	10	200	R	N	G	NA	
CHR-SE		34	SM	24	20	10	200	R	N	G	NA	
CHR-SE	P2	35	SM	30	30	20	600	R	N	G	NA	
CHR-SE		36	SM	36	30	20	600	R	DW2	F	PR	
MAIN ST	42.18.27 x 71.33.10											
CHR-NW	oppP3	37	SAPLINGS	3	15	5	75	R	COD	P	REM	
CHR-NW	42.18.32 x 71.33.13	38	SM	24	30	30	900	R	N	G	NA	
CHR-NW		39	AL	66+58	50	40	2000	W-R	DW2	F	PR	
CHR-NW		40	AL	72	30	30	900	W-R	TC	F	M	
CHR-NW		41	SM	30	30	20	600	R	DW1	G	PR	
CHR-NW	42.18.37 x 71.33.20	42	SM	30	30	20	600	R	DW5	D	REM	15
CHR-NW		43	AL	72+59	40	50	2000	W-R	COD	G	NA	
CHR-NW		44	WO	75	40	40	1600	W-R	N	G	NA	
CHR-NW	42.18.38 x 71.33.20	45	AL	72	20	0	20	R	DW5	D	REM	16
CHR-NW	42.18.38 x 71.33.21	46	AL	90	50	40	2000	W-R	TC	P	REM	17
CHR-NW		47	AL	36+48	40	40	1600	W-R	COD/DW1	F	PR	
CHR-NW		48	WO	63	40	40	1600	W-R	DW1	G	PR	
CHR-NW		49	WO	82	50	40	2000	W-R	N	G	NA	
CHR-NW		50	WO	63	50	30	1500	W-R	N	G	NA	
CHR-NW		51	WO	90	60	40	2400	W-R	N	G	NA	
CHR-NW	42.18.42 x 71.33.24	52	WO	84	40	40	1600	W-R	DW4	P	REM	18
CHR-NW		53	RO	75	60	40	2400	W-R	N	G	NA	
CHR-NW		54	RO	72	50	30	1500	W-R	N	G	NA	
CHR-NW		55	RO	66	40	40	1600	W-R	N	G	NA	
CHR-NW		56	RO	36	40	30	1200	W-R	N	G	NA	
CHR-NW	42.18.46 x 71.33.28	57	RO	58+62	40	50	2000	W-R	TC	P	REM	19
CHR-NW		58	RO	81+105	50	60	3000	W-R	COD	F	M	
CHR-NW		59	RO	90	50	50	2500	W-R	DW1	G	PR	
CHR-NW		60	RO	96	50	40	2000	W-R	DW2	F	PR	
CHR-NW	42.18.47 x 71.33.29	61	RO	82	50	40	2000	W-R	TC	P	REM	20
CHR-NW		62	RO	76	40	40	1600	W-R	N	G	NA	

APPENDIX C8	CHESTNUT	HILL	ROAD					TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
CHR-NW		63	PH	24	50	30	1500	R	N	G	NA	
CHR-NW		64	RO	54	50	30	1500	R	DW2	F	PR	
CHR-NW		65	RO	42	30	20	600	R	DW1	G	PR	
CHR-NW		66	WO	62	40	30	1200	R	DW1	G	PR	
CHR-NW		67	RO	36	40	30	1200	R	DW1	G	PR	
CHR-NW		68	RM	54	50	40	2000	R	N	G	NA	
CHR-NW		69	WO	54	30	30	900	R	DW1	G	PR	
CHR-NW	42.18.49 x 71.33.30	70	WO	42	30	30	900	R	DW5	D	REM	21
CHR-NW	42.18.50 x 71.33.31	71	RO	68	40	50	2000	W-R	TC	P	REM	22
CHR-NW	42.18.52 x 71.33.31	72	WA-PP	60	40	40	1600	W-R	DW4	P	REM	PP
CHR-NW		73	YB-PP	60	30	30	900	R	DW4	P	REM	23
CHR-NW	42.18.53 x 71.33.34	74	RM	60	30	30	900	R	DW2	F	PR	
Dairy Farm Rd	North terminus											
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APPENDIX C9	DEERFOOT ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#9W	42.17.28 x 71.32.35											
P51W	42.17.31 x 71.32.36	1	RM	36	40	20	800	W-R	DW4	P	REM	1
SW	42.17.33 x 71.32.38	2	RM	36	40	10	400	R	DW5	D	REM	2
SW	42.17.33 x 71.32.38	3	RO	66	50	30	1500	R	DW4	P	REM	3
SW	42.17.34 x 71.32.38	4	RM	36	30	15	450	R	DW4	P	REM	4
SW	42.17.36 x 71.32.40	5	RO	51+90	50	50	2500	W-R	TC/COD	P	REM	5
Cliiford Street	42.17.45 x 71.32.41											
SW	42.17.45 x 71.32.41	6	RM	52	30	20	600	R	DW4	P	REM	6
P40SW		7	RO	74	40	40	1600	R	N	G	NA	
		8	NM	52	35	40	1400	R	N	G	NA	
#70SE		9	RO	51+51	50	60	3000	R	COD/DW1	G	PR	
#70SE	42.17.43 x 71.32.41	10	WO	54	35	40	1400	R	DW4	P	REM	7
#74SE		11	RO	60	40	40	1600	W-R	N	G	NA	
#74SE		12	RO	45	40	30	1200	W-R	N	G	NA	
#74SE		13	AE	30+30	40	20	800	R	COD	F	M	
#74SE		14	RM	24+34	30	30	900	R	COD	G	NA	
#76SE		15	RO	33	40	30	1200	W-R	DW2	F	PR	
#76SE		16	RO	42	40	40	1600	R	N	G	NA	
#76SE		17	RO	12	15	10	150	R	N	G	NA	
#76SE		18	RO	21	25	10	250	R	N	G	NA	
#76SE		19	RO	36	25	10	250	R	N	G	NA	
#76SE		20	RO	66	40	40	1600	R	N	G	NA	
#76SE	42.17.38 x 71.32.42	21	RO	30	30	10	300	R	TC/COD	P	REM	8
#76SE		22	RO	24	30	20	600	R	N	G	NA	
#76SE		23	RO	52	35	30	1050	R	N	G	NA	
#76SE		24	RO	54	40	30	1200	W-R	N	G	NA	
#76SE		25	RO	55	40	40	1600	W-R	N	G	NA	
#76SE		26	RO	24	30	30	900	R	N	G	NA	
#76E		27	RC	36	20	20	400	R	N	G	NA	
#78E		28	RM	63	40	40	1600	W-R	TC	F	M	
#78E	42.17.36 x 71.32.40	29	RO	120	40	40	1600	W-R	TC	P	REM	9
SE	42.17.32 x 71.32.36	30	STUMP	90	0	0	0	R		D	REM	10

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
South Rte9W												
P67SW	42.17.12 x 71.32.37											
SW	41.17.23 x 71.32.36	31	RO	45	50	30	1500	W-R	N	G	NA	
SW		32	RO	60+66	55	40	2200	W-R	COD	G	NA	
SW		33	RO	66	50	60	3000	W-R	DW2	F	PR	
P62SW		34	RO	68	50	60	3000	W-R	N	G	NA	
P62SW		35	AL	36	50	20	1000	W-R	N	G	NA	
P62SW		36	RM	52+40	60	40	2400	W-R	COD	F	M	
P62SW	42.17.35 x 71.28.36	37	RO	54	60	60	3600	W-R	N	G	NA	
East Side												
SE	42.17.24 x 71.32.36	38	WA	42	40	30	1200	W-R	N	G	NA	
SE	42.17.24 x 71.32.26	39	WA	30+30	30	20	600	R	TC	P	REM	11
SE	42.17.24 x 71.32.26	40	RM	69	20	10	200	R	DW5	D	REM	12
		41	WO	120	50	40	2000	W-R	DW1	G	NA	
#118W		42	AL	48	30	35	1050	W-R	N	G	NA	
#120W		43	WO	102	40	60	2400	W-R	DW2	F	PR	

END OF STUDY

APPENDIX 10	GILMORE ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
Flanders Rd	heading East											
South side	42.16.27 x 71.33.24	1	RO	40	30	25	750	R	DW4	P	REM	13
N		2	PH	52	50	40	2000	R	N	G	NA	
N		3	PH	39	50	40	2000	R	N	G	NA	
N		4	PH	36	40	30	1200	R	N	G	NA	
South side	42.16.27 x 71.33.23	5	PH	64	50	40	2000	R	TC	P	REM	14
N		6	PH	40	50	40	2000	R	TC	F	M	
N		7	PH	44	50	30	1500	R	N	G	NA	
N		8	RM	36	40	30	1200	R	N	G	NA	
South side		9	PH	48	40	30	1200	R	DW1	G	PR	
South side		10	PH	42	40	30	1200	R	N	G	NA	
South side	42.16.27 x 71.33.22	11	PH	60	40	40	1600	R	TC	P	REM	15
N	42.16.27 x 71.33.22	12	RO	78	50	60	3000	R	DW4	P	REM	16
South side	42.16.26 x 71.33.21	13	RO	42	40	30	1200	R	DW5	D	REM	17
South side		14	PH	54	40	30	1200	R	N	G	NA	
N		15	PH	36	60	40	2400	R	N	G	NA	
N		16	BUTT	70	20	5	100	R	DW5	D	REM	18
N		17	RO	45	40	30	1200	R	N	G	NA	
N		18	RO	40	50	30	1500	R	DW1	G	PR	
N		19	RO	42	50	30	1500	R	DW1	G	PR	
N		20	PH	36	40	30	1200	R	DW4	P	REM	19
N		21	RO	40	40	20	800	R	DW4	P	REM	20
N		22	RO	69	50	60	3000	R	N	G	NA	
South side		23	RO	110	50	50	2500	R	DW2	F	PR	
South side		24	YB	42	40	30	1200	R	N	G	NA	
N	42.16.27 x 71.33.08	25	RO	60	40	20	800	R	TC	P	REM	21
N		26	YB	36	25	20	500	R	N	G	NA	
N		27	AL	57	40	30	1200	R	N	G	NA	
N		28	PH	75	50	40	2000	R	DW1	G	PR	
South side		29	BC	45	50	40	2000	R	DW1	G	PR	
N	42.16.27 x 71.33.05	30	BC	34	40	20	800	R	DW4	P	REM	22
N		31	YB	42	40	20	800	R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
South side		32	RM	63	40	40	1600	R	N	G	NA	
South side		33	PH	60	60	30	1800	R	N	G	NA	
N		34	YB	36	40	40	1600	R	N	G	NA	
N		35	RM	28	50	30	1500	R	N	G	NA	
N		36	RM	48	40	40	1600	R	N	G	NA	
South side		37	RO	96	50	50	2500	R	TC/DW1	F	PR/M	
N	42.16.27 x 71.33.03	38	WO	36	40	10	400	R	TC	P	REM	23
South side	42.16.27 x 71.33.02	39	RO	70	40	20	800	R	TC	P	REM	24
N	42.16.27 x 71.33.02	40	RO	63	40	20	800	R	DW4	P	REM	25
South side		41	RO	48	40	30	1200	R	TC	F	M	
N		42	WO	40	40	30	1200	R	DW1	G	PR	
South side		43	PH	48	40	30	1200	R	N	G	NA	
N	42.16.28 x 71.32.59	44	RO	66	50	30	1500	R	TC	P	REM	26
N	42.16.28 x 71.32.58	45	RO	36	30	20	600	R	DW4	P	REM	27
N	42.16.28 x 71.32.58	46	WO	60	40	30	1200	R	DW5	D	REM	28
South side		47	RO	75	50	40	2000	R	DW2	F	PR	
South side		48	RO	60	50	40	2000	R	DW1	G	PR	
South side		49	RO	90	50	40	2000	R	DW1	G	PR	
N		50	RM	36	35	20	750	R	N	G	NA	
N		51	RO	90	50	40	2000	R	DW1	G	PR	
South side		52	RO	90	50	40	2000	R	DW2	F	PR	
N	42.16.30 x 71.32.55	53	RO	66+60	40	20	800	R	COD/TC	P	REM	29
South side	42.16.30 x 71.32.55	54	RO	29+55	40	30	1200	R	COD/TC	P	REM	30
N		55	RO	72	50	40	2000	R	N	G	NA	
South side		56	YB	24	30	20	600	R	N	G	NA	
South side		57	RO	48	40	30	1200	R	TC	G	M	
N	42.16.29 x 71.32.53	58	RO	120	40	30	1200	R	DW4	P	REM	31
N		59	RO	96	50	40	2000	R	DW1	G	PR	
South side		60	WO	60	40	40	1600	R	DW2	F	PR	
N		61	RM	42	40	20	800	R	N	G	NA	
N	42.16.29 x 71.32.53	62	WO	40	40	20	800	R	TC	P	REM	32
N		63	WO	60	50	40	2000	R	N	G	NA	
#60S		64	PH	45	30	20	600	R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#60S		65	RM	63	40	40	1600	R	DW1	G	PR	
South side		66	PH	51	40	50	2000	R	N	G	NA	
N		67	RO	66	40	40	1600	R	TC	G	M	
#60N		68	RO	70	50	40	2000	R	DW4	P	REM	33
Parkerville Rd	East Terminus											
Gilmore Rd	heading West											
#6S	42.16.36 x 71.32.10	69	PO	45	35	30	1050	R	N	G	NA	
#6S		70	RO	30	30	30	900	R	N	G	NA	
#8S		71	RM	26+34	30	30	900	R	COD/DW1	F	PR	
#8S		72	PO	64	40	40	1600	W-R	N	G	NA	
#8S		73	BC	30+34	30	30	900	R	COD	F	M	
#10S		74	BC	33+45	25	30	750	R	COD	F	M	
#12S		75	WA	66	50	50	2500	W-R	DW1	G	PR	
#14S		76	PH	60	40	40	1600	W-R	N	G	NA	
#18S		77	PH	54+63	50	60	3000	W-R	COD	G	M	
#20S		78	AE	27	30	20	600	R	DW2	F	PR	
#20S		79	WP	38	25	30	750	R	DW2	F	PR	
#30S		80	AE	28	25	20	500	R	N	G	NA	
#36S	42.16.31 x 71.32.31	81	RO	66	20	20	400	W-R	DW4	P	REM	34
#36S	42.16.31 x 71.32.31	82	PH	75	50	30	1500	W-R	TC	P	REM	35
#38S		83	PH	21	30	30	900	R	N	G	NA	
#38S		84	PH	36	30	30	900	R	N	G	NA	
#40S		85	PH	63	50	40	2000	W-R	N	G	NA	
#40S		86	PH	27	30	20	600	R	N	G	NA	
#42S	42.16.30 x 71.32.35	87	WA	33	20	20	400	R	TC	P	REM	36
#42S		88	PH	64	60	30	1800	W-R	N	G	NA	
#44S		89	WO	42	50	30	1500	W-R	N	G	NA	
#44S		90	RM	53+21	40	40	1600	W-R	COD/DW1	F	PR	
#46S		91	BG	15+24	30	20	600	R	COD	F	M	
#46S		92	WO	63	50	30	1500	W-R	N	G	NA	
#50S		93	PH	66	60	40	2400	W-R	N	G	NA	
#50S		94	PH	64	50	40	2000	W-R	N	G	NA	
#52S		95	PH	62	50	40	2000	W-R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#52S		96	PH	42	40	30	1200	W-R	N	G	NA	
#52S		97	RM	54	40	30	1200	W-R	DW2	F	PR	
#54S		98	PH	42	60	40	2400	W-R	N	G	NA	
#54S		99	RM	54	40	30	1200	W-R	DW1	G	PR	
#56S		100	RM	51	40	40	1600	W-R	N	G	NA	
#56S		101	RM	30	30	30	900	R	N	G	NA	
#56S		102	RM	36	30	30	900	R	TC	F	M	
#56S		103	RM	33	30	20	600	R	N	G	NA	
#56S/P24	42.16.30 x 71.32.49	104	RM	54+48	40	30	1200	W-R	TC	P	REM	37
#56S/P24		105	WO	82	50	40	2000	W-R	N	G	NA	
#58S	42.16.30 x 71.32.50	106	RO	63	40	30	1200	W-R	DW4	P	REM	38
#56N		107	WO	40	30	30	900	R	N	G	NA	
#56N		108	RO	54	50	40	2000	W-R	DW1	G	PR	
#56N		109	RM	24	30	20	600	R	N	G	NA	
#54N	42.16.30 x 71.32.46	110	RO	60	40	30	1200	W-R	TC	P	REM	39
#54N		111	RO	51	60	30	1800	W-R	N	G	NA	
#54N		112	RO	75	50	40	2000	W-R	TC	F	M	
#54N		113	RO	66	40	40	1600	W-R	DW2	F	PR	
#52N	42.16.30 x 71.32.44	114	PH	50	50	30	1500	W-R	TC	P	REM	40
#50N		115	RO	36	30	20	600	R	DW2	F	PR	
#46N	42.16.30 x 71.32.39	116	WO	54	50	30	1500	W-R	DW5	D	REM	41
#46N	42.16.30 x 71.32.38	117	WO	75	40	30	1200	W-R	DW5	D	REM	42
#42N		118	RM	33	50	30	1500	W-R	TC	F	M	
#40N	42.16.31 x 71.32.34	119	RO	54	50	40	2000	W-R	DW4	P	REM	43
#34N		120	PH	32	50	40	2000	W-R	N	G	NA	
#34N		121	PH	36	50	40	2000	W-R	N	G	NA	
#34N		122	PH	34	50	40	2000	W-R	N	G	NA	
#34N		123	PH	40	50	40	2000	W-R	N	G	NA	
#34N	OLAND LANE	124	PH	54	50	40	2000	W-R	DW2	F	PR	
#22N		125	PH	64	50	60	3000	W-R	N	G	NA	
#11N	42.16.33 x 71.32.18	126	WA	35	30	20	600	W-R	DW5	D	REM	44
#14N		127	PH	48	40	30	1200	W-R	N	G	NA	
#5/P5		128	RO	36	20	20	400	R	DW5	D	REM	45

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#5/P5		129	PO	45	50	40	2000	W-R	DW4	P	REM	
201	PARKERVILLE RD	130	SM	38	30	30	900	R	DW1	G	PR	
201	PARKERVILLE RD	131	SM	27	30	30	900	R	DW2	F	PR	
201	PARKERVILLE RD	132	SM	30	30	30	900	R	DW2	F	PR	
201	PARKERVILLE RD	133	SM	39	30	30	900	R	N	G	NA	
201N	42.16.37 x 71.32.09											

END OF STUDY

APPENDIX 11	MT VICKERY ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
Middle Road	42.16.59 x 71.32.01											
P2/North	42.16.59 x 71.31.59	1	WA	45+60	40	30	1200	R	DW5	D	REM	1
P5		2	RO	30	35	20	700	R	DW2	F	PR	
91N		3	WP	96	60	30	1800	W-R	DW1	G	PR	
95N/Vickery Lane		4	CP	24	25	15	375	R	N	G	NA	
95N/Vickery Lane		5	CP	24	25	15	375	R	N	G	NA	
81N		6	PH	57	60	40	2400	W-R	N	G	NA	
75N	42.17.10 x 71.33.44	7	WA	90	40	30	1200	W-R	DW4	P	REM	2
75N		8	PO	54	40	30	1200	W-R	N	G	NA	
71N		9	RO	75	50	40	2000	W-R	DW1	G	PR	
71N		10	PH	90	60	60	3600	W-R	N	G	NA	
71N	42.17.30 x 71.31.40	11	RO	60	50	40	2000	W-R	TC	P	REM	3
71N		12	RO	54	50	40	2000	W-R	DW2	F	PR	
71N		13	WP	64	50	30	1500	W-R	DW2	F	PR	
71N		14	WP	80	50	30	1500	W-R	DW2	F	PR	
P16N	42.17.40 x 71.31.37	15	RO	60	50	40	2000	W-R	DW4	P	REM	4
P16N		16	WP	60	60	30	1800	W-R	DW2	F	PR	
P16N		17	WP	60	60	30	1800	W-R	DW2	F	PR	
P16N		18	WP	60	60	30	1800	W-R	DW2	F	PR	
P16N		19	WP	27	30	10	300	R	DW4	P	REM	5
OPPP62N		20	WP	30	40	10	400	R	DW4	P	REM	6
NE to Cordaville Rd	42.17.07 x 71.31.35	21	RO	105	40	50	2000	R	TC	P	REM	7
NE to Cordaville Rd	42.17.08 x 71.31.35	22	WA	60	30	20	600	R	TC	P	REM	8
NE to Cordaville Rd		23	RO	84+90	50	40	2000	W-R	DW1	G	PR	
Cordaville Rd	42.17.10 x 71.31.34											
Heading SW	42.17.09 x 71.31.34	24	WO	75	50	30	1500	W-R	N	G	NA	
#64S/butt with cable		25	RO	44	20	5	100	R	DW5	D	REM	9
#64S		26	PH	42	40	30	1200	W-R	N	G	NA	
#64S		27	WO	105	50	60	3000	W-R	N	G	NA	
#64S		28	RO	64	60	40	2400	W-R	N	G	NA	
#64S		29	RM	64	50	40	2000	W-R	DW2	F	PR	
#64S		30	PH	30	40	20	800	W-R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#64S		31	BC	33+33	40	40	1600	W-R	DW1	G	PR	
#64S/20' butt	42.17.05 x 71.31.36	32	PH	60	20	10	200	W-R	DW5	D	REM	11
#64S		33	SS	15	25	20	500	R	N	G	NA	
#62S		34	RO	90	40	40	1600	W-R	DW1	G	PR	
		35	RO	90	40	40	1600	W-R	TC	F	M	
		36	RO	106	50	60	3000	W-R	N	G	NA	
P16SW												
#62S		37	WP	60	50	40	2000	W	DW2	F	PR	
#66S		38	RO	54	50	40	2000	W-R	DW1	G	PR	
#68S		39	PO	45	40	30	1200	W-R	TC	G	M	
#68S		40	WA	30	30	15	450	R	N	G	NA	
#72S	42.17.03 x 71.31.45	41	RM	45	30	10	300	R	DW4	P	REM	12
#72S/P12		42	RM	75	50	60	3000	W-R	N	G	NA	
#72S		43	SS	63	40	30	1200	W-R	N	G	NA	
#76S		44	WO	90	50	80	4000	W-R	N	G	NA	
#76S		45	WO	48	40	40	1600	W-R	N	G	NA	
#82S		46	RM	42+48	50	40	2000	W-R	TC	F	M	
#86S		47	RO	84	60	80	4800	W-R	N	G	NA	
#96S		48	RO	81	60	60	3600	W-R	N	G	NA	
#96S	42.16.59 x 71.31.59	49	WA	62+58	40	60	2400	W-R	DW4	P	REM	13
Middle Road/SW Cordaville Rd												
Post Office/ENE	42.17.11 x 71.31.32	50	PH	54	40	30	1200	W-R	N	G	NA	
Tree Company/ESE		51	WO	93	40	40	1600	W-R	DW1	G	PR	
Tree Company/ESE		52	RM	30	35	20	700	R	N	G	NA	
Tree Company/ESE		53	RO	48	40	40	1600	W-R	TC	F	M	
Garden Center/ESE		54	WO	105	50	80	4000	W-R	DW2	F	PR	
Garden Center/ESE	42.17.12 x 71.31.30	55	RO	90	50	40	2000	W-R	DW4	P	REM	14
Garden Center/ESE		56	PH	54	30	20	600	R	DW2	F	PR	
Garden Center/ESE		57	PH	75	50	40	2000	W-R	N	G	NA	
ESE	42.17.13 x 71.31.29	58	WA	30	40	10	400	R	DW4	P	REM	15
P23/ESE		59	RM	48	40	20	800	W-R	N	G	NA	
ENE	42.17.13 x 71.31.28	60	WO	84	60	60	3600	W-R	TC	F	M	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
ENE		61	PH	42	50	40	2000	W-R	N	G	NA	
ENE		62	RO	54	40	40	1600	W-R	TC	F	M	
#38S		63	RO	120	40	80	3200	W-R	N	G	NA	
#38S		64	RO	132	60	100	6000	W-R	DW1	G	PR	
#38N		65	RO	62	60	40	2400	W-R	DW2	F	PR	
#38S		66	WA	32	30	30	900	W-R	N	G	NA	
#38S		67	RO	75	50	40	2000	W-R	TC	G	M	
Admiral Lane/ESE to Breakneck Hill/NE	42.17.15 x 71.31.27	68	WO	96	60	100	6000	W-R	N	G	NA	
past Admiral Lane/S	42.17.16 x 71.31.26	69	RO	60	40	40	1600	W-R	DW4	P	REM	22
S		70	WO	48	50	40	2000	W-R	N	G	NA	
N		71	WO	42	30	30	900	W-R	N	G	NA	
N		72	WO	74	50	40	2000	W-R	N	G	NA	
N		73	WP	52	40	40	1600	W-R	N	G	NA	
N	42.17.16 x 71.31.24	74	WO	63+60	40	30	1200	W-R	TC/COD	P	REM	16
#25S	42.17.17 x 71.31.25	75	PH	54	60	30	1800	W-R	DW4	P	REM	18
#25N	42.17.18 x 71.31.24	76	RO	54	50	50	2500	W-R	DW2	F	PR	
#25N		77	WO	54	50	40	2000	W-R	DW2	F	PR	
#25S	42.17.18 x 71.31.23	78	RO	72	40	40	1600	W-R	TC	P	REM	19
#25N		79	WO	90	60	40	2400	W-R	DW1	F	PR	
#25N		80	WO	60	50	30	1500	W-R	N	G	NA	
#25N		81	WA	60	55	30	1650	W-R	N	G	NA	
#25S		82	WO	58+62	60	80	4800	W-R	COD	G	NA	
#25N		83	RO	92	50	40	2000	W-R	DW2	F	PR	
#25N		84	RO	72	60	30	1800	W-R	N	G	NA	
#25N		85	WO	54	40	40	1600	W-R	N	G	NA	
#15S	42.17.19 x 71.31.22	86	RO	60	40	20	800	W-R	TC	P	REM	20
#18N		87	RM	42	40	30	1200	W-R	DW2	F	PR	
#18N		88	RO	90	50	60	3000	W-R	TC	G	M	
#18N		89	RO	48+58	60	60	3600	R	TC	F	M	
#16N		90	WO	54	60	40	2400	R	DW2	F	PR	
#16N		91	RM	62	50	40	2000	R	DW2	F	PR	
#16S	42.17.22 x 71.31.19	92	RO	90	50	60	3000	R	DW4	P	REM	21

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#16N		93	PH	72	60	40	2400	R	N	G	NA	
#16N		94	PH	30	50	20	1000	R	N	G	NA	
#16S		95	WO	66	50	40	2000	R	N	G	NA	
#12S		96	RO	144	60	60	3600	R	DW1	G	PR	
#12S		97	WO	81	60	40	2400	R	N	G	NA	
#12S		98	WO	54	50	40	2000	R	N	G	NA	
#10S		99	RO	18	30	20	600	R	N	G	NA	
#10S		100	BC	35	40	40	1600	R	DW2	F	PR	
#15 Breakneck Hill/N	42.17.26 x 71.31.13	101	RO	114	60	80	4800	R	DW1	G	PR	

END OF STUDY

APPENDIX 12	SEARS ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
P17W/Presidential Dr	42.19.07 x 71.32.19	1	RO	110	50	40	2000	W-R	DW4	P	REM	1
		2	RO	60	50	30	1500	W-R	DW2	F	PR	
#78W		3	AE	75	40	40	1600	W-R	N	G	NA	
#78W		4	AE	60	40	30	1200	W-R	TC	P	REM	2
#78W		5	RM	30	25	30	750	R	TC	P	REM	3
#80W		6	PH	66	70	40	2800	W-R	DW1	G	PR	
#80W		7	PH	39	40	30	1200	W-R	N	G	NA	
#80W		8	RO	100	45	40	1800	W-R	DW2	F	PR	
#80W		9	PH	20	30	20	600	R	N	G	NA	
#80W		10	RO	90	60	60	3600	W-R	DW1	G	PR	
P50W												
#84W		11	PH	39	60	30	1800	W-R	N	G	NA	
#88W		12	RO	45	50	30	1500	W-R	N	G	NA	
P10/52#88W		13	RO	72+78	50	80	4000	W-R	TC	P	REM	4
#90W		14	RO	63	50	40	2000	W-R	DW1	G	PR	
#90W		15	WO	75	50	40	2000	W-R	N	G	NA	
#90W		16	RO	48+52	60	50	3000	W-R	DW1	G	PR	
P8-54/#94-96W		17	RO	90	50	80	4000	W-R	N	G	NA	
Stowe RdW		18	RO	70+96	50	40	2000	W-R	DW4	P	REM	5
#100W		19	RO	91	40	50	2000	W-R	DW1	G	PR	
#100W		20	RO	75	50	50	2500	W-R	N	G	NA	
#100W		21	RO	45	40	30	1200	W-R	N	G	NA	
#100W		22	RO	105	50	40	2000	W-R	DW1	G	PR	
OPPP59W		23	RO	115	60	80	4800	W-R	DW1	G	PR	
Stowe RdW		24	WP	66	30	20	600	R	DW5	D	REM	6
Malboro RdE	42.19.37 x 71.32.11											
#168MalboroE		25	BC	54	25	20	500	R	DW5	P	REM	7
OPPP60E	42.19.35 x 71.32.12	26	RO	105	25	20	500	R	DW5	D	REM	8
P60-P57E												
OPP#100E		27	RO	66	60	30	1800	W-R	DW1	G	PR	
P53/OPP92-96E		28	WO	48	50	40	2000	W-R	N	G	NA	
P52-51E		29	RO	39	50	30	1500	W-R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
OPP#90E		30	YB	39	50	30	1500	W-R	N	G	NA	
OPP#88E		31	RO	51	50	30	1500	W-R	N	G	NA	
OPP#88E		32	RO	47	40	30	1200	W-R	N	G	NA	
OPP#88E		33	RO	66	50	30	1500	W-R	N	G	NA	
OPP#88E		34	RO	170	50	60	3000	W-R	N	G	NA	
OPP#86E		35	RO	88+92	60	80	4800	W-R	DW1	G	PR	
#79E		36	RO	48	40	40	1600	W-R	DW1	G	PR	
#79E		37	WP	54	60	40	2400	W-R	DW1	G	PR	
#79E		38	PH	30	40	30	1200	W-R	N	G	NA	
OPP#84E		39	RO	98	50	60	3000	W-R	DW1	G	PR	
OPP#84E		40	RO	30	50	30	1500	W-R	N	G	NA	
P49/#75E		41	WP	72	70	40	2800	W-R	DW1	G	PR	
P49/#75E		42	RO	96	60	50	3000	W-R	N	G	NA	
OPP#80E		43	RO	54	50	40	2000	W-R	N	G	NA	
OPP#80E		44	RO	39	40	20	800	W-R	DW1	G	PR	
OPP#80E		45	RO	36	35	30	750	R	N	G	NA	
OPP#80E		46	RO	54	60	30	1800	W-R	DW1	G	PR	
P48/#73E		47	RO	69	60	40	2400	W-R	DW1	G	PR	
#73E		48	PH	60	60	30	1800	W-R	TC	F	M	
#73E		49	RO	90	50	40	2000	W-R	DW1	G	PR	
#71E		50	PH	33	40	30	1200	W-R	N	G	NA	
#71E		51	RO	75	50	40	2000	W-R	TC	F	M	
P46E		52	RO	42+44	50	60	3000	W-R	DW1	G	PR	
P46E	42.19.10 x 71.32.18	53	RO	48	20	10	200	R	DW5	D	REM	9
P45/#69E		54	RO	82	50	40	2000	W-R	N	G	NA	
#69E		55	RO	45	40	20	800	W-R	N	G	NA	
#69E		56	RO	42+48	60	40	2400	W-R	DW1	G	PR	
#69E		57	RO	42	50	30	1500	W-R	DW2	F	PR/M	
#67E		58	RO	82	50	50	2500	W-R	DW2	F	PR/M	
#67E		59	RO	60	45	20	900	W-R	N	G	NA	
#67E		60	RO	45	40	30	1200	W-R	N	G	NA	
P44E		61	RO	63	60	60	3600	W-R	N	G	NA	
P44/Ledge Hill Rd-E	42.19.06 x 71.32.19	62	RO	40	40	20	800	W-R	TC	P	REM	10

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
Ledge Hill Rd												
OPP#72E		63	RO	40	40	30	1200	W-R	DW2	F	PR	
P43/OPP#72E		64	RO	45	50	30	1500	W-R	TC	F	M	
P43/OPP#72E		65	RO	33	50	20	1000	W-R	N	G	NA	
#65E		66	RO	42	50	20	1000	W-R	N	G	NA	
#65E		67	RO	42	50	20	1000	W-R	DW2	F	PR	
#65E		68	RO	36	50	40	2000	W-R	DW2	F	PR	
#65E		69	RO	45	50	30	1500	W-R	DW2	F	PR	
#65E		70	RM	48	45	30	1350	W-R	N	G	NA	
#65E		71	RM	48	50	40	2000	W-R	N	G	NA	
OPPP42E		72	RO	36	40	30	1200	W-R	N	G	NA	
OPPP42E		73	RO	36	25	30	750	W-R	N	G	NA	
OPPP42E		74	WP	42	40	30	1200	W-R	DW2	F	PR	
P41E	42.19.00 x 71. 32.23	75	RO	66	60	60	3600	W-R	DW1	G	PR	
P40E		76	RO	84	50	60	3000	W-R	N	G	NA	
P40E		77	PH	60	50	30	1500	W-R	DW1	G	PR	
P40E		78	PH	30	40	30	1200	W-R	N	G	NA	
P40E		79	PH	45	40	40	1600	W-R	DW1	G	PR	
P40E		80	RO	90	40	40	1600	W-R	DW2	F	PR/M	
Sadie Hutt Lane	42.18.56 x 71.32.25	81	RO	45+48	50	40	2000	W-R	DW4	P	REM	11
P38/OPP#58E		82	BW	104	60	60	3600	W-R	DW1	G	PR	
OPP#54		83	HL	30	40	30	1200	W-R	N	G	NA	
#39E		84	BW	45	50	30	1500	W-R	TC	F	M	
#39E		85	RO	21+30	20	20	400	R	DW4	P	REM	12
#29E		86	AE	45	40	30	1200	W-R	N	G	NA	
Main Street/S	heading North											
#8W		87	BW	39	40	20	800	W-R	N	G	NA	
#8W		88	RM	40	30	30	900	W-R	DW5	D	REM	13
#12W		89	bO	66	50	50	2500	W-R	N	G	NA	
#12W		90	bO	45	40	30	1200	W-R	N	G	NA	
#12W		91	bO	33	30	30	900	W-R	N	G	NA	
#12W		92	bO	45	40	30	1200	W-R	DW1	G	PR	
#12W		93	bO	52	45	30	1350	W-R	N	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#12W		94	bO	36	35	30	1050	W-R	DW1	G	PR	
#12W		95	bO	24	30	20	600	R	TC	P	REM	14
#12W		96	bO	45	40	30	1200	W-R	N	G	NA	
#14W		97	RM	30+32	20	20	400	R	TC	P	REM	15
#14W		98	bO	45	40	40	1600	W-R	TC	F	M	
#14W		99	WA	30	20	10	200	R	DW5	D	REM	16
#20W	42.18.39 x 71.32.32	100	AL	60	40	30	1200	W-R	TC	P	REM	17
P61W		101	RO	82	45	60	2700	W-R	N	G	NA	
P61W		102	AL	45	30	30	900	W-R	N	G	NA	
P61W		103	AL	39+33	40	50	2000	W-R	N	G	NA	
#48W		104	BW	40	35	30	1050	W-R	TC	F	M	
#54W		105	BW	33	30	20	600	W-R	N	G	NA	
#56W		106	RO	54	40	40	1600	W-R	N	G	NA	
Sadie Hutt Lane/#58W		107	RO	36	40	30	1200	W-R	DW5	D	REM	18
P39W		108	RO	39	40	40	1600	W-R	N	G	NA	
OPPP40W		109	WO	42	50	40	2000	W-R	N	G	NA	
OPPP40W		110	RO	36	50	20	1000	W-R	DW1	G	PR	
OPPP40W		111	PH	36	50	20	1000	W-R	TC	F	M	
P41W		112	RO	60+66	50	40	2000	W-R	COD	G	NA	
P41W/Sadie Hutt		113	WO	45+27	30	20	600	R	TC	P	REM	19
P42W		114	RO	45	40	20	800	W-R	N	G	NA	
#72W		115	RO	54	50	50	2500	W-R	DW1	G	PR	
#72W		116	RO	42	50	40	2000	W-R	N	G	NA	
#72W		117	RO	45	40	40	1600	W-R	N	G	NA	
Presidential Dr												

END OF STUDY

APPENDIX 13	WOODBURY ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
176 Woodland Rd												
#10E		1	WO	90	50	40	2000	W-R	N	G	NA	
#12E		2	RO	84	60	50	3000	W-R	N	G	NA	
#14E		3	WA	60	50	30	1500	W-R	N	G	NA	
#14E		4	RO	96	55	50	2750	W-R	N	G	NA	
#14E		5	PH	39	50	30	1500	W-R	TC	F	M	
#16E		6	WA	33	40	30	1200	W-R	N	G	NA	
#16W		7	WO	52	40	30	1200	W-R	N	G	NA	
#16W		8	WP	21	50	10	500	R	N	G	NA	
#16W		9	WO	42	50	20	1000	W-R	DW1	G	PR	
#16W		10	WO	39	40	20	800	R	DW1	G	PR	
#16E		11	WO	18	30	40	1200	W-R	N	G	NA	
#16W		12	WO	15	30	10	300	R	N	G	NA	
#16W		13	RO	52	40	40	1600	W-R	DW1	G	PR	
#20E		14	RO	69	50	40	2000	W-R	N	G	NA	
#20E		15	WA	72	60	40	2400	W-R	N	G	NA	
#28E		16	WO	72	40	40	1600	W-R	DW1	G	PR	
#28E		17	RO	66	50	30	1500	W-R	DW2	F	PR	
#28E		18	RM	39	40	30	1200	W-R	N	G	NA	
#28E	42.16.19 x 71.31.08	19	RO	60	50	40	2000	W-R	DW4	P	REM	19
Heather Lane												
#30E		20	WO	54	50	30	1500	W-R	N	G	NA	
#30E		21	RO	60	50	40	2000	W-R	DW2	F	PR	
#30E		22	RO	75	60	50	3000	W-R	DW1	G	PR	
#30E		23	RO	66	65	50	3250	W-R	DW2	F	PR	
#32E		24	RO	66	50	50	2500	W-R	DW1	G	PR	
#32E		25	WO	51	40	40	1600	W-R	DW2	F	PR	
P5E/#32		26	PH	30	40	30	1200	W-R	N	G	NA	
#34W		27	PH	45	50	30	1500	W-R	N	G	NA	
#36W		28	PH	90	60	50	3000	W-R	DW1	G	PR	
#36W		29	PH	60	50	30	1500	W-R	N	G	NA	
P50E		30	RO	54	50	30	1500	W-R	DW1	G	PR	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
P50E		31	RO	93	45	60	2700	W-R	N	G	NA	
P50E	42.16.08 x 71.35.05	32	RO	54	50	30	1500	W-R	DW5	D	REM	20
Southville Road												
#49W		33	RO	40	40	30	1200	W-R	DW1	G	PR	
#47W		34	RO	48	40	30	1200	W-R	N	G	NA	
#41W		35	WP	36	40	30	1200	W-R	DW1	G	PR	
#41W		36	PH	18	35	30	1050	W-R	N	G	NA	
#41W		37	PH	52	40	30	1200	W-R	N	G	NA	
#41W		38	PH	36	40	30	1200	W-R	DW1	G	PR	
#35W		39	RO	60	50	40	2000	W-R	N	G	NA	
#35W		40	WO	60+45	50	40	2000	W-R	COD	G	NA	
#31W		41	RM	27	35	20	700	R	N	G	NA	
#31W		42	RM	45	35	25	875	R	DW2	F	PR	
#31W		43	RM	15+15	40	30	1200	R	DW3	P	REM	
#29W		44	RO	48	40	30	1200	W-R	DW2	F	PR	
#29W		45	PH	52	40	30	1200	W-R	N	G	NA	
#29W		46	PH	56	50	30	1500	W-R	N	G	NA	
#27W		47	PH	39	50	20	1000	W-R	N	G	NA	
#27W		48	RO	60	40	30	1200	W-R	DW5	D	REM	21
#27W		49	RM	40	40	30	1200	W-R	DW2	F	PR	
OPP#30W		50	PH	40	35	20	700	R	N	G	NA	
OPP#30W		51	RM	40	35	25	875	R	N	G	NA	
OPP#30W		52	RO	34	40	30	1200	W-R	N	G	NA	
OPP#30W		53	PH	25	30	30	900	R	N	G	NA	
#23W	Heather Lane /N	54	PH	33	50	30	1500	W-R	N	G	NA	
OPP#24W		55	RM	42	40	20	800	W-R	DW5	P	REM	22
OPP#24W		56	RM	60+45	50	40	2000	W-R	TC	P	REM	23
OPP#24W		57	PH	42	40	40	1600	W-R	N	G	NA	
OPP#24W		58	YB	39	40	30	1200	W-R	N	G	NA	
#15W		59	RO	40	20	10	200	R	DW5	D	REM	24
OPP#12W	42.16.25 x 71.31.15	60	RO	50	50	30	1500	W-R	DW4	P	REM	25
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APPENDIX 14	WOODLAND ROAD							TREE	INVENTORY	2021		
ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
P45-P43/West	42.16.52 x 71.30.54											
P42-41/#98W	41.16.55 x 71.30.46	1	RO	33	25	30	750	W-R	N	G	NA	
P42-41/#98W		2	RO	60	25	30	750	W-R	COD	G	NA	
P42-41/#98W		3	RO	33	25	25	625	R	DW4	P	REM	
#98E	42.16.55 x 71.30.42	4	RO	54	40	40	1600	W-R	TC/DW4	P	REM	1
#85-83W	42.16.60 x 71.30.42	5	RO	68	40	25	1000	W-R	TC/DW5	P	REM	2
#85-83W		6	YB	62	55	40	2200	W-R	N	G	NA	
#85-83W		7	YB	60	50	40	2000	W-R	N	G	NA	
#83W		8	YB	66+45	40	30	1200	W-R	DW4	P	REM	3
P28W/#75	42.17.07 x 71.30.39	9	WO	40	40	20	800	W-R	DW5	D	REM	4
P27W/Kidder Lane		10	RO	38	40	30	1200	R	DW2	F	PR	
P27W/Kidder Lane		11	RO	90	60	50	3000	W-R	TC	P	REM	5
P27W/#77-59	42.17.10 x 71.30.39	12	RO	48+50	60	30	1800	W-R	DW5	D	REM	6
OPPP27E/#77-59		13	RO	69	55	30	1650	W-R	TC/DW4	P	REM	7
OPPP27E/#77-59	42.17.09 x 71.30.38	14	RO	105	40	20	800	W-R	TC/DW4	P	REM	8
P24W		15	RO	75	50	30	1500	W-R	DW2	F	PR	
P24E		16	RO	74+76	50	80	4000	W-R	DW2	F	PR/M	
Bay Lane Path	42.17.15 x 71.30.36											
P20E/#55		17	WO	24	30	10	300	R	TC	D	REM	9
#31	42.17.23 x 71.30.28	18	PH	33	30	20	600	R	DW4	P	REM	10
P8E	42.17.28 x 71.30.28	19	WA	90	40	30	1200	W-R	DW5	D	REM	11
#21W		20	EB*	93	50	60	3000	W-R	DW2	F	PR	
#21W		21	RO	18	35	20	700	R	N	G	NA	
#21W		22	RO	40	50	20	1000	W-R	N	G	NA	
P21W/#7		23	AE	30	40	30	1200	W-R	N	G	NA	
#9E	42.17.33 x 71.30.28	24	AE	40	30	30	900	R	DW5	D	REM	12
END	42.17.28 x 71.30.30											
OREGON RD	42.16.49 x 71.30.53											
#127W		25	WO	175	40	40	1600	W-R	DW1	G	PR	
#128E		26	WA	33	25	20	500	R	DW4	P	REM	13
#128E		27	AE	51	40	40	1600	W-R	N	G	NA	
#128E		28	RM	21+30	25	20	500	W-R	COD	G	NA	

ADDRESS	GPS	TID	SPECIES	TRC	HT	SPR	TFZ	TARGET	DEFECT	CR	REC	PH
#128E		29	RM	39	25	20	500	R	N	G	NA	
#138E		30	WP	84	50	40	2000	W-R	DW1	G	PR	
#138E		31	WP	52	50	30	1500	W-R	DW1	G	PR	
#138E		32	WP	60	50	30	1500	W-R	DW2	G	PR	
#138E		33	WP	63	30	25	750	W-R	DW4	P	REM	14
#142W		34	RO	60	50	40	2000	W-R	N	G	NA	
#142W		35	WO	60	50	40	2000	W-R	N	G	NA	
#142W	42.16.41 x 71.31.04	36	WO	50	40	30	1200	W-R	DW5	P	REM	15
#148E		37	PH	52	60	40	2400	W-R	N	G	NA	
#150E		38	PH	52	50	30	1500	W-R	N	G	NA	
#150E		39	PH	39	45	30	1350	W-R	N	G	NA	
#156E		40	PH	60	55	30	1650	W-R	DW1	G	PR	
P66E		41	RM	59+60	40	40	1600	W-R	COD	F	M	
#161W		42	PH	48	50	30	1500	W-R	N	G	NA	
#164E		43	RM	60	40	30	1200	W-R	N	G	NA	
#166E		44	BS(3trees)	10	8	6	48	R	N	G	NA	
#168E		45	RO	45	40	20	800	W-R	DW5	D	REM	16
#176E		46	WP	84	50	30	1500	W-R	N	G	NA	
Woodbury Rd-E		47	WA	60	35	25	875	W-R	N	G	NA	
#178E		48	PH	24	25	20	500	R	N	G	NA	
#178E		49	WA	48	50	40	2000	W-R	DW1	G	PR	
P79E	42.16.21 x 71.31.19	50	RO	90	40	30	1200	W-R	DW5	D	REM	17
#189W		51	PH	62	40	30	1200	W-R	N	G	NA	
#197W		52	AE	48	40	40	1600	W-R	N	G	NA	
#197W		53	BC	40	30	30	900	W-R	DW1	G	PR	
#185W	42.16.24 x 71.31.19	54	RO	36	30	20	600	R	N	G	NA	
P84W	42.16.15 x 71.31.20	55	WA	32	40	20	800	W-R	DW4	P	REM	18
STEFCO END												

END OF STUDY