



PUBLIC WORKS COMMITTEE

MEETING March 5, 2019

9:00A.M.

Brighton Town Hall

DOWNSTAIRS MEETING ROOM

DRAFT AGENDA

MEETING CALLED TO ORDER:

APPROVE MINUTES:

PUBLIC REVIEW OPEN FORUM:

PETITIONS:

COMMUNICATIONS:

BIDS:

MATTER RE: Landfill Grinding Contract

MATTER RE: GIGP Maintenance Contract

MATTER RE: Lawn Mowing Contract

OLD BUSINESS:

MATTER RE: East River Road Structures

MATTER RE: East Ave. Sidewalks

MATTER RE: Renovation, Repair and Painting, (RRP) Certification

NEW BUSINESS:

TREES:

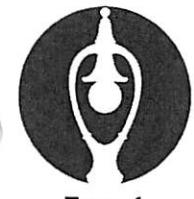
Address	Description	Recommendation
882 S. Grosveor on Landon	34" Norway Maple	Remove and Replace
99 Dale Road	36" Silver Maple	Remove and Replace
33 Drury Lane	52" Ash, (no tag)	Remove and Replace
199 Thackery Road	36" Sugar Maple	Remove and Replace
Town R.O.W. at 149 Edgemoor Road	(1) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(9) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(10) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(11) 24" Norway Maple	Remove
45 Knolltop Dr.	44" Silver Maple, (#1)	Remove and Replace
45 Knolltop Dr.	43" Silver Maple, (#2)	Remove and Replace
45 Knolltop Dr.	42" Silver Maple, (#3)	Remove and Replace

UPDATES:

MATTER RE: Geographic Information Systems Analyst

MEETING ADJOURNED:

NEXT COMMITTEE MEETING: **April 2, 2019 at 9:00 A.M**



Town of
Brighton

Building and Planning Department

Commissioner of Public Works – Michael Guyon, P.E.

Rick DiStefano

Planner

February 15, 2019

Michael Guyon, Commissioner of Public Works
Town of Brighton
2300 Elmwood Avenue
Rochester, NY 14618

RE: Tree Removals

Dear Commissioner Guyon:

In response to your letter, dated January 30, 2019, and attached tree evaluation forms regarding the proposed removal of town trees, the Tree Council reviewed the forms and visited the sites.

In regards to proposed tree removals at:

882 S. Grovesnor Road (on Landon Pkwy)	34" Norway maple
99 Dale Road	36" Silver maple
33 Drury Lane	52" Ash
199 Thackery Road	36" Sugar maple

The Council is in agreement with the evaluations and supports the removal of the identified trees. As recommended, the Council encourages properly sized replacement trees be planted as soon as possible.

In regards to proposed tree removals at:

149 Edgemoor Road	24" Norway maple (1)
149 Edgemoor Road	24" Norway maple (9)
149 Edgemoor Road	24" Norway maple (10)
149 Edgemoor Road	24" Norway maple (11)

The Council is in agreement with the evaluations and supports the removal of the identified trees, they recommend however, that only tree #1 be considered for replacement.

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February 15, 2019

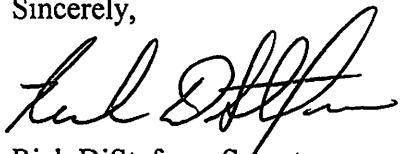
In regards to proposed tree removals at:

45 Knolltop Drive	44' Silver Maple (#1)
45 Knolltop Drive	44' Silver Maple (#2)
45 Knolltop Drive	44' Silver Maple (#3)

The Council is in agreement with the evaluation and supports the removal of the identified trees. As recommended, the Council agrees that only replacement of tree #2 is warranted.

Lastly, the Council reviewed the arborist's report regarding a 36" Norway maple located at 47 Laconia Parkway. Prior to making a recommendation on this tree, the Council would like an estimated cost for the work that needs to be done to lower the tree's risk hazard to an acceptable level and clarification of the abutting property owner's desire to retain the tree.

Sincerely,



Rick DiStefano, Secretary
Brighton Tree Council

cc: Tim Anderson



Public Works Department

Mike Guyon, P.E.
Commissioner of Public Works

January 30, 2019

The Honorable Tree Council
Town of Brighton
2300 Elmwood Ave.
Rochester, New York

Re: Trees Evaluations and Recommendations

Honorable Members:

I request your review and comment regarding the proposed recommendations of the following tree(s):

All of these trees exhibit compromised health, structural deficiencies and/or safety issues as noted in the attached reports. Each location is a cause for concern of the general public which supports the recommendation to trim, remove and replant these trees as noted.

Address	Description	Recommendation
882 S. Grosveor on Landon	34" Norway Maple	Remove and Replace
99 Dale Road	36" Silver Maple	Remove and Replace
33 Drury Lane	52" Ash, (no tag)	Remove and Replace
199 Thackery Road	36" Sugar Maple	Remove and Replace
Town R.O.W. at 149 Edgemoor Road	(1) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(9) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(10) 24" Norway Maple	Remove
Town R.O.W. at 149 Edgemoor Road	(11) 24" Norway Maple	Remove
45 Knolltop Dr.	44" Silver Maple, (#1)	Remove and Replace
45 Knolltop Dr.	43" Silver Maple, (#2)	Remove and Replace
45 Knolltop Dr.	42" Silver Maple, (#3)	Remove and Replace

In addition, the tree council previously reviewed the removal of a significant tree at 47 Laconia Park and agreed with the Town assessment. A property owner adjacent to this tree strongly disagreed with its removal. Chapter 175 paragraph 175-8 indicates that if a notified property owner disagrees with the removal of the tree, that property owner may request that the Commissioner reconsider the proposed removal of the tree and refer the proposed tree removal to the Tree Council for its review and recommendation. Therefore, I instructed Bartlett Tree Experts to perform a visual inspection of the tree. I



am forwarding a copy of the Tree Risk Assessment for the tree at 47 Laconia Park for your review and recommendation.

Thank you for your attention to this matter and I look forward to your review of these trees.

Respectfully,

Michael E. Guyon
Commissioner of Public Works

Attachments

Cc: Tim Anderson

**TREE HAZARD EVALUATION FORM** 2nd EditionSite/Address: 882 S. GROSVENOR ON LANDON

Map/Location:

Owner: public private unknown other Date: 1-7-19 Inspector: CARROLL LOVELESS

Date of last inspection:

HAZARD RATING:
$$\frac{4}{\text{Failure Potential}} + \frac{4}{\text{Size of part}} + \frac{4}{\text{Target Rating}} = \frac{12}{\text{Hazard Rating}}$$
 Immediate action needed Needs further inspection Dead tree**TREE CHARACTERISTICS**Tree #: TWO Species: NORWAY MAPLEDBH: 34" # of trunks: _____ Height: _____ Spread: _____Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headedCrown class: dominant co-dominant intermediate suppressedLive crown ratio: 50 % Age class: young semi-mature mature over-mature/senescingPruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates: _____Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency**TREE HEALTH**Foliation color: normal chlorotic necrotic Epicormics? Y N

Growth obstructions:

Foliation density: normal sparse Leaf size: normal small stakes wire/ties signs cablesAnnual shoot growth: excellent average poor Twig Dieback? Y N curb/pavement guardsWoundwood development: excellent average poor none other _____Vigor class: excellent average fair poorMajor pests/diseases: INSECTS, WOODPECKER, SQUIRRELS**SITE CONDITIONS**Site Character: residence commercial industrial park open space natural woodland/forestLandscape type: parkway raised bed container mound lawn shrub border wind breakIrrigation: none adequate inadequate excessive trunk wettedRecent site disturbance? Y N construction soil disturbance grade change line clearing site clearing

% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N

% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%

% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%

Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fail
 clay expansive slope _____ aspect: _____Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrowPrevailing wind direction: WIS Occurrence of snow/ice storms never seldom regularly**TARGET**Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility linesCan target be moved? Y N Can use be restricted? Y N Occupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: DEAD SCAFFOLDS, SPLIT SCAFFOLDS Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Dead/wood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: LARGE SCAFFOLDS

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

$$4 + 4 + 4 = 12$$

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 - intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-7-19

COMMENTS

TREE HAS MAJOR INSECT INFESTATION

TO FAR GONE TO TREAT

RECOMMEND REMOVAC + REPLACE

(CL)

882 S. GROSVENOR
ON LANDON # 2



SPLIT



Site/Address: 99 Dahl Rd

Map/Location:

Owner: public private unknown other Date: 1-7-19 Inspector: CARROLL LOUGLESS

Date of last inspection:

HAZARD RATING:
$$\frac{4}{\text{Failure Potential}} + \frac{4}{\text{Size of part}} + \frac{4}{\text{Target Rating}} = \frac{12}{\text{Hazard Rating}}$$
 Immediate action needed Needs further inspection Dead tree**TREE CHARACTERISTICS**Tree #: one Species: Silver MapleDBH: 36 in # of trunks: 1 Height: 60+ Spread: 50+Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headedCrown class: dominant co-dominant intermediate suppressedLive crown ratio: less 20 % Age class: young semi-mature mature over-mature/senescingPruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates:Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency**TREE HEALTH**Foliation color: normal chlorotic necrotic Epicormics? NFoliation density: normal sparse Leaf size: normal smallAnnual shoot growth: excellent average poor Twig Dieback? NWound/wood development: excellent average poor noneVigor class: excellent average fair poorMajor pests/diseases: poss. ant infestation due to planting at base of tree**Growth obstructions:** stakes wire/ties signs cables curb/pavement guards other None**SITE CONDITIONS**Site Character: residence commercial industrial park open space natural woodland/forestLandscape type: parkway raised bed container mound lawn shrub border wind breakIrrigation: none adequate inadequate excessive trunk wettedRecent site disturbance? N construction soil disturbance grade change line clearing site clearing% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? N% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fail clay expansive slope 0° aspect: Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrowPrevailing wind direction: WEST Occurrence of snow/ice storms never seldom regularly**TARGET**Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility lines A!!Can target be moved? N Can use be restricted? NOccupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper		L		
Bow, sweep			M	
Codominants/forks			S	
Multiple attachments				
Included bark		S	S	S
Excessive end weight				
Cracks/splits		S	S	S
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark		S	m	S
Nesting hole/bee hive		S		S
Deadwood/stubs		S	m	S
Borers/termites/ants	S	S	S	S
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: LIFE OF TREE

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

$$4 + 4 + 4 = 12$$

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 - intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-7-19

COMMENTS

TREE HAS MAJOR ANT INFESTATION

TO FAR GONE TO TREAT

PLANTING AT BASE OF TREE NOT RECOMMENDED

RECOMMEND REMOVAL + REPLACE

(CL)

99 DALE RD



**TREE HAZARD EVALUATION FORM** 2nd EditionSite/Address: 33 DRURY LANE

Map/Location:

Owner: public private unknown other Date: 1-7-19 Inspector: CARROLL LOVIES

Date of last inspection:

HAZARD RATING:
$$\frac{4}{Failure Potential} + \frac{4}{Size of part} + \frac{4}{Target Rating} = \frac{12}{Hazard Rating}$$
 Immediate action needed Needs further inspection Dead tree**TREE CHARACTERISTICS**Tree #: ONE Species: ASH NO TAG #DBH: 52" # of trunks: Height: 60' Spread: 50'Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headedCrown class: dominant co-dominant intermediate suppressedLive crown ratio: 100 % Age class: young semi-mature mature over-mature/senescingPruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates: _____Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency**TREE HEALTH**Foliation color: normal chlorotic necrotic Epicormics? Y N**Growth obstructions:**Foliation density: normal sparse Leaf size: normal small stakes wire/ties signs cablesAnnual shoot growth: excellent average poor Twig Dieback? Y N curb/pavement guardsWound/wood development: excellent average poor none otherVigor class: excellent average fair poorMajor pests/diseases: DEAD**SITE CONDITIONS**Site Character: residence commercial industrial park open space natural woodland/forestLandscape type: parkway raised bed container mound lawn shrub border wind breakIrrigation: none adequate inadequate excessive trunk wettedRecent site disturbance? Y N construction soil disturbance grade change line clearing site clearing% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fall clay expansive slope aspect: Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrowPrevailing wind direction: _____ Occurrence of snow/ice storms never seldom regularly**TARGET**Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility lines

Can target be moved? Y N Can use be restricted? Y N

Occupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: _____

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

4 + 4 + 4 = 12

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <8" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 - intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-7-19

COMMENTS

SEE SERVICE REQUEST # 61613

33 DRURY LANE ASH #1





Tree Risk Assessment Report

Client: **Department of Public Works, Town of Brighton, New York**

Inspection Date: December 24, 2018, 11:30am

Inspector: S. MacKenzie

Time Frame: Immediate

Tree: # 20

Species: Sugar maple DBH: 36" Est. Ht. Approx. 50' +/-

Tree Location: Street Edge, In Front yard, parkway

Assignment: Tim Anderson, Deputy Highway Superintendent, Town of Brighton Highway Department. Requested evaluation and visual assessment of the following tree:

199 Thackery Road. 36" Sugar maple

It is likely this tree is past a preservation stage. Removal, this action will help reduce the possibility of both branch and root failure.

The tree is in the lawn area, on the street edge in front of 199 Thackery Road. It is on the road edge, sits 60 feet from the house that the likelihood of stem/ branch failure is *high*, the impact upon the residence would be *low*. The likelihood of impact on the road would be *high*. The likelihood of impact on the utilities across the street would be *moderate*. (water valve is just south of the base of the tree. The overall risk rating for the tree with removal *low*.

The concern of this report is limited to the likelihood of failure due to the size and stem structure of the tree and, the likelihood that part of this tree could strike a particular target and the consequence of that impact.

Summary and Recommendations:

Tree Risk Rating: High,

Mitigation Recommendations:

1. Recommend Removal

Residual Risk: **None** if the tree is removed;

Re-inspection Interval: Visual assessments are recommended monthly until tree is removed



Tree Risk Assessment Report

Submitted by:

Stuart MacKenzie, Arborist Rep 678

Bartlett Tree Experts

554 Bills Road

Macedon, New York 14502

smackenzie@bartlett.com

585-385-4060 office

585-662-3877 cell.

Appendix:

Limitations of Tree Risk Assessments

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation. Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

Glossary

Tree risk assessment has a unique set of terms with specific meanings. Definitions of all specific terms may be found in the *International Society of Arboriculture's Best Management Practice for Tree Risk Assessment*. Definitions of some of these terms used in this report are as follows:

The *likelihood of failure* may be categorized as imminent meaning that failure has started or could occur at any time; probable meaning that failure may be expected under normal weather conditions within the next 3 years; possible meaning that failure could occur, but is unlikely under normal weather conditions during that time frame; and improbable meaning that failure is not likely under normal weather conditions, and may not occur in severe weather conditions during that time frame.



Tree Risk Assessment Report

The *likelihood of the failed tree part impacting a target* may be categorized as high meaning that a failed tree or tree part will most likely impact a target; medium meaning that a failed tree or tree part may or may not impact a target with equal likelihood; low meaning that the failed tree or tree part is not likely to impact a target; and very low meaning that the chance of a failed tree or tree part impacting the target is remote.

The *Likelihood of Failure and Impact* is defined by Table 1, the Likelihood Matrix:

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probably	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The *consequences* of a known target being struck may be categorized as severe meaning that impact could involve serious personal injury or death, damage to high value property, or disruption to important activities; significant meaning that the impact may involve personal injury, property damage of moderate to high value, or considerable disruption; minor meaning that impact could cause low to moderate property damage, small disruptions to traffic or a communication utility, or minor injury; and negligible meaning that impact may involve low value property damage, disruption that can be replaced or repaired, and do not involve personal injury.

Targets are people, property, or activities that could be injured, damaged or disrupted by a tree failure

Levels of assessment 1) *Limited visual assessments* are conducted to identify obvious defects. 2) *Basic assessments* are visual inspections done by walking around the tree looking at the site, buttress roots, trunk and branches. It may include the use of simple tools to gain information about the tree or defects. 3) *Advanced assessments* are performed to provide detailed information about specific tree parts, defects, targets of site conditions. Drilling to detect decay is an advanced assessment technique.

Tree Risk Ratings are terms used to communicate the level of risk rating. They are defined in Table 2, the Risk Matrix, as a combination of Likelihood and Consequences:

Likelihood of Failure & Impact	Consequences of Tree Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low



Tree Risk Assessment Report

Overall tree risk rating is the highest individual risk identified for the tree. The *residual risk* is the level of risk the tree should pose after the recommended mitigation. *Mitigation priority 1* is defined as mitigation activities that should be scheduled prior to the next growing season. *Mitigation Priority 2* can be scheduled on the next routine maintenance cycle.



Root crown is exposed, and visual inspection seems to reveal over all concerns of failure.
Recommend removing the tree

Tree Risk Assessment Report



Underground utilities close to the tree and the road itself would be the highest risk target if the tree would fail at 199 Thackery Road. Likelihood of impact would be somewhat likely, consequence of impact would be *High*.



Tree Risk Assessment Report

Client: **Department of Public Works, Town of Brighton, New York**

Inspection Date: October 30, 2018, 3:30pm & December 17, 2018

Inspector: S. MacKenzie

Time Frame: Immediate

Tree: 9 -19 (Map shows 1-11)

Species: Maple, London Plane, Elm DBH: 24"-30" Est. Ht. Approx.+/-60'

Tree Location: Pathway

Assignment: Tim Anderson, Deputy Highway Superintendent, Town of Brighton Highway Department. Requested evaluation and visual assessment of the following trees:

<u>Item Number</u>	<u>Common Name</u>	<u>DBH</u>	<u>Action</u>
1	Norway Maple	24"	remove
2	Norway Maple	30"	reduce crown
3	Norway Maple	24"	reduce crown
4	Norway Maple	24"	reduce crown
5	Norway Maple	24"	reduce crown
6	London Plane Tree	24"	reduce crown
7	London Plane Tree	24"	reduce crown
8	Chinese Elms	24"	reduce crown
9	Norway Maple	24"	remove
10	Norway Maple	24"	remove
11	Norway Maple	24"	remove

It is likely if there is crown reduction in both height and width, we can reduce the load on both branches and root system. This action will help reduce the possibility of both branch and root failure.

The tree is in the lawn area along side of Path way on Town R.O.W. at 149 Edgemoor. It is away from the road, sits >40 feet from the house that the likelihood of stem/ branch failure is *possible*, the impact upon the residence would be *high*. The likelihood of impact on the road would be *low*, impact on the pathway and fence would be *high*. The likelihood of impact on the utilities across the street would be *low*. The overall risk rating for the tree with crown reduction, both height and width, cabling the remaining crown is *low*.



Tree Risk Assessment Report

The concern of this report is limited to the likelihood of failure due to the size and stem structure of the tree and, the likelihood that part of this tree could strike a particular target and the consequence of that impact.

Summary and Recommendations:

Tree Risk Rating: Low,

Mitigation Recommendations:

1. If a low risk is not acceptable, remove Norway maples (1, 9,10, & 11) and replant with another tree. The risk of failure cannot be reduced to zero unless the tree is removed and the stump ground.
2. If a low risk is acceptable and pruning, crown reduction of trees 2,3,4,5,6,7,8, installation of cables, or re-cabling, should be performed as practical.
3. Pruning to remove dead branches would reduce their likelihood of failure to possible.
4. Crown Reduction pruning both height and width, to reduce some of the longest limbs, this can reduce loads, and the likelihood of branch and root failure. As with cabling, reduction pruning would not alter the risk rating.
5. Recommend periodic inspections and assessments on the tree and new cabling system ;1 per year.

Residual Risk: **None** if the trees (1,9,10,&11) are removed; *low* for branch failure if other trees (2,3,4,5,6,7,&8) are pruned; *low* for whole tree even if pruning and cabling is performed.

Re-inspection Interval: Visual assessments are recommended annually and after major storms if tree is not removed. Cables should be inspected approximately annually.

Submitted by:

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Tree Risk Assessment Report

Appendix:

Limitations of Tree Risk Assessments

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation. Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

Glossary

Tree risk assessment has a unique set of terms with specific meanings. Definitions of all specific terms may be found in the *International Society of Arboriculture's Best Management Practice for Tree Risk Assessment*. Definitions of some of these terms used in this report are as follows:

The *likelihood of failure* may be categorized as imminent meaning that failure has started or could occur at any time; probable meaning that failure may be expected under normal weather conditions within the next 3 years; possible meaning that failure could occur, but is unlikely under normal weather conditions during that time frame; and improbable meaning that failure is not likely under normal weather conditions, and may not occur in severe weather conditions during that time frame.

The *likelihood of the failed tree part impacting a target* may be categorized as high meaning that a failed tree or tree part will most likely impact a target; medium meaning that a failed tree or tree part may or may not impact a target with equal likelihood; low meaning that the failed tree or tree part is not likely to impact a target; and very low meaning that the chance of a failed tree or tree part impacting the target is remote.



Tree Risk Assessment Report

The *Likelihood of Failure and Impact* is defined by Table 1, the Likelihood Matrix:

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probably	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The *consequences* of a known target being struck may be categorized as severe meaning that impact could involve serious personal injury or death, damage to high value property, or disruption to important activities; significant meaning that the impact may involve personal injury, property damage of moderate to high value, or considerable disruption; minor meaning that impact could cause low to moderate property damage, small disruptions to traffic or a communication utility, or minor injury; and negligible meaning that impact may involve low value property damage, disruption that can be replaced or repaired, and do not involve personal injury.

Targets are people, property, or activities that could be injured, damaged or disrupted by a tree failure

Levels of assessment 1) *Limited visual assessments* are conducted to identify obvious defects. 2) *Basic assessments* are visual inspections done by walking around the tree looking at the site, buttress roots, trunk and branches. It may include the use of simple tools to gain information about the tree or defects. 3) *Advanced assessments* are performed to provide detailed information about specific tree parts, defects, targets of site conditions. Drilling to detect decay is an advanced assessment technique.

Tree Risk Ratings are terms used to communicate the level of risk rating. They are defined in Table 2, the Risk Matrix, as a combination of Likelihood and Consequences:

Likelihood of Failure & Impact	Consequences of Tree Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Overall tree risk rating is the highest individual risk identified for the tree. The *residual risk* is the level of risk the tree should pose after the recommended mitigation. *Mitigation priority 1* is defined as mitigation activities that should be scheduled prior to the next growing season. *Mitigation Priority 2* can be scheduled on the next routine maintenance cycle.

Tree Risk Assessment Report



Recommend removing trees number 1 and 9,10 , 11.



Tree Risk Assessment Report



The crown should be reduced, both height and width. This will help avoid root and branch failure.
Recommend cabling and bracing where needed

Tree Risk Assessment Report



The pathway and the Residence to the East & West would be the highest risk target if the tree would fail at 149 Edgemoor Road. Likelihood of impact would be somewhat likely, consequence of impact would be *High*.

REF



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM

2nd Edition

Site/Address: 45 KNOB TOPMap/Location: ACTIVE BUS STOPOwner: public private unknown other Date: 1-29-19 Inspector: CARROLL LOVLESS

Date of last inspection: _____

HAZARD RATING:

$$\frac{4}{Failure} + \frac{4}{Size} + \frac{4}{Target} = \frac{12}{Hazard Rating}$$
 Immediate action needed Needs further inspection Dead tree**TREE CHARACTERISTICS**Tree #: ONE Species: SILVER MAPLEDBH: 43 1/4" # of trunks: ONE Height: 70' Spread: 50'

*** HIGH RISK ***

Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headedCrown class: dominant co-dominant intermediate suppressedLive crown ratio: 60 % Age class: young semi-mature mature over-mature/senescencePruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates: _____Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency**TREE HEALTH**Foliation color: normal chlorotic necrotic Epicormics? N

Growth obstructions:

Foliation density: normal sparse Leaf size: normal small stakes wire/ties signs cablesAnnual shoot growth: excellent average poor Twig Dieback? N curb/pavement guardsWound/wood development: excellent average poor none other _____Vigor class: excellent average fair poorMajor pests/diseases: SQUIRRELS**SITE CONDITIONS**Site Character: residence commercial industrial park open space natural woodland/forestLandscape type: parkway raised bed container mound lawn shrub border wind breakIrrigation: none adequate inadequate excessive trunk wettedRecent site disturbance? N construction soil disturbance grade change line clearing site clearing% drip line paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? N% drip line w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%% drip line grade lowered: 0% 10-25% 25-50% 50-75% 75-100%Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fail clay expansive slope _____ aspect: _____Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrowPrevailing wind direction: WEST Occurrence of snow/ice storms never seldom regularly**TARGET**Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility linesCan target be moved? N Can use be restricted? NOccupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper	—	m	—	—
Bow, sweep	—	—	s	s
Codominants/forks	—	—	s	s
Multiple attachments	—	—	s	s
Included bark	—	s	s	s
Excessive end weight	—	—	s	s
Cracks/splits	—	—	s	s
Hangers	—	—	—	—
Girdling	m	m	—	—
Wounds/seam	—	s	s	s
Decay	—	s	s	s
Cavity	—	s	s	s
Conks/mushrooms/bracket	—	—	—	—
Bleeding/sap flow	—	—	—	—
Lobse/cracked bark	—	m	s	s
Nesting hole/bee hive	—	s	s	s
Deadwood/stubs	—	—	m	m
Borers/termites/ants	—	—	—	—
Cankers/galls/burls	—	—	m	s
Previous failure	—	—	—	—

HAZARD RATING

Tree part most likely to fail: TRUNK

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Inspection period: annual biannual other

Size of part: 1 - <5" (15 cm); 2 - 6-18" (15-45 cm);

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

4 + 4 + 4 = 12

Target rating: 1 - occasional use; 2 intermittent use;

3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-29-19

COMMENTS

THIS SILVER HAS SEVERAL CAVITY IN THE TRUNK, SCAFFOLDS, BRANCHES
EXCESSIVE END WEIGHT WITH MAJOR BOW SWEEPS!
ALSO LIFTING PAVEMENT.

RECOMMEND REMOVAL.

45 KNOBLTOP TREE #1



TREE #1



TREE # 1





A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas
TREE HAZARD EVALUATION FORM 2nd Edition

EE
#2
Site/Address: 45 KNOB TOP

Map/Location: ACTIVE BUS STOP

Owner: public private unknown other

Date: 1-29-19 Inspector: CARROLL LOVELLESS

Date of last inspection: _____

HAZARD RATING:

4 + 4 + 4 = 12
Failure Potential + Size of part + Target Rating = Hazard Rating

Immediate action needed

Needs further inspection

Dead tree

TREE CHARACTERISTICS

Tree #: two Species: SILVER MAPLE

DBH: 42" # of trunks: one Height: 70' Spread: 50'

Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headed

Crown class: dominant co-dominant intermediate suppressed

Live crown ratio: 60 % Age class: young semi-mature mature over-mature/senescing

Pruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates: _____

Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency

X HIGH RISK

TREE HEALTH

Foliation color: normal chlorotic necrotic Epiphytes? N

Foliation density: normal sparse Leaf size: normal small

Terminal shoot growth: excellent average poor Twig Dieback? Y N

Woundwood development: excellent average poor none

Vigor class: excellent average fair poor

Major pests/diseases: SOOTY MOLD

Growth obstructions:

stakes wire/ties signs cables

curb/pavement guards

other _____

SITE CONDITIONS

Site Character: residence commercial industrial park open space natural woodland/forest

Landscape type: parkway raised bed container mound lawn shrub border wind break

Irrigation: none adequate inadequate excessive trunk wetted

Recent site disturbance? Y N construction soil disturbance grade change line clearing site clearing

% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N

% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%

% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%

Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fail

clay expansive slope _____ aspect: _____

Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____

Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrow

Prevailing wind direction: WEST Occurrence of snow/ice storms never seldom regularly

TARGET

Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility lines

Can target be moved? Y N Can use be restricted? Y N

Occupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper	s	—	—	—
Bow/sweep	—	—	s	s
Codominants/forks	—	—	s	s
Multiple attachments	—	—	s	s
Included bark	—	s	s	s
Excessive end weight	—	—	s	s
Cracks/splits	—	m	s	s
Hangers	—	—	—	—
Girdling	m	—	—	—
Wounds/seam	—	s	s	s
Decay	—	s	s	s
Cavity	—	s	s	s
Conks/mushrooms/bracket	—	m	—	—
Bleeding/sap flow	—	—	—	—
Loose/cracked bark	—	n	s	s
Nesting hole/bee hive	—	s	s	s
Deadwood/stubs	—	—	—	—
Borers/termites/ants	—	—	—	—
Cankers/galls/burls	—	m	s	s
Previous failure	—	—	—	—

HAZARD RATING

Tree part most likely to fail: TRUNK

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Inspection period: 10-3-16 annual biannual other

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 - intermittent use;
3 - frequent use; 4 - constant use

$$4 + 4 + 4 = 12$$

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-29-19

COMMENTS

THIS SILVER HAS MAJOR CAVITY'S IN ITS TRUNK, SCAFFOLDS, BRANCHES
EXCESSIVE END WEIGHT

LARGE BOW SWEET
RECOMMEND REMOVAL AND REPLACE.

TREE #2



TREE #2



LARGE CAVITYS

REF

#3



A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd EditionSite/Address: 45 KNOB TOPMap/Location: ACTIVE BUS STOPOwner: public private unknown other Date: 1-29-19 Inspector: CARROLL LOUFLLESS

Date of last inspection: _____

HAZARD RATING:

$$\frac{4}{Failure} + \frac{4}{Size} + \frac{4}{Target} = \frac{12}{Hazard Rating}$$
 Immediate action needed Needs further inspection Dead tree**TREE CHARACTERISTICS**Tree #: 23 Species: SILVER MAPLEDBH: 42" # of trunks: ONE Height: 70' Spread: 60'Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headedCrown class: dominant co-dominant intermediate suppressedLive crown ratio: 68 % Age class: young semi-mature mature over-mature/senescingPruning history: crown cleaned excessively thinned topped crown raised pollarded crown reduced flush cuts cabled/braced
 none multiple pruning events Approx. dates: _____Special Value: specimen heritage/historic wildlife unusual street tree screen shade indigenous protected by gov. agency**TREE HEALTH**Foliation color: normal chlorotic necrotic Epicuticular? Y NFoliation density: normal sparse Leaf size: normal smallAxillary shoot growth: excellent average poor Twig Dieback? Y NWound/wood development: excellent average poor noneVigor class: excellent average fair poorMajor pests/diseases: SQUIRRELS**Growth obstructions:** stakes wire/ties signs cables curb/pavement guards other _____**SITE CONDITIONS**Site Character: residence commercial industrial park open space natural woodland/forestLandscape type: parkway raised bed container mound lawn shrub border wind breakIrrigation: none adequate inadequate excessive trunk wettedRecent site disturbance? Y N construction soil disturbance grade change line clearing site clearing% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume disease center history of fail
 clay expansive slope _____ aspect: _____Obstructions: lights signage line-of-sight view overhead lines underground utilities traffic adjacent veg. _____Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge area prone to windthrowPrevailing wind direction: WEST Occurrence of snow/ice storms never seldom regularly**TARGET**Use Under Tree: building parking traffic pedestrian recreation landscape hardscape small features utility linesCan target be moved? Y N Can use be restricted? Y NOccupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root pruned: _____ distance from trunk Root area affected: _____ % Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper	m	—	—	—
Bow, sweep	—	—	ss	ss
Codominants/forks	—	—	ss	ss
Multiple attachments	—	—	ss	ss
Included bark	—	m	ss	ss
Excessive end weight	—	—	s	ss
Cracks/splits	—	—	m	s
Hangers	—	—	—	—
Girdling	m	—	—	—
Wounds/seam	—	s	s	s
Decay	—	s	s	s
Cavity	—	s	s	s
Conks/mushrooms/bracket	—	m	s	ss
Bleeding/sap flow	—	—	—	—
Lobse/cracked bark	—	m	s	s
Nesting hole/beehive	—	m	s	s
Deadwood/stubs	—	—	—	m
Borers/termites/ants	—	—	—	—
Cankers/galls/burls	—	s	m	m
Previous failure	—	—	—	—

HAZARD RATING

Tree part most likely to fail: TRUNK

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Inspection period: 10-3-16 annual biannual other

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Failure Potential + Size of Part + Target Rating = Hazard Rating

Target rating: 1 - occasional use; 2 - intermittent use;

3 - frequent use; 4 - constant use

$$4 + 4 + 4 = 12$$

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: 1-29-19

COMMENTS

THIS SILVER MAPLE HAS SEVERAL LARGE CAVITY'S IN IT TRUNK, SCAFFOLDS, BRANCHES
EXCESSIVE END WEIGHT,
LARGE BOW SWEEPS

RECOMMEND REMOVAL

TREE #3



80%
Hollow

45 KNOB/TOP TREES 1.2.5





Tree Risk Assessment Report

Client: Department of Public Works, Town of Brighton, New York

Inspection Date: January 11, 2019

Inspector: S. MacKenzie

Time Frame: Immediate

Tree: #1 -2019

Species: Norway Maple

DBH: 36"

Est. Ht. Approx. 50' +/-

Tree Location: Street Edge, In Front yard

Assignment: Tim Anderson, Deputy Highway Superintendent, Town of Brighton Highway Department. Requested evaluation and visual assessment of the following tree:

47 Laconia Parkway

It is likely if there is crown reduction in both height and width, we can reduce the load on both branches and root system. This action will help reduce the possibility of both branch and root failure.

The tree is in the tree lawn area in front of 47 Laconia Parkway. It is in the Parkway next to the road, sits 46.5 feet from the house that the likelihood of stem/ branch failure is *possible*, the impact upon the residence would be *high*. Impact on driveway would be moderate. The likelihood of impact on the road would be *low*. The likelihood of impact on the utilities along the street would be *low*. The overall risk rating for the tree with crown reduction, both height and width, (existing) cabling needs inspecting, the remaining crown is *low*.

The concern of this report is limited to the likelihood of failure due to the size and stem structure of the tree and, the likelihood that part of this tree could strike a particular target and the consequence of that impact.



Tree Risk Assessment Report

Summary and Recommendations:

Tree Risk Rating: Moderate,

Mitigation Recommendations:

1. If a moderate risk is not acceptable, remove this Norway maple and replant with another tree. The risk of failure cannot be reduced to zero unless the tree is removed and the stump ground.
2. If a moderate risk is acceptable and the tree is not removed, installation of cables, or re-cabling, should be performed as practical.
3. Pruning to remove dead branches would reduce their likelihood of failure to *low*.
4. Crown Reduction pruning both height and width, to reduce some of the longest limbs, this can reduce loads, and the likelihood of branch and root failure. As with cabling, reduction pruning would alter the risk rating to *low*.
5. Recommend periodic inspections and assessments on the tree and new cabling system; 2 per year. Feeding the tree with boost and fortiphite application.

Residual Risk: **None** if the tree is removed; *low* for branch failure if tree is pruned; *low* for whole tree even if pruning and cabling is performed.

Re-inspection Interval: Visual assessments are recommended every 6 mos. and after major storms if tree is not removed. Cables should be inspected approximately annually.

Submitted by:

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585-662-3877 cell.



Tree Risk Assessment Report

Appendix:

Limitations of Tree Risk Assessments

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation. Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

Glossary

Tree risk assessment has a unique set of terms with specific meanings. Definitions of all specific terms may be found in the International Society of Arboriculture's *Best Management Practice for Tree Risk Assessment*. Definitions of some of these terms used in this report are as follows:

The *likelihood of failure* may be categorized as imminent meaning that failure has started or could occur at any time; probable meaning that failure may be expected under normal weather conditions within the next 3 years; possible meaning that failure could occur, but is unlikely under normal weather conditions during that time frame; and improbable meaning that failure is not likely under normal weather conditions, and may not occur in severe weather conditions during that time frame.

The *likelihood of the failed tree part impacting a target* may be categorized as high meaning that a failed tree or tree part will most likely impact a target; medium meaning that a failed tree or tree part may or may not impact a target with equal likelihood; low meaning that the failed tree or tree part is not likely to impact a target; and very low meaning that the chance of a failed tree or tree part impacting the target is remote.



Tree Risk Assessment Report

The *Likelihood of Failure and Impact* is defined by Table 1, the Likelihood Matrix:

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probably	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The *consequences* of a known target being struck may be categorized as severe meaning that impact could involve serious personal injury or death, damage to high value property, or disruption to important activities; significant meaning that the impact may involve personal injury, property damage of moderate to high value, or considerable disruption; minor meaning that impact could cause low to moderate property damage, small disruptions to traffic or a communication utility, or minor injury; and negligible meaning that impact may involve low value property damage, disruption that can be replaced or repaired, and do not involve personal injury.

Targets are people, property, or activities that could be injured, damaged or disrupted by a tree failure

Levels of assessment 1) *Limited visual assessments* are conducted to identify obvious defects. 2) *Basic assessments* are visual inspections done by walking around the tree looking at the site, buttress roots, trunk and branches. It may include the use of simple tools to gain information about the tree or defects. 3) *Advanced assessments* are performed to provide detailed information about specific tree parts, defects, targets of site conditions. Drilling to detect decay is an advanced assessment technique.

Tree Risk Ratings are terms used to communicate the level of risk rating. They are defined in Table 2, the Risk Matrix, as a combination of Likelihood and Consequences:

Likelihood of Failure & Impact	Consequences of Tree Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Overall tree risk rating is the highest individual risk identified for the tree. The *residual risk* is the level of risk the tree should pose after the recommended mitigation. *Mitigation priority 1* is defined as mitigation activities that should be scheduled prior to the next growing season. *Mitigation Priority 2* can be scheduled on the next routine maintenance cycle.

Tree Risk Assessment Report



Root crown is exposed, and visual inspection seems to be there are girdling roots that should be managed. Recommend Boost and fortiphite application, mulch at root zone. The crown should be reduced, both height and width. This will help avoid root and branch failure. Recommend cabling and bracing where needed.



Tree Risk Assessment Report



2 Cables are in the crown stems. Recommend they get inspected and possibly replaced. The deadwood removed and reduce the crown. Monitor the tree every 6 months. Re-Evaluate this spring 2019.
Boost and fortiphite applications for health of the tree.