

Tree Risk Assessment and Tree Protection

596 Ryan Road, Northampton, Massachusetts

Prepared For:

John Handzel

Nu-Way Homes

10 White Avenue

East Longmeadow, Ma 01028

Prepared By:

Charles W. McCarthy

Consulting Arborist

Massachusetts Certified Arborist

ISA Certified Arborist

ISA Tree Risk Assessment Qualification



P O Box 648 Belchertown, MA 01007

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Tree Risk Assessment and Tree Protection

596 Ryan Road, Northampton, Massachusetts

I. Assignment

On August 18, 2022, John Handzel of Nu-Way Homes , contracted my services to assist with the tree protection at his construction site at #596 Ryan Road in Northampton, Massachusetts. The proposed construction project will interact with some of the trees on the property. At the owner's request I was contracted to inventory significant trees on the property before the start of the project.

A. Scope of Work

The scope includes inventorying and assessing the significant existing trees on the property at #596 Ryan Road in Northampton, Massachusetts. All of the significant trees were given a tree identification number. The following information was collected for each tree.

- ✓ Identify the existing trees in the defined survey limits of the property with a dbh (trunk diameter at 4.5 feet above the ground) of 20" or greater.
- ✓ Each inventoried tree will receive a basic tree risk assessment.
- ✓ Selected inventoried tree will receive recommendations of tree protection. The critical root zone (CRZ) or tree protection zone (TPZ) will be determined for each significant tree.
- ✓ The main objectives are to identify significant trees and risk trees on the property.

John Handzel supplied me with a drawing of the proposed construction project for #596 Ryan Road in Northampton, Massachusetts. He requested that I plot the inventoried significant trees on the drawing.



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8/24/2022

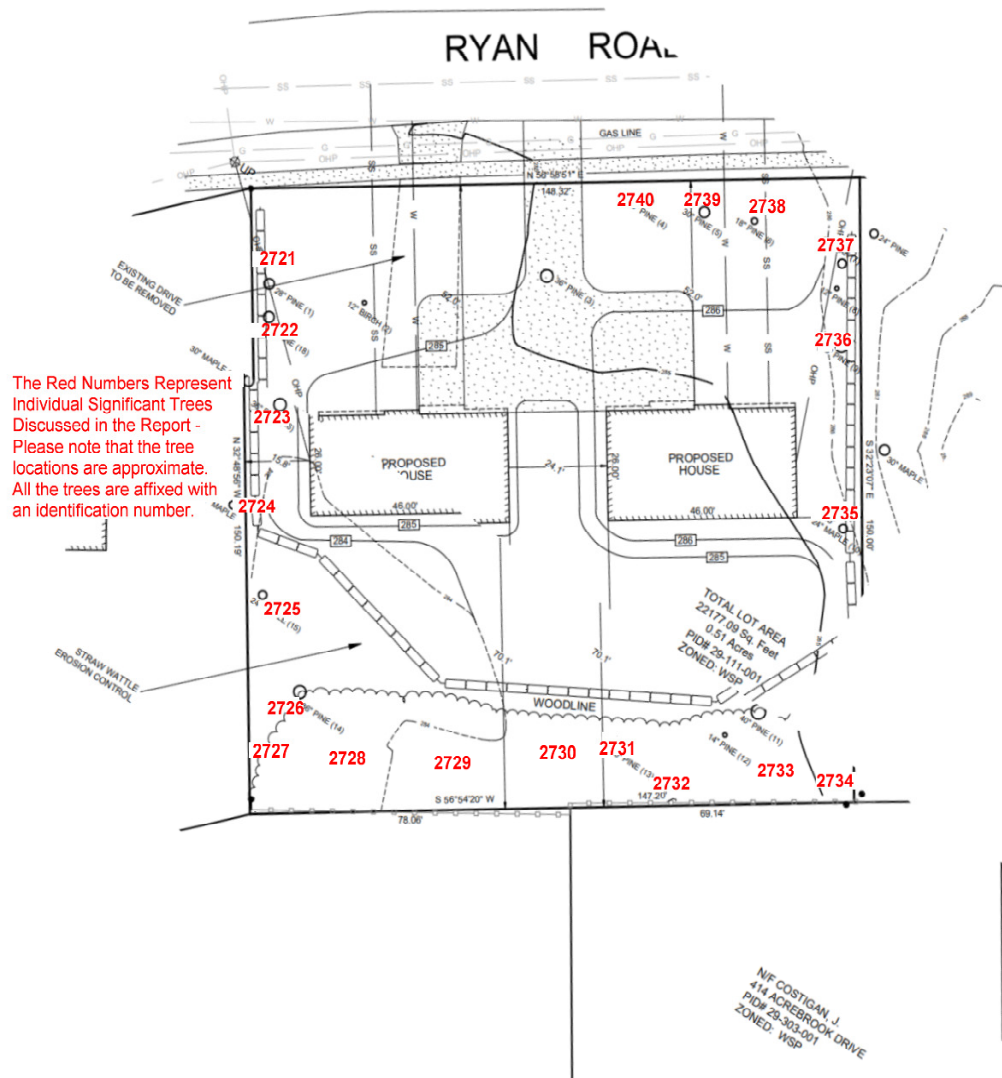
II. Observations and Tree Risk – Site visit on 8/16/2022

All of the significant trees were affixed with a tree identification number tag which will be referred to throughout the project.



A tree identification number was affixed to every inventoried tree.

Tree Location Drawing #1



The numbers in the drawing supplied by Nu-Way Homes represent the approximate locations of individual significant trees that were inventoried.



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Table #1 Tree Risk and Protection Significant Tree Inventory -
(Please refer to the location map on page #4)

TREE 2721



Pinus	strobus	Date Inspected	08-18-2022
DBH	31"	Tree Height	80' TO 90'
TREE PROTECTION ZONE	34'		
TPZ RADIUS (measured from trunk)	17.0'		
PROTECT	No		
PROTECTION			
AIR EXCAVATION REQUIRED	N		
POTENTIAL FOR FAILURE	PROBABLE		
RECOMMENDATION	TAKEDOWN		

COMMENTS

there is a defect / cavity at ground level that originates below ground, the tree is exhibiting symptoms of pine needlecast

TREE 2722



Pinus	strobus	Date Inspected	08-18-2022
DBH	27"	Tree Height	80' TO 90'
TREE PROTECTION ZONE	34'		
TPZ RADIUS (measured from trunk)	17.0'		
PROTECT	No		
PROTECTION			
AIR EXCAVATION REQUIRED	N		
POTENTIAL FOR FAILURE	PROBABLE		
RECOMMENDATION	TAKEDOWN		

COMMENTS

there is a defect / cavity at ground level on both sides of the tree, it looks like past construction damage

Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2723 Red Maple



Acer rubra Date Inspected 08-18-2022
DBH 28" Tree Height 60' TO 70'
TREE PROTECTION ZONE 35'
TPZ RADIUS (measured from trunk) 17.5'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

COMMENTS

the is a high branched red maple, it looks pretty good

TREE 2724 White Pine



Pinus strobus Date Inspected 08-18-2022
DBH 32" Tree Height 80' TO 90'
TREE PROTECTION ZONE 35'
TPZ RADIUS (measured from trunk) 17.5'
PROTECT No
PROTECTION
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE PROBABLE
RECOMMENDATION TAKEDOWN

COMMENTS

the tree has a cavity on two sides of the tree with wood decay present at ground level, the tree has a pronounce lean towards the property



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2725 Red Maple



COMMENTS

the trunk is hollow, it is missing a top from past storm damage, it is leaning toward the neighbor's property

Acer rubrum Date Inspected 08-18-2022
DBH 22" Tree Height 30' TO 40'
TREE PROTECTION ZONE 35'
TPZ RADIUS (measured from trunk) 17.5'
PROTECT No
PROTECTION
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE PROBABLE
RECOMMENDATION TAKEDOWN

TREE 2726 White Pine



COMMENTS

the tree looks good, some poison ivy growing up the trunk

Pinus strobus Date Inspected 08-18-2022
DBH 35" Tree Height 80' TO 90'
TREE PROTECTION ZONE 50'
TPZ RADIUS (measured from trunk) 25.0'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2727 Red Maple



Acer rubrum Date Inspected 08-18-2022
DBH 24" Tree Height 40' TO 50'
TREE PROTECTION ZONE 50'
TPZ RADIUS (measured from trunk) 25.0'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

COMMENTS

the tree looks good, there is bittersweet growing up the trunk, some poison ivy growing up the trunk

TREE 2728 Red Maple



Acer rubrum Date Inspected 08-18-2022
DBH 20" Tree Height 50' TO 60'
TREE PROTECTION ZONE 30'
TPZ RADIUS (measured from trunk) 15.0'
PROTECT No
PROTECTION
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE PROBABLE
RECOMMENDATION TAKEDOWN

COMMENTS

has a hollow trunk

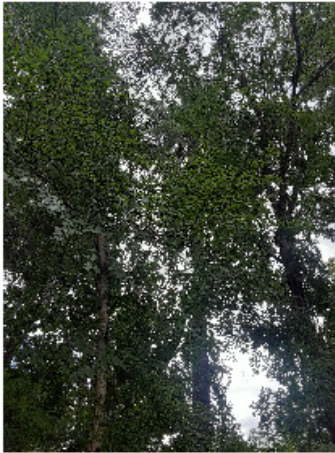


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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2729 White Pine



COMMENTS

the trunk looks solid

Pinus strobus **Date Inspected** 08-18-2022
DBH 32" **Tree Height** 70' TO 80'
TREE PROTECTION ZONE 30'
TPZ RADIUS (measured from trunk) 15.0'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

TREE 2730 White Pine



COMMENTS

the tree looks good

Pinus strobus **Date Inspected** 08-18-2022
DBH 28" **Tree Height** 80' TO 90'
TREE PROTECTION ZONE 45'
TPZ RADIUS (measured from trunk) 22.5'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2731 White Pine



COMMENTS

the tree looks good

Pinus strobus **Date Inspected** 08-18-2022
DBH 31" **Tree Height** 80' TO 90'
TREE PROTECTION ZONE 45'
TPZ RADIUS (measured from trunk) 22.5'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

TREE 2732 Red Maple



COMMENTS

the tree looks good, the tree is on-sided towards the back neighbor

Acer rubrum **Date Inspected** 08-18-2022
DBH 20" **Tree Height** 50' TO 60'
TREE PROTECTION ZONE 25'
TPZ RADIUS (measured from trunk) 12.5'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2733 White Pine



COMMENTS

the tree looks good, there are some lower dead branches

Pinus	strobus	Date Inspected	08-18-2022
DBH	39"	Tree Height	50' TO 60'
TREE PROTECTION ZONE	40'		
TPZ RADIUS (measured from trunk)	20.0'		
PROTECT	Yes		
PROTECTION	FENCING AROUND TPZ		
AIR EXCAVATION REQUIRED	N		
POTENTIAL FOR FAILURE			
RECOMMENDATION			

TREE 2734 White Pine



COMMENTS

there is an oak tree embedded in the trunk creating a cavity, it is onside towrds the neighbor

Pinus	strobus	Date Inspected	08-18-2022
DBH	24"	Tree Height	70' TO 80'
TREE PROTECTION ZONE	40'		
TPZ RADIUS (measured from trunk)	20.0'		
PROTECT	No		
PROTECTION			
AIR EXCAVATION REQUIRED	N		
POTENTIAL FOR FAILURE	PROBABLE		
RECOMMENDATION	TAKEDOWN		



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2735 Acer Rubrum



Acer rubrum Date Inspected 08-18-2022

DBH 21" Tree Height 50' TO 60'

TREE PROTECTION ZONE 25'

TPZ RADIUS (measured from trunk) 12.5'

PROTECT Yes

PROTECTION **FENCING AROUND TPZ**

AIR EXCAVATION REQUIRED N

POTENTIAL FOR FAILURE

RECOMMENDATION

COMMENTS

the tree looks good, has bittersweet growing up the trunk that should be removed

TREE 2736 White Pine



Pinus strobus Date Inspected 08-18-2022

DBH 34" Tree Height 80' TO 90'

TREE PROTECTION ZONE 35'

TPZ RADIUS (measured from trunk) 17.5'

PROTECT Yes

PROTECTION **FENCING AROUND TPZ**

AIR EXCAVATION REQUIRED N

POTENTIAL FOR FAILURE

RECOMMENDATION

COMMENTS

the tree looks good, the tree has some deadwood



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2737 Black Oak



Quercus velutina **Date Inspected** 08-18-2022
DBH 26" **Tree Height** 50' TO 60'
TREE PROTECTION ZONE 35'
TPZ RADIUS (measured from trunk) 17.5'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

COMMENTS

the tree looks good, the tree has some deadwood

TREE 2738 White Pine



Pinus strobus **Date Inspected** 08-18-2022
DBH 33" **Tree Height** 80' TO 90'
TREE PROTECTION ZONE 50'
TPZ RADIUS (measured from trunk) 25.0'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

COMMENTS

the tree looks good, the tree has some deadwood



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Tree Risk and Protection Significant Tree Inventory (Continued)

TREE 2739 White Pine



Pinus strobus **Date Inspected** 08-18-2022
DBH 32" **Tree Height** 80' TO 90'
TREE PROTECTION ZONE 40'
TPZ RADIUS (measured from trunk) 20.0'
PROTECT Yes
PROTECTION **FENCING AROUND TPZ**
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE
RECOMMENDATION

COMMENTS

the tree has some surface girdling roost, there is some needlecast symptoms in the canopy,

TREE 2740 White Pine



Pinus strobus **Date Inspected** 08-18-2022
DBH 39" **Tree Height** 80' TO 90'
TREE PROTECTION ZONE 40'
TPZ RADIUS (measured from trunk) 20.0'
PROTECT No
PROTECTION
AIR EXCAVATION REQUIRED N
POTENTIAL FOR FAILURE PROBABLE
RECOMMENDATION TAKEDOWN

COMMENTS

the tree has significant needlecast symptom, consider removal



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III. Analysis

Prior to the preparation of this report I inventoried the existing *significant* trees with a dbh of 20" or greater. I performed a *basic tree risk assessment* on every inventoried tree. Mitigation recommendations and tree protection determinations were made for each tree.

Northampton Significant Tree Ordinance - According to the ordinance, significant trees - defined as trees with a minimum 20-inch diameter or specifically identified specimen trees "enhance air quality, reduce noise, reduce energy costs, create habitat, enhance aesthetics and property values, and benefit city neighborhoods."¹

A. Pre-existing Tree Health Issues

Many of the trees that were inventoried and inspected have defects that pre-dispose them to failure. These trees recommended for *removal* can be found in table #2.

¹ Daily Hampshire Gazette, [Northampton ordinance protects trees](#). 3/18/2016

Table #2 Trees Recommended to be Removed

TREE	Common Name	Street #	DBH	Comments	Recommendation
596 RYAN					
2721		596	31.00	there is a defect / cavity at ground level that originates below ground, the tree is exhibiting symptoms of pine needlecast	TAKEDOWN
2722		596	27.00	there is a defect / cavity at ground level on both sides of the tree, it looks like past construction damage	TAKEDOWN
2724	<u>White Pine</u>	596	32.00	the tree has a cavity on two sides of the tree with wood decay present at ground level, the tree has a pronounced lean towards the property	TAKEDOWN
2725	<u>Red Maple</u>	596	22.00	the trunk is hollow, it is missing a top from past storm damage, it is leaning toward the neighbor's property	TAKEDOWN
2728	<u>Red Maple</u>	596	20.00	has a hollow trunk	TAKEDOWN
2734	<u>White Pine</u>	596	24.00	there is an oak tree embedded in the trunk creating a cavity, it is on one side towards the neighbor	TAKEDOWN
2740	<u>White Pine</u>	596	39.00	the tree has significant needlecast symptom, consider removal	TAKEDOWN



IV. Conclusion

This report attempts to address selected trees individually that may be involved with the construction project. Additions and exceptions will certainly have to be made as the project evolves. The report should be used as a guide to the contractors and to emphasize that the trees are important to the city and of owners of the property. Hopefully it will assist the owners and its' contractors to work as a team to protect the trees.



McCarthy, Charles W. - *Consulting Arborist*
ISA Certified Arborist

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V. Assumptions and Limiting Conditions

Arbor and Horticulture Advisor – Charles W. McCarthy
(413) 323-0121 cwarborist@charter.net

1. Any legal description provided to the consultant is assumed to be correct. Titles and ownerships to property are assumed to be good and marketable. No responsibility is assumed for legal matters.
2. Care has been taken to obtain all information from reliable sources. All data have been verified insofar as feasible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including additional fees.
4. This report and any values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
6. Unless expressed otherwise, information in this report covers only items that were examined, and reflects the condition of those items at the time of inspection. The inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing, or coring, unless otherwise stated.
7. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
9. Loss or alteration of any part of the report invalidates the entire report. Ownership of any documents produced passes to the Client only when all fees have been paid.

I certify that all the statements of fact in this appraisal are true and correct to the best of my knowledge and belief.

Charles W. McCarthy
Massachusetts Certified Arborist



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ISA Certified Arborist

8/24/2022