



# Basic Tree Risk Assessment Form

Client \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Address/Tree location \_\_\_\_\_ Tree no. \_\_\_\_\_ Sheet \_\_\_\_\_ of \_\_\_\_\_  
 Tree species \_\_\_\_\_ dbh \_\_\_\_\_ Height \_\_\_\_\_ Crown spread dia. \_\_\_\_\_  
 Assessor(s) \_\_\_\_\_ Tools used \_\_\_\_\_ Time frame \_\_\_\_\_

## Target Assessment

Target number	Target description	Target protection	Target zone			Occupancy rate 1 – rare 2 – occasional 3 – frequent 4 – constant	Practical to move target?	Restriction practical?
			Target within drip line	Target within 1 x Ht.	Target within 1.5 x Ht.			
1								
2								
3								
4								

## Site Factors

**History of failures** \_\_\_\_\_ **Topography** Flat  Slope  \_\_\_\_\_ % **Aspect** \_\_\_\_\_  
**Site changes** None  Grade change  Site clearing  Changed soil hydrology  Root cuts  Describe \_\_\_\_\_  
**Soil conditions** Limited volume  Saturated  Shallow  Compacted  Pavement over roots  \_\_\_\_\_ % Describe \_\_\_\_\_  
**Prevailing wind direction** \_\_\_\_\_ **Common weather** Strong winds  Ice  Snow  Heavy rain  Describe \_\_\_\_\_

## Tree Health and Species Profile

**Vigor** Low  Normal  High  **Foliage** None (seasonal)  None (dead)  Normal \_\_\_\_\_ % Chlorotic \_\_\_\_\_ % Necrotic \_\_\_\_\_ %  
**Pests/Biotic** \_\_\_\_\_ **Abiotic** \_\_\_\_\_  
**Species failure profile** Branches  Trunk  Roots  Describe \_\_\_\_\_

## Load Factors

**Wind exposure** Protected  Partial  Full  Wind funneling  \_\_\_\_\_ **Relative crown size** Small  Medium  Large   
**Crown density** Sparse  Normal  Dense  **Interior branches** Few  Normal  Dense  **Vines/Mistletoe/Moss**  \_\_\_\_\_  
**Recent or expected change in load factors** \_\_\_\_\_

## Tree Defects and Conditions Affecting the Likelihood of Failure

### — Crown and Branches —

Unbalanced crown  LCR \_\_\_\_\_ %  
 Dead twigs/branches  \_\_\_\_\_ % overall Max. dia. \_\_\_\_\_  
 Broken/Hangers Number \_\_\_\_\_ Max. dia. \_\_\_\_\_  
 Over-extended branches   
**Pruning history**  
 Crown cleaned  Thinned  Raised   
 Reduced  Topped  Lion-tailed   
 Flush cuts  Other \_\_\_\_\_  
 \_\_\_\_\_ Condition(s) of concern \_\_\_\_\_  
 Part Size \_\_\_\_\_ Fall Distance \_\_\_\_\_  
**Load on defect** N/A  Minor  Moderate  Significant   
**Likelihood of failure** Improbable  Possible  Probable  Imminent   
 Cracks  \_\_\_\_\_ Lightning damage   
 Codominant  \_\_\_\_\_ Included bark   
 Weak attachments  \_\_\_\_\_ Cavity/Nest hole \_\_\_\_\_ % circ.  
 Previous branch failures  \_\_\_\_\_ Similar branches present   
 Dead/Missing bark  Cankers/Galls/Burls  Sapwood damage/decay   
 Conks  Heartwood decay  \_\_\_\_\_  
 Response growth \_\_\_\_\_

### — Trunk —

Dead/Missing bark  Abnormal bark texture/color   
 Codominant stems  Included bark  Cracks   
 Sapwood damage/decay  Cankers/Galls/Burls  Sap ooze   
 Lightning damage  Heartwood decay  Conks/Mushrooms   
 Cavity/Nest hole \_\_\_\_\_ % circ. Depth \_\_\_\_\_ Poor taper   
 Lean \_\_\_\_\_ ° Corrected? \_\_\_\_\_  
 Response growth \_\_\_\_\_  
 Condition(s) of concern \_\_\_\_\_  
 Part Size \_\_\_\_\_ Fall Distance \_\_\_\_\_  
**Load on defect** N/A  Minor  Moderate  Significant   
**Likelihood of failure** Improbable  Possible  Probable  Imminent

### — Roots and Root Collar —

Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Condition(s) of concern \_\_\_\_\_  
 Part Size \_\_\_\_\_ Fall Distance \_\_\_\_\_  
**Load on defect** N/A  Minor  Moderate  Significant   
**Likelihood of failure** Improbable  Possible  Probable  Imminent

## Risk Categorization

Target <i>(Target number or description)</i>	Tree part	Condition(s) of concern	Likelihood											Consequences				Risk rating <i>(from Matrix 2)</i>			
			Failure				Impact				Failure & Impact <i>(from Matrix 1)</i>										
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant		Severe		

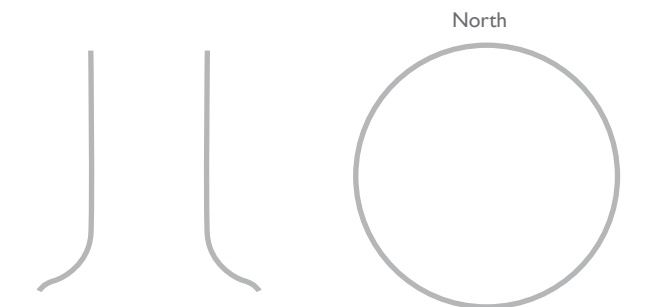
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact			
	Very low	Low	Medium	High
<b>Imminent</b>	Unlikely	Somewhat likely	Likely	Very likely
<b>Probable</b>	Unlikely	Unlikely	Somewhat likely	Likely
<b>Possible</b>	Unlikely	Unlikely	Unlikely	Somewhat likely
<b>Improbable</b>	Unlikely	Unlikely	Unlikely	Unlikely



Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
<b>Very likely</b>	Low	Moderate	High	Extreme
<b>Likely</b>	Low	Moderate	High	High
<b>Somewhat likely</b>	Low	Low	Moderate	Moderate
<b>Unlikely</b>	Low	Low	Low	Low



**Notes, explanations, descriptions**

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**Mitigation options**

1. \_\_\_\_\_ Residual risk \_\_\_\_\_

2. \_\_\_\_\_ Residual risk \_\_\_\_\_

3. \_\_\_\_\_ Residual risk \_\_\_\_\_

4. \_\_\_\_\_ Residual risk \_\_\_\_\_

**Overall tree risk rating**      Low    Moderate    High    Extreme

**Overall residual risk**    None    Low    Moderate    High    Extreme       **Recommended inspection interval** \_\_\_\_\_

**Data**  Final    Preliminary   **Advanced assessment needed**  No    Yes-Type/Reason \_\_\_\_\_

**Inspection limitations**  None    Visibility    Access    Vines    Root collar buried   Describe \_\_\_\_\_

Existing Conditions – Stephens Lake Park Ash Tree #1



Tree Canopy – Leaf



Leaf Loss



Bark Discoloration



Boring Insect Activity