



Basic Tree Risk Assessment Form

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

Target Assessment

| Target number | Target description | 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 _____ 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 planned change in load factors _____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR _____ % Cracks ☐ _____ Lightning damage ☐
Dead twigs/branches ☐ _____ % overall Max. dia. _____ Codominant ☐ _____ Included bark ☐
Broken/Hangers Number _____ Max. dia. _____ Weak attachments ☐ _____ Cavity/Nest hole _____ % circ.
Over-extended branches ☐ Previous branch failures ☐ _____ Similar branches present ☐
Pruning history
Crown cleaned ☐ Thinned ☐ Raised ☐ Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐
Reduced ☐ Topped ☐ Lion-tailed ☐ Conks ☐ Heartwood decay ☐ _____
Flush cuts ☐ Other _____ Response growth _____
Main concern(s) _____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐ _____
Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐ _____

— 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 _____
Main concern(s) _____

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 _____
Main concern(s) _____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐
Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

| Risk Categorization | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|-----------|-----------------------|-----------|---------------|---------------|-------------------|------------|----------|----------|----------|----------|-----|--------|------|----------------------------------|----------|--------|-------------|--------------|-------|-------------|--------|-------------------------------------|
| Condition number | Tree part | Conditions of concern | Part size | Fall distance | Target number | Target protection | Likelihood | | | | | | | | | | | | Consequences | | | | Risk rating of part (from Matrix 2) |
| | | | | | | | Failure | | | | Impact | | | | Failure & Impact (from Matrix 1) | | | | | | | | |
| | | | | | | | Improbable | Possible | Probable | Imminent | Very low | Low | Medium | High | Unlikely | Somewhat | Likely | Very likely | Negligible | Minor | Significant | Severe | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | | | | | | | | | | | | | | | | | | | | | | | |
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| 4 | | | | | | | | | | | | | | | | | | | | | | | |
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Matrix 1. Likelihood matrix.

| Likelihood of Failure | Likelihood of Impacting Target | | | |
|-----------------------|--------------------------------|-----------------|-----------------|-----------------|
| | Very low | Low | Medium | High |
| Imminent | Unlikely | Somewhat likely | Likely | Very likely |
| Probable | Unlikely | Unlikely | Somewhat likely | Likely |
| Possible | Unlikely | Unlikely | Unlikely | Somewhat likely |
| Improbable | Unlikely | Unlikely | Unlikely | Unlikely |

Matrix 2. Risk rating matrix.

| Likelihood of Failure & Impact | Consequences of 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 |

Notes, explanations, descriptions _____

Mitigation options _____ Residual risk _____

_____ Residual risk _____

_____ Residual risk _____

_____ Residual risk _____

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

Work priority 1 ☐ 2 ☐ 3 ☐ 4 ☐

Overall residual risk 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 _____

