



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 —

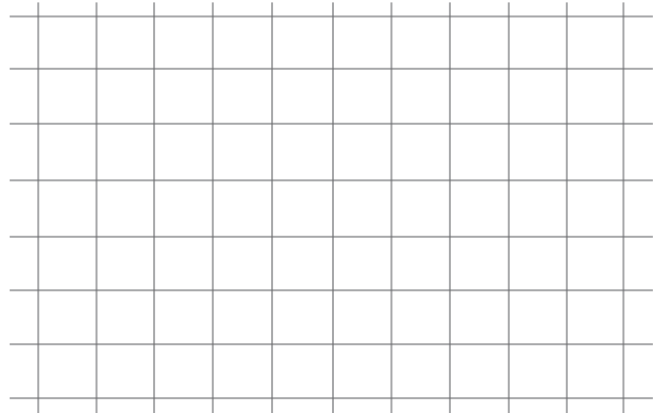
Collar buried/Not visible Depth _____ Stem girdling
 Dead Decay Conks/Mushrooms
 Ooze Cavity _____ % circ.
 Cracks Cut/Damaged roots Distance from trunk _____
 Root plate lifting Soil weakness
 Response growth _____
 Condition(s) of concern _____
 Part Size _____ Fall Distance _____
Load on defect N/A 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> | | | Negligible | Minor | Significant | Severe | | | | | |
| | | | Improbable | Possible | Probable | Imminent | Very low | Low | Medium | High | Unlikely | Somewhat | Likely | | | | | | Very likely | | | |
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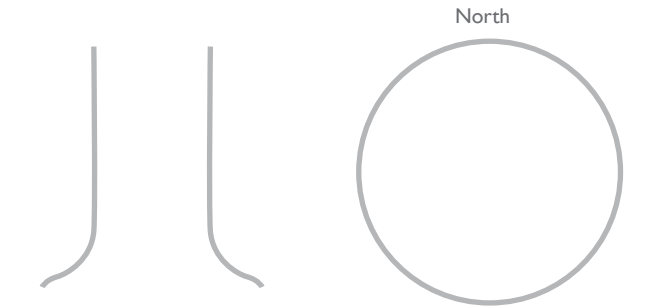
Matrix 1. Likelihood matrix.

| Likelihood of Failure | Likelihood of Impact | | | |
|-----------------------|----------------------|-----------------|-----------------|-----------------|
| | 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

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 _____