Risk Categorization

Target (Target number or description)	Tree part	Condition(s) of concern	Failure: Improbable	Possible	Probable	Imminent	Impact: Very low	Low	Medium	High	F&I: Unlikely	Somewhat	Likely	Very likely	Cons: Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
Home owers house	Whole Tree	Trunk/root rot due to ganoderma infection			X					X			X				X		high
Gov. Kotek Mansion				X				X				X				X			low

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

The trunk that has the exposed conk is the northern trunk of the tree that has significant trunk and root decay these 3 trunks share one root system therefore 33▷35% of the root system will be missing once this stem is gone and with a tree of this size that is unacceptable.

Mitigation options

1. Remove the tree   Residual risk 0%
2. Only remove northern stem (absolute terrible idea)   Residual risk 100%
3. as removing the one stem doesn't stop the fungal infect-   Residual risk ___
4. ion to the remaining root system.   Residual risk ___

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

Overall residual risk   None ☐ Low ☐ Moderate ☐ High ☐ Extreme ☐   Recommended inspection interval 6 months/month (sumertime/winter)

Data ☐Final ☐Preliminary   Advanced assessment needed ☐No ☐Yes-Type/Reason ___

Inspection limitations ☒None ☐Visibility ☐~~Access~~ ☐Vines ☐Root collar buried   Describe has already been dug and exposed/ photos taken.
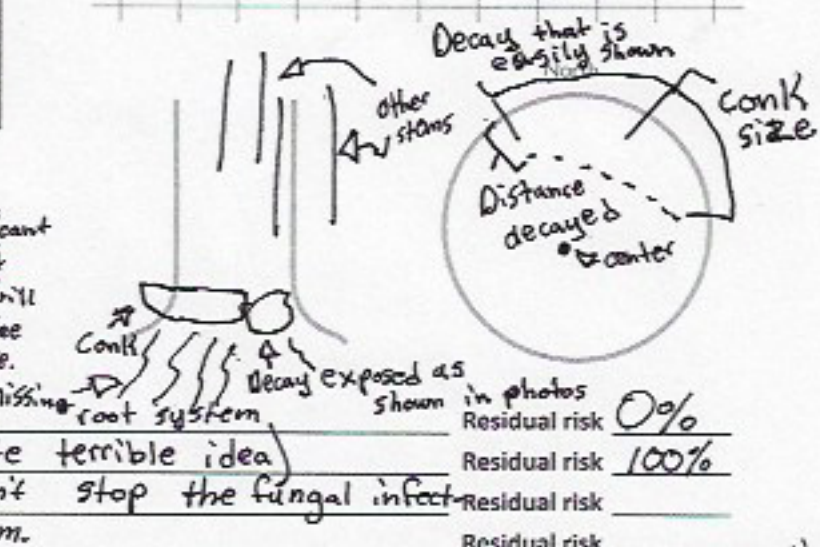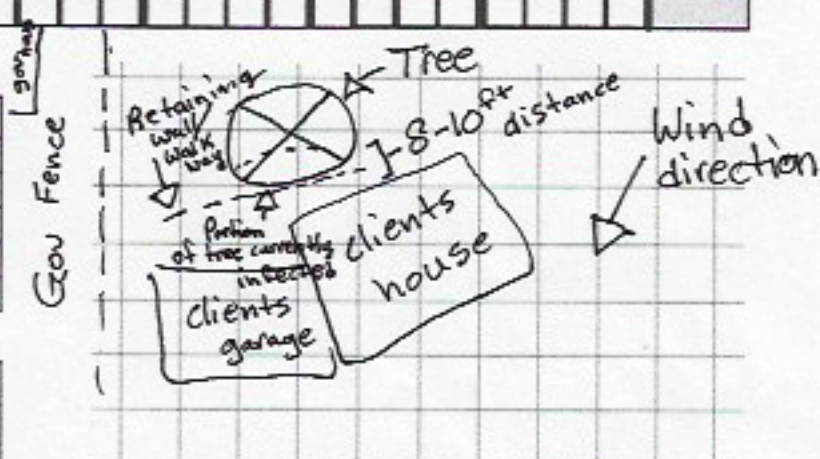
Client **Michael & LeAnne Goodenberger** Date **1-9-24** Time **10:26am**

Address / Tree location **550 Leffelle St S.** Tree no. _____ Sheet **1** of **1**

Tree species **Oregon White Oak** dbh **23"/22"/20"** Height **85-90ft** Crown spread dia. **50→60ft**

Assessor(s) **Elwoods Tree Service** Tools used **probe-shovel** Time frame _____

Target Assessment

Target number	Target description	Target protection	Target zone — Target within drip line	Target within 1 × Ht.	Target within 1.5 × Ht.	Occupancy rate 1—rare 2—occasional 3—frequent 4—constant	Practical to move target?	Restriction practical?
1	Gov. Kotek mansion	NONE			✓	3	NO	
2	Homeowners house	NONE			✓	3	NO	
3								
4								

Site Factors

History of failures **Yes - Ice Storm** Topography Flat ☐ Slope ☒ **20** % 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 **Landscape**

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 **Oak gull** Abiotic _____

Species failure profile Branches ☐ Trunk ☐ Roots ☒ Describe **Tree has Ganoderma fungus**

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 **load factors in bad weather conditions**

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☒ LCR **23** %

Dead twigs/branches ☒ **20** % overall Max. dia. **4"**

Broken/Hangers Number **0** Max. dia. _____

Over-extended branches ☒

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other _____

Minor storm damage

Part Size **whole tree** Fall Distance **85 ft**

Load on defect N/A ☐ Minor ☐ Moderate ☒ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☒ Imminent ☐

Cracks ☐ _____ Lightning damage ☐

Codominant ☒ _____ Included bark ☒

Weak attachments ☒ **stems** Cavity/Nest hole ____ % circ.

Previous branch failures ☒ **Ice** Similar branches present ☐

Dead/Missing bark ☒ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☒ Heartwood decay ☒ _____

Response growth **no wound wood growing**

Condition(s) of concern **around injuries.**

Part Size **12-16" dia** Fall Distance **50 ft**

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 **15** % circ. Depth _____ Poor taper ☒

Lean _____° Corrected? _____

Response growth **N/O wound wood**

Condition(s) of concern **root rot**

Part Size _____ Fall Distance **85 ft**

Load on defect N/A ☐ Minor ☐ Moderate ☒ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☒ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☒ Depth **6-8"** Stem girdling ☐

Dead ☐ Decay ☒ Conks/Mushrooms ☒

Ooze ☐ Cavity ☒ **35** % circ.

Cracks ☐ Cut/Damaged roots ☐ Distance from trunk _____

Root plate lifting ☐ Soil weakness ☐

Response growth **NONE**

Condition(s) of concern **Fungus Ganoderma**

Part Size **whole tree** Fall Distance **85 ft**

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☒

Likelihood of failure Improbable ☐ Possible ☐ Probable ☒ Imminent ☐