NOTICE OF DECISION

PLANNING DIVISION
555 LIBERTY ST. SE, RM 305
SALEM, OREGON 97301
PHONE: 503-588-6173
FAX: 503-588-6005

CITY OF Salem AT YOUR SERVICE

Si necesita ayuda para comprender esta información, por favor llame 503-588-6173

DECISION OF THE PLANNING ADMINISTRATOR

TREE REMOVAL PERMIT: TRP24-34

APPLICATION NO.: 24-117771-PLN

NOTICE OF DECISION DATE: September 3, 2024

REQUEST: A Tree Removal Permit to remove three significant Giant Sequoia trees, approximately 59 inches, 60 inches, and 39 inches in diameter at breast height (dbh). These trees are located at 4824 San Antonio Court NE, a property zoned RS (Residential Single-Family) with Marion County Assessor's Map and Tax Lot number 072W17CC / 07200.

APPLICANT: Dennis and Debbie Engelhard

LOCATION: 4824 San Antonio Court NE, Salem OR 97305

CRITERIA: Salem Revised Code (SRC) Chapter 808.030(d)(1)

FINDINGS: The findings are in the attached Decision dated September 3, 2024.

DECISION: The **Planning Administrator APPROVED** TRP24-34 based upon the application materials and the findings as presented in this report.

Approval of a Tree Removal permit application does not expire.

This decision is final; there is no local appeal process. Any person with standing may appeal this decision by filing a "Notice of Intent to Appeal" with the Land Use Board of Appeals, 775 Summer St NE, Suite 330, Salem OR 97301-1283, not later than 21 days after the decision date. Anyone with questions regarding filing an appeal with the Oregon Land Use Board of Appeals should contact an attorney.

The following items are submitted to the record: 1) All materials and evidence submitted by the applicant, including any applicable professional studies; and 2) All materials, evidence, and comments from City Departments and public agencies. The application materials are available on the City's online Permit Application Center at https://permits.cityofsalem.net. You may use the search function without registering and enter the permit number listed here: 24 117771.

Case Manager: Quincy Miller, Planner I, qmiller@cityofsalem.net, 503-584-4676

http://www.cityofsalem.net/planning

BEFORE THE PLANNING ADMINISTRATOR OF THE CITY OF SALEM

DECISION

IN THE MATTER OF APPROVAL OF	**)**	**FINDINGS & ORDER**
TREE REMOVAL PERMIT	**)**	
CASE NO. TRP24-34	**)**	
4824 SAN ANTONIO CT NE	**)**	**SEPTEMBER 3, 2024**

In the matter of the application for a Tree Removal Permit, the Planning Administrator, having received and reviewed evidence and the application materials, makes the following findings and adopts the following order as set forth herein.

REQUEST

A request to remove three significant Giant Sequoia trees, approximately 59 inches, 60 inches, and 39 inches in diameter at breast height (dbh). These trees are located at 4824 San Antonio Court NE, a property zoned RS (Residential Single-Family) with Marion County Assessor's Map and Tax Lot number 072W17CC / 07200. A location map identifying the subject property is included as **Attachment A**.

PROCEDURAL FINDINGS

1. On August 20, 2024, an application for a Tree Removal Permit was submitted for property located at 4824 San Antonio Court NE.

2. On September 3, 2024, the application was deemed complete.

SUBSTANTIVE FINDINGS

1. Proposal

The application states that there are ten trees on the property, with three Giant Sequoias proposed for removal along with two stumps proposed for removal. The remaining seven trees on the property have been identified for preservation, with no other heritage trees, significant trees, or riparian corridor trees or vegetation located on the property.

2. Applicability

SRC 808.015 Significant Trees. No person shall remove a significant tree, unless the removal is undertaken pursuant to a tree and vegetation removal permit issued under SRC 808.030.

DECISION CRITERIA FINDINGS

3. Analysis of Tree Removal Permit Approval Criteria:

SRC 808.030(d)(1) Hazardous tree. The condition or location of the tree presents a hazard or danger to persons or property; and the hazard or danger cannot reasonably be

alleviated by treatment or pruning, or the tree has a disease of a nature that even with reasonable treatment or pruning is likely to spread to adjacent trees and cause such trees to become hazardous trees.

Finding: The applicant provided an arborist's report (**Attachment B**) as well as the arborist's ISA Risk Assessment (**Attachment C**) for the three Giant Sequoia's slated for removal. These reports provided measurements and analysis of the three Giant Sequoias along with the history of the two Giant Sequoia stumps that are also proposed to be removed. Tree 1 refers to the Giant Sequoia with a dbh of 59 inches, Tree 2 refers to the Giant Sequoia with a dbh of 60 inches, and Tree 3 refers to the Giant Sequoia with a dbh of 39 inches.

According to the arborist's report, all three trees have experienced significant lightning damage, with the top part of Tree 1 failing completely in 2021 after an ice storm caused the top part of the tree to land on the roof of the property. All three trees are also leaning at least 10% towards the property or a neighboring property. This instability is also due to the canopy being "unbalanced," as the three remaining Giant Sequoias grew tightly with two other Giant Sequoias that have died (the two stumps also proposed for removal). The critical root zone for all three trees is also stated to have been compromised, further endangering the health of the remaining Giant Sequoias. The arborist also states that due to the previous damage to the trees, all three Giant Sequoias have a high likelihood of total failure within the next ten years, with a high likelihood of impacting property and/or people.

Due to the extensive existing damage to the trees themselves and to the critical root zones of the trees, the three Giant Sequoias on the property are leaning significantly and pose a hazard to persons and property. Therefore, per the arborist's recommendation, the three Giant Sequoias and two stumps shall be removed.

IT IS HEREBY ORDERED

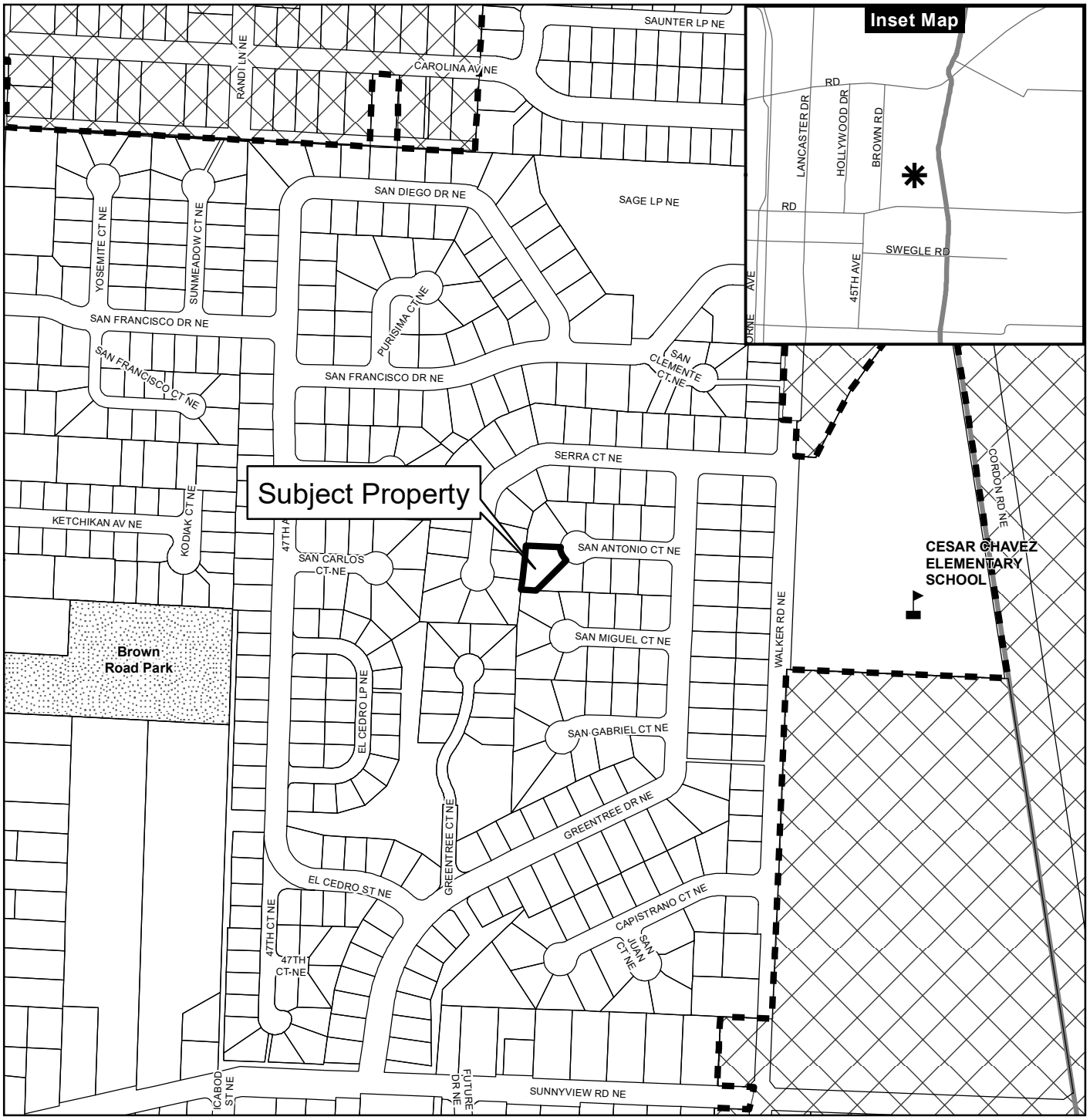
The proposed Tree Removal Permit is consistent with the provisions of SRC Chapter 808 and is hereby **APPROVED (or approved** subject to the following conditions).

Quincy Miller, Planner I, on behalf of,
Lisa Anderson-Ogilvie, AICP
Planning Administrator

Attachments:

A. Vicinity Map
B. Arborist Report
C. Arborist ISA Risk Assessment

Vicinity Map
4824 San Antonio Court NE



Legend

- Taxlots
- Urban Growth Boundary
- City Limits
- Outside Salem City Limits
- Historic District
- Schools
- Parks

0 100 200 400 Feet

CITY OF Salem AT YOUR SERVICE

Community Planning and Development

C:\Users\qmiller\Desktop\GIS_Local\VicinityMap.mxd - 8/30/2024 @ 12:37:44 PM

August, 15th 2024

From: Will Fargo
ISA Certified Arborist PN-9313A
willfargo@gmail.com
503-881-6004

ATTN: City of Salem

RE: 4824 San Antonio Ct. NE Salem, OR 97305

To Whom it May Concern,

I have been contracted by property owners Dennis and Debbie Engelhard to evaluate three (3) Giant Sequoia (*Sequoia sempervirens*) trees bordering their property's west property line. In addition to providing a basic Tree Risk Assessment using standardized tree risk assessment criteria established by the International Society of Arboriculture (ISA) I have also provided recommendations to mitigate any risk associated with these trees. The trees are identified as *Tree 1* (59" DBH), *Tree 2* (60" DBH) and *Tree 3* (39" DBH). Photos of the evaluated trees are attached to this report.

In evaluating these trees, it was determined that this was originally a grove of five (5) closely spaced Giant Sequoia trees that grew up together and are approximately 50-60 years old at present day. The two northernmost trees of the grove have already been removed as they were badly damaged by a lightning storm approximately ten (10) years ago. Additionally, the top, or apical meristem or *Tree 1* experience a complete failure in the ice storm of 2021 with the top of the tree landing on the property owner's roof. The remaining three trees have significant lightning damage. The lightning damage to *Tree 1* and *Tree 2* has exceeded the tree's ability to compartmentalize the damage and has led to noticeable decline. An almost certain impending death of *Tree 2* can be seen by the presence of a dead top, or apical meristem.

While the lightning damage to these trees is significant and appears to be leading to the trees decline, a far more significant risk is total tree failure. It should be noted that *Tree 1* is leaning (10%) towards Dennis and Debbie Engelhard's property, *Tree 2* is leaning (10%) towards the neighbor's home to the South and *Tree 3* leans (15%) west towards another neighboring house. Because the trees grew up together in a tight grove, their canopies are unbalanced, with the majority of the canopy weight compounding the lean of the trees. Moreover, in discussing the history and future plans for the property, the root zones on all four sides of the grove have been compromised: On the North side of the grove's critical root zone, two Giant Sequoia trees have already been removed. As the roots from these two trees decay, the intertwining roots from the remaining three

trees will lose stability. Additionally, when the homeowners proceed with stump grinding and replanting of the two trees removed, the existing trees will be unavoidably damaged and further destabilized. On the West side of the critical root zone, a fence and raised garden bed have been built on the neighbor's property altering the natural grade of the soil. On the east side of the critical root zone, the property owners have brought in fill dirt in an attempt to better grow a lawn in the backyard. They reported extensive soil compaction and existing root damage during this process. The entire root plate from these trees is significantly uplifted approximately two (2) feet from the natural grade. The property owners have noticed additional root plate uplifting in recent years and recently had to replace a leaking automatic sprinkler line that broke (likely due to root plate uplift) on the south side of the grove's critical root zone. It is unknown how long this line had been broken and fully saturating the tree's critical root zone.

Because Giant Sequoia trees are a very long lived species I chose a ten year time frame over a typical five year time span used for these reports. Given the significant lean of all three trees towards high risk targets, and the lean compounded by an imbalance canopy and deteriorating root zone, I found total tree failure within ten years to be probable with a high likelihood of impacting targets. Given the severe consequences of total tree failure, all three trees are determined to be high risk trees and are recommended to be removed.

When Giant Sequoia trees grow up together in a grove they become very interdependent. Absent the lightning strike ten years ago, these trees would have had a good chance of supporting one another into old age. However, because the lightning has already caused the death of two of these trees and a third (*Tree 2)* is badly in decline, it is inevitable that the other trees will fail as well. Giant Sequoia trees naturally have shallow intertwined roots which they use to support one another. Given the general decline of these trees and the significantly compromised critical root zone, it is essential that you remove these trees to avoid total tree failure, which becomes more and more likely as root zone degradation progresses.

Should there be any questions or concerns regarding this inspection, please don't hesitate to reach out.

Sincerely,

Will Fargo
503-881-6004
willfargo@gmail.com
ISA Certified Arborist PN-9313A


2
1

1
2
3


1 3

ISA Basic Tree Risk Assessment Form

Client Dennis & Debbie Engelhard Date 8/15/24 Time 2:00PM

Address/Tree location 4824 San Antonio Ct. NE Salem, OR 97305 Tree no. 1 Sheet 1 of 2

Tree species Giant Sequoia (Sequoia sempervirens) dbh 60" Height 90' Crown spread dia. 25'

Assessor(s) William L. Fargo Tools used DBH Tape **Time frame** 10 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1–rare 2–occasional 3–frequent 4–constant)	Practical to move target?	Restriction practical?
1	House	None	X			4	No	No
2	Occupants	None	X			3	No	No
3								
4								

Site Factors

History of failures Lightning strike ~ 2014 Ice Storm ~ 2021 Trunk and branch failures **Topography** Flat☐ Slope☒ 5 % **Aspect** W

Site changes None☐ Grade change☒ Site clearing☒ Changed soil hydrology☒ Root cuts☒ Describe See attached report

Soil conditions Limited volume☒ Saturated☒ Shallow☒ Compacted☒ Pavement over roots☐ ____% Describe See attached report

Prevailing wind direction WSW **Common weather** Strong winds☐ Ice☐ Snow☐ Heavy rain☐ Describe

Tree Health and Species Profile

Vigor Low☐ Normal☒ High☐ **Foliage** None (seasonal)☐ None (dead)☐ Normal 90 % Chlorotic ____% Necrotic 10 %

Pests/Biotic Boring insects **Abiotic** Lightning damage

Species failure profile Branches☐ Trunk☐ Roots☒ Describe Shallow, intertwining roots

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 Degrading root zone and trunk

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown☒ LCR 100 %

Dead twigs/branches☒ 10 % overall Max. dia. 2"

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches☐

Pruning history

Crown cleaned☒ Thinned☐ Raised☒

Reduced☐ Topped☐ Lion-tailed☐

Flush cuts☐ Other ____

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 ____

Condition(s) of concern Crown weight compunds tree lean

Part Size ____ Fall Distance ____

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

Likelihood of failure Improbable☐ Possible☒ Probable☐ Imminent☐

Condition(s) of concern ____

Part Size ____ Fall Distance ____

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 10 ° Corrected? ____

Response growth ____

Condition(s) of concern See attached report

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 See attached report

Part Size ____ Fall Distance ____

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

Likelihood of failure Improbable☐ Possible☐ Probable☒ Imminent☐

Risk Categorization

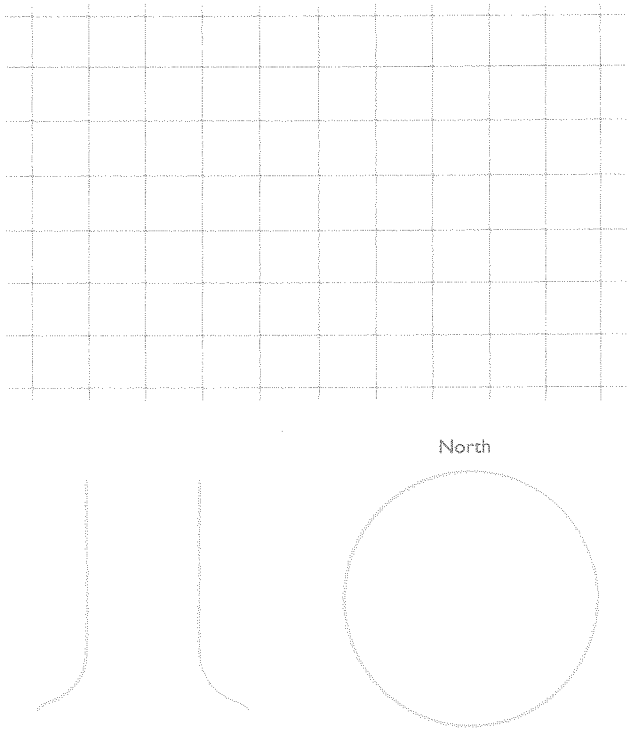
Target *(Target number or description)*	Tree part	Condition(s) of concern	Likelihood												Consequences				Risk rating *(from Matrix 2)*
			Failure				Impact				Failure & Impact *(from Matrix 1)*								
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	
House	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x					x			x					x	High
Occupants	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x				x			x						x	Mod

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

See attached report

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 _____

ISA Basic Tree Risk Assessment Form

Client Dennis & Debbie Engelhard Date 8/15/24 Time 2:00PM

Address/Tree location 4824 San Antonio Ct. NE Salem, OR 97305 Tree no. 2 Sheet 1 of 2

Tree species Giant Sequoia (Sequoia sempervirens) dbh 59" Height 90' Crown spread dia. 20'

Assessor(s) William L. Fargo Tools used DBH Tape **Time frame** 10 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1x Ht.	Target zone: Target within 1.5x Ht.	Occupancy rate (1–rare 2–occasional 3–frequent 4–constant)	Practical to move target?	Restriction practical?
1	Neighbor's house, greenhouse and sheds	None		X		4	No	No
2	Property owners	None	X			3	No	No
3								
4								

Site Factors

History of failures Lightning strike ~ 2014 Ice Storm ~ 2021 Trunk and branch failures **Topography** Flat☐ Slope☒ 5 % **Aspect** W

Site changes None☐ Grade change☒ Site clearing☒ Changed soil hydrology☒ Root cuts☒ Describe See attached report

Soil conditions Limited volume☒ Saturated☒ Shallow☒ Compacted☒ Pavement over roots☐ ____% Describe See attached report

Prevailing wind direction WSW **Common weather** Strong winds☐ Ice☐ Snow☐ Heavy rain☐ Describe ____

Tree Health and Species Profile

Vigor Low☒ Normal☐ High☐ **Foliage** None (seasonal)☐ None (dead)☐ Normal 80 % Chlorotic 10 % Necrotic 10 %

Pests/Biotic Boring insects **Abiotic** Lightning damage

Species failure profile Branches☐ Trunk☐ Roots☒ Describe Shallow, intertwining roots

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 100 %

Dead twigs/branches☒ 10 % overall Max. dia. 2"

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches☐

Pruning history

Crown cleaned☑ Thinned☐ Raised☒

Reduced☐ Topped☐ Lion-tailed☐

Flush cuts☐ Other ____

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 ____

Condition(s) of concern ____

Part Size ____ Fall Distance ____

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

Likelihood of failure Improbable☐ Possible☑ Probable☐ Imminent☐

Part Size ____ Fall Distance ____

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 ____

Condition(s) of concern See attached report

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 See attached report

Part Size ____ Fall Distance ____

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

Likelihood of failure Improbable☐ Possible☐ Probable☑ Imminent☐

Risk Categorization

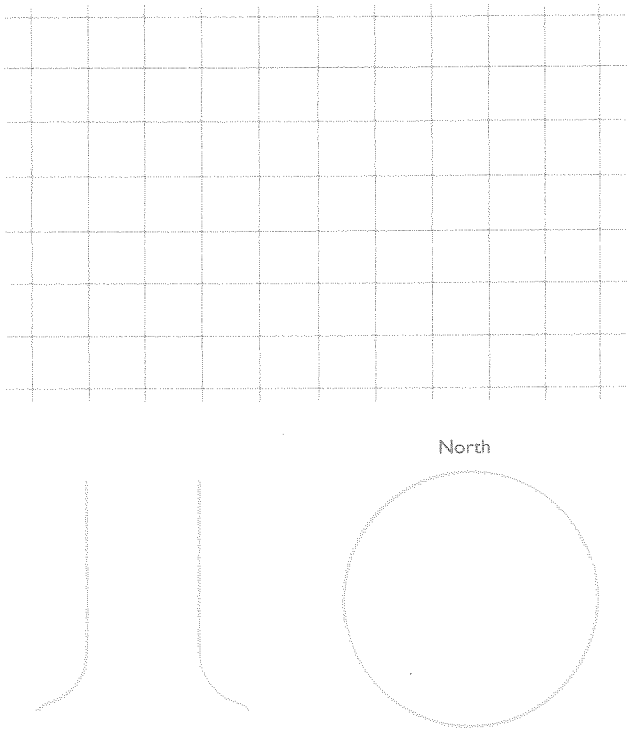
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood												Consequences				Risk rating (from Matrix 2)
			Failure				Impact				Failure & Impact (from Matrix 1)								
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	
Neighbor's house,	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x					x			x					x	High
greenhouse and																			
sheds																			
Property owners	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x				x			x						x	Mod

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

See attached report

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 _____

ISA Basic Tree Risk Assessment Form

Client Dennis & Debbie Engelhard Date 8/15/24 Time 2:00PM

Address/Tree location 4824 San Antonio Ct. NE Salem, OR 97305 Tree no. 3 Sheet 1 of 2

Tree species Giant Sequoia (Sequoia sempervirens) dbh 39" Height 90' Crown spread dia. 25'

Assessor(s) William L. Fargo Tools used DBH Tape **Time frame** 10 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1x Ht.	Target zone: Target within 1.5x Ht.	Occupancy rate (1–rare 2–occasional 3–frequent 4–constant)	Practical to move target?	Restriction practical?
1	Neighbor's house	None	X			4	No	No
2	Neighbors	None	X			3	No	No
3								
4								

Site Factors

History of failures Lightning strike ~ 2014 Ice Storm ~ 2021 Trunk and branch failures **Topography** Flat☐ Slope☒ 5 % **Aspect** W

Site changes None☐ Grade change☒ Site clearing☒ Changed soil hydrology☒ Root cuts☒ Describe See attached report

Soil conditions Limited volume☒ Saturated☒ Shallow☒ Compacted☒ Pavement over roots☐ ____% Describe See attached report

Prevailing wind direction WSW **Common weather** Strong winds☐ Ice☐ Snow☐ Heavy rain☐ Describe

Tree Health and Species Profile

Vigor Low☒ Normal☐ High☐ **Foliage** None (seasonal)☐ None (dead)☐ Normal 80 % Chlorotic 5 % Necrotic 15 %

Pests/Biotic Boring insects **Abiotic** Lightning damage

Species failure profile Branches☐ Trunk☐ Roots☒ Describe Shallow, intertwining roots

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 See attached report

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown☒ LCR 100 %

Dead twigs/branches☒ 10 % overall Max. dia. 2"

Broken/Hangers Number Max. dia.

Over-extended branches☐

Pruning history

Crown cleaned☒ Thinned☐ Raised☒

Reduced☐ Topped☐ Lion-tailed☐

Flush cuts☐ Other

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

Crown weight compunds tree lean — Condition(s) of concern

Part Size Fall Distance

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

Likelihood of failure Improbable☐ Possible☒ Probable☐ Imminent☐

Part Size Fall Distance

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 10 ° Corrected?

Response growth

Condition(s) of concern See attached report

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 See attached report

Part Size Fall Distance

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

Likelihood of failure Improbable☐ Possible☐ Probable☒ Imminent☐

Risk Categorization

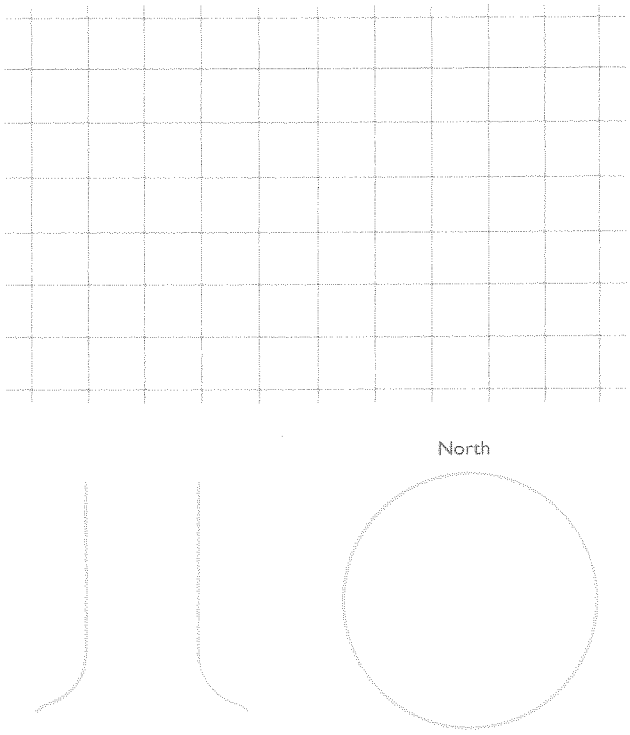
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Somewhat	Likely	Very likely	Consequences: Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
Neighbor's house,	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x					x			x					x	High
Neighbors	Trunk and canopy	Lean compounded by an imbalanced crown. Deteriorated and declining root stability.			x				x					x				x	Mod

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

See attached report

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 _____