



9/22/2022

Emily Moran  
State Street Homes  
123 NW Northrup St #125  
Portland, OR 97209

## **Re: Tree Protection Plan for 38015 HWY 26, Sandy, Oregon**

### **Summary**

The property at 38015 Hwy 26 in Sandy, Oregon is planned for development and the construction of a 48,811 square foot, four-story building. Also planned is a parking lot with seventy-six spaces, and a shared access road on the west side of the property.

### **Assignment**

Prepare a Tree Protection Plan to meet the requirements outlined in the City of Sandy Code 17.102.

### **Observations**

A tree inventory of the undeveloped site was completed on 9/20/2022. All trees on the property were included in the inventory, as well as trees on adjacent properties which may be impacted by the planned construction. Twenty-four (24) trees will be impacted by site disturbance and are recommended for removal. Twenty-two (22) trees bordering the property are recommended to be retained and protected due to their location on neighboring properties and/or their health and structure.

### **Discussion**

The proposed changes to the site will be within the critical root zones of existing trees. Existing asphalt will be removed and replaced, and new sidewalk will be excavated and poured. Twenty-four (24) trees are recommended for removal to accommodate the new construction. It is not possible to retain these trees with the proposed development. Twenty-two (22) trees around the outside of the of the planned construction shall be protected as outlined in the tree protection plan (Appendix 5). The trees to be retained and protected are near the property lines and in some cases on adjacent properties. Tree protection zones shall be fenced during the duration of the project and no changes to the native soil in these areas is planned.

As outlined in Appendix 5, the project arborist shall be onsite during excavation within the critical root zones of retained trees 13.2, 14, 15, 21, 23, 24, 25, 26, 28, 29, 31, and 32. The project consulting arborist shall evaluate and oversee the proper cutting of roots with sharp cutting tools. If many significant roots are encountered during excavation in the zones highlighted in Appendix 5, an alternative layout for areas requiring excavation should be considered to maintain the health and safety of retained trees. Alternate methods of construction may also be necessary for the preservation of significant roots of retained trees. Other construction methods include but are not limited to: bridging over significant roots, constructing sidewalks on top of grade over landscape fabric without excavation, and using post and beam construction instead of conventional footing foundations within the critical root zone.

## Recommendations

Based on the proposed development, my observations, and requirements of the proposed development at 38015 Hwy 26, I recommend the following actions:

1. **Tree protection fencing.** Tree protection fencing that is a minimum of six-feet tall and chain link shall be installed per the tree protection plan (Appendix 5).
  - a. Tree protection fencing is to be installed before any ground disturbing activities and remain in place for the duration of the project, or a planning official approves removal.
  - b. Tree protection is not to be moved without written consent from the project arborist.
2. **Tree removal.** Remove twenty-four (24) trees negatively impacted by site improvements.
3. **Report sharing.** Share this report in its entirety to the project team, including contractors performing demolition and concrete work.

Additional tree protection recommendations for the trees to be retained are included in Appendix 3, Tree Protection Specifications.

## Conclusion

The proposed renovation to the north of the north parking lot will require the removal of twenty-four (24) trees. Tree protection fencing shall be installed for the twenty-two (22) trees near or over the property line on adjacent properties that may be impacted by site disturbance. The project arborist shall be present during excavation within the critical root zones outlined in Appendix 5. This report meets the requirements outlined in the City of Sandy Code 17.102.

Please contact me if you have questions, concerns, or need any additional information.

Sincerely,

*Caleb Lattimer*

Caleb Lattimer  
ISA Certified Arborist®, PN-8644A  
ISA Tree Risk Assessment Qualified  
caleb@teragan.com

## Enclosures:

- |             |                                     |
|-------------|-------------------------------------|
| Appendix 1: | Certification of Performance        |
| Appendix 2: | Assumptions and Limiting Conditions |
| Appendix 3: | Tree Protection Specifications      |
| Appendix 4: | Tree Inventory                      |
| Appendix 5: | Tree Protection Plan                |

## **Appendix 1: Certification of Performance**

I, Caleb Lattimer, certify:

- That a representative of Teragan & Associates, Inc., has inspected the tree(s) and/or the property referred to in this report. The extent of the evaluation is stated in the attached report.
- That Teragan & Associates, Inc. has no current or prospective interest in the vegetation of the property that is the subject of this report, and Teragan & Associates, Inc. has no personal interest or bias with respect to the parties involved.
- That Teragan & Associates, Inc.'s compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- That the analysis, opinions, and conclusions that were developed as part of this report have been prepared according to commonly accepted arboricultural practices.
- That a Board-Certified Master Arborist has overseen the gathering of data.

## **Appendix 2: Assumptions and Limiting Conditions**

1. Any legal description provided to the consultant is assumed to be correct. Teragan and Associates, Inc. checked the species identification and tree diameters in the field.
2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
4. Loss or alteration of any part of this delivered report invalidates the entire report.
5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
6. The consultants' role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
7. This report is to certify the trees that are on site, their size and condition and create a tree plan. Tree plan to include the measures necessary to protect trees that are to be retained during the construction process.

## Appendix 3: Tree Protection Specifications

It is critical that the following steps be taken to ensure that trees slated for retention are protected.

### **Before Construction Begins**

- 1. Tree removals** within the tree protection area.
  - a. Prior to construction, allow tree removal within the tree protection area to occur.
    - i. The project arborist shall oversee the removal of any trees within the tree protection zone.
  - b. Installing tree protection fencing immediately following the removal of trees within the tree protection area (see 3 below). Tree protecting shall be installed after removals to ensure:
    - i. Tree removals are performed safely.
    - ii. Tree protection fencing is not accidentally or intentionally moved.
- 2. Notify all contractors of the tree protection procedures.** For successful tree protection on a construction site, all contractors must know and understand the goals of tree protection. It can only take one mistake with a misplaced trench or other action to destroy the future of a tree.
  - a. Hold a Tree Protection meeting with all contractors to fully explain goals of tree protection.
  - b. Have all sub-contractors sign memoranda of understanding regarding the goals of tree protection. Memoranda to include penalty for violating tree protection plan. Penalty to equal appraised value of tree(s) within the violated tree protection zone per the current Trunk Formula Method as outline by the Council of Tree & Landscape Appraisers current edition of the *Guide for Plant Appraisal*. Penalty is to be paid to owner of the property.
- 3. Fencing.**
  - a. Establish fencing around each tree or grove of trees to be retained.
  - b. The fencing is to be put in place before the ground is cleared in order to protect the trees and the soil around the trees from any disturbance at all.
  - c. Fencing is to be placed at the edge of the root protection zone. Root protection zones are to be established by the project arborist based on the needs of the site and the tree to be protected.
  - d. Fencing is to consist of 6-foot high chainlink fence secured to the ground with metal posts every ten feet to prevent it from being moved by contractors, sagging or falling down OR as required by municipal code.
  - e. Fencing is to remain in the position that is established by the project arborist and not to be moved without written permission from the project arborist until the end of the project.
- 4. Signage**
  - a. All tree protection fencing should have signage as follows so that all contractors understand the purpose of the fencing:

**VEGETATION/TREE PROTECTION ZONE**

**DO NOT REMOVE OR ADJUST THIS FENCING.**

**The fence locations are approved to protect vegetation & trees.**

**NOTE: Moving these fences is a civil violation.**

Please contact the Code Enforcement Specialist and project arborist if alterations to the approved location of the protection fencing is requested.

Project Arborist: TERAGAN & ASSOCIATES, INC 503-697-1975

- b. Signage should be placed as to be visible from all sides of a tree protection area and spaced every 75 feet.

**During Construction**

**1. Protection guidelines Within the Root Protection Zone**

- a. No traffic shall be allowed within the root protection zone. No vehicle, heavy equipment, or even repeated foot traffic.
  - b. No storage of materials including but not limiting to soil, construction material, or waste from the site.
    - i. Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc.
  - c. Construction trailers are not to be parked / placed within the root protection zone without written clearance from project arborist.
  - d. No vehicles shall be allowed to park within the root protection areas.
  - e. No activity shall be allowed that will cause soil compaction within the root protection zone.
- 2. Tree pruning.** The trees shall be protected from any cutting, skinning or breaking of branches, trunks or roots.
- 3. Root pruning.** Any roots that are to be cut from existing trees that are to be retained, the project consulting arborist shall be notified to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots are to be immediately covered with soil or mulch to prevent them from drying out.
- 4. Grade changes.** No grade change should be allowed within the root protection zone.
- 5. Root protection zone changes.** Any necessary deviation of the root protection zone shall be cleared by the project consulting arborist or project owner.
- 6. Watering.** Provide water to trees during the summer months. Tree(s) that will have had root system(s) cut back will need supplemental water to overcome the loss of ability to absorb necessary moisture during the summer months.
- 7. Utilities.** Any necessary passage of utilities through the root protection zone shall be by means of tunneling under roots by hand digging or boring.

**After Construction**

- 1. Landscaping.** Carefully landscape in the area of the tree. Do not allow trenching within the root protection zone. Carefully plant new plants within the root protection zone. Avoid cutting the roots of the existing trees.

2. **Irrigation.** Do not plan for irrigation within the root protection zone of existing trees unless it is drip irrigation for a specific planting or cleared by the project arborist.
3. **Drainage.** Provide for adequate drainage of the location around the retained trees.
4. **Tree pruning.** Pruning of the trees should be completed as one of the last steps of the landscaping process before the final placement of trees, shrubs, ground covers, mulch, or turf.
5. **Pest and disease inspection.** Provide for inspection and treatment of insect and disease populations that can damage the retained trees and plants.
6. **Fertilization.** Trees that are retained may need to be fertilized as called for by project arborist after final inspection.



Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
001	Colorado blue spruce	<i>Picea pungens</i>	14	Poor	Poor		X	
002	western red cedar	<i>Thuja plicata</i>	6	Fair	Good		X	
002.1	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good	Good	Tree may be on property to east		X
002.2	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good	Good	Tree may be on property to east		X
002.3	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east. Obvious large surface roots at 8' from base of tree.		X
002.4	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree may be on property to east		X
003	western red cedar	<i>Thuja plicata</i>	8	Fair	Good		X	
004	Colorado blue spruce	<i>Picea pungens</i>	12	Good	Good		X	
004.1	Colorado blue spruce	<i>Picea pungens</i>	10	Good	Good		X	
005	western red cedar	<i>Thuja plicata</i>	11	Good	Good		X	
006	windmill palm	<i>Trachycarpus fortunei</i>	6	Good	Good		X	
006.1	Japanese maple	<i>Acer japonica</i>	2				X	
007	windmill palm	<i>Trachycarpus fortunei</i>	10	Good	Good	Tree on property to west	X	
008	western red cedar	<i>Thuja plicata</i>	10	Poor	Fair	Tree on property to west	X	
009	English holly	<i>Ilex aquifolium</i>	4	Good	Good	Tree on property to west	X	
010	sugar maple	<i>Acer saccharum</i>	16	Fair	Fair		X	
010.1	rhododendron	<i>Rhododendron</i>	4	Good	Good		X	
011	Norway spruce	<i>Picea abies</i>	15	Good	Good		X	
011.1	Japanese andromeda	<i>Pieris japonica</i>	3	Fair	Fair		X	
012	golden chain tree	<i>Laburnum anagyroides</i>	7	Fair	Fair	Sweeping trunk at base, codominant stems at 3'	X	
013	photinia	<i>Photinia serratifolia</i>	6	Good	Good		X	
013.1	photinia	<i>Photinia serratifolia</i>	6	Fair	Fair		X	
013.2	bigleaf maple	<i>Acer macrophyllum</i>	23	Poor	Poor	Tree may be on property to east. Thin crown		X
014	photinia	<i>Photinia serratifolia</i>	12	Good	Fair	Decay at base, tree may be on property line.		X
015	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Good	Tree on neighboring property to east		X
016	golden chain tree	<i>Laburnum anagyroides</i>	8	Poor	Poor	Tree on property to east. Significant decay in stem.		X
017	thundercloud plum	<i>Prunus cerasifera</i>	6	Fair	Fair	Tree on property to east		X
018	golden chain tree	<i>Laburnum anagyroides</i>	9	Fair	Fair	Tree on property to east		X

Survey Number	Common Name	Scientific Name	DBH	Condition Health	Condition Structure	Field Notes/ Comments	Remove	Retain
019	golden chain tree	<i>Laburnum anagyroides</i>	8	Fair	Fair	Tree on property to east. Significant decay in stem		X
020	thundercloud plum	<i>Prunus cerasifera</i>	4	Fair	Fair	Tree on property to east		X
021	sweet cherry	<i>Prunus avium</i>	10	Poor	Poor	Tree on property to south. Thin crown with ivy in crown		X
022	sweet cherry	<i>Prunus avium</i>	6	Good	Good		X	
023	casacara	<i>Frangula pershiana</i>	6	Good	Good	Tree on property to south		X
024	sweet cherry	<i>Prunus avium</i>	12	Fair	Fair	Tree on property to south		X
025	sweet cherry	<i>Prunus avium</i>	10	Poor	Fair	Tree on property to south		X
026	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Tree on property to south. Stem originates on neighboring property		X
027	sweet cherry	<i>Prunus avium</i>	6	Poor	Poor	Tree appears to be on property to be developed	X	
028	bigleaf maple	<i>Acer macrophyllum</i>	28	Good	Fair	Multiple stems at base. Deadwood in crown		X
028.1	English holly	<i>Ilex aquifolium</i>	4	Fair	Fair	Tree appears to be on property to be developed	X	
029	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Retain. Tree on property to east		X
030	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
031	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Good	Tree on property to east		X
032	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Good	Tree on property to east		X
033	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
034	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Fair	Tree base inaccessible. Branches at ground level	X	
035	bigleaf maple	<i>Acer macrophyllum</i>	12	Fair	Fair	Tree inaccessible. Suppressed crown	X	



Laurus Designs, LLC



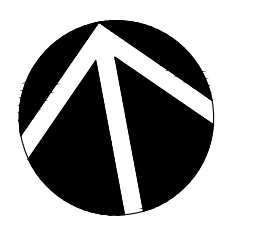
1012 Pine Street  
Silverton, Oregon  
503.784.6494

Multi-Family  
Sandy

38015 Highway 26  
Sandy, Oregon



EXISTING TREE INVENTORY



SCALE: 1"=30'-0"  
0' 15' 30' 60'  
SCALE

July 11th, 2022

REVISIONS

#	DATE	NOTES	INITIALS

L1.1

SHEET 1 OF 2

PROJECT # 1409R

Legend:

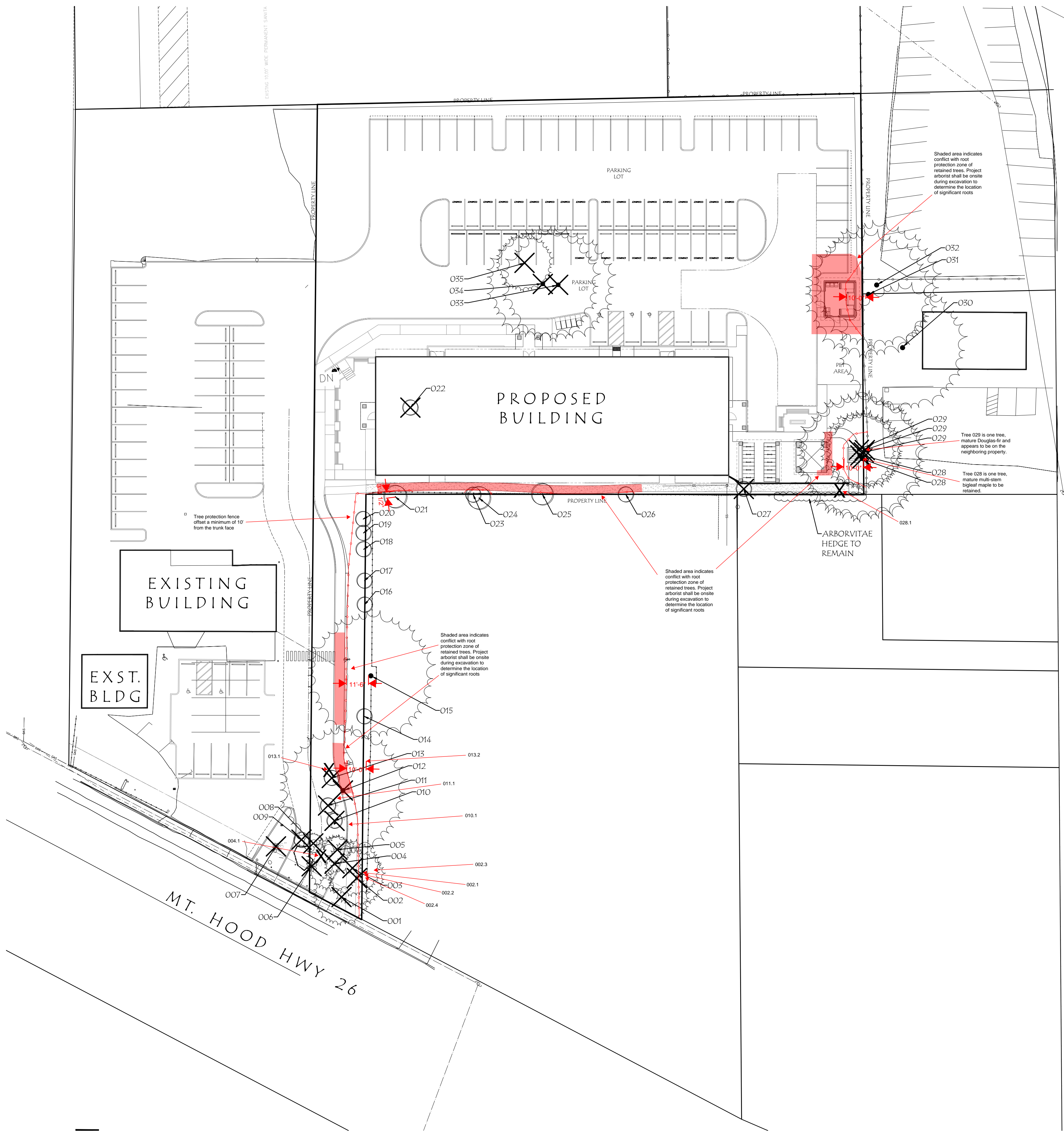
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING PALM TREE
- EXISTING TREE TO BE REMOVED
- TREE IDENTIFICATION NUMBER

General Notes:

1. TREE LOCATIONS BASED ON SITE SURVEY.
2. SEE ARCHITECTURAL PLANS FOR SITE INFORMATION.
3. TREE INVENTORY TABLE SEE THIS SHEET.

Existing Tree Inventory

TREE ID	TREE SPECIES	SIZE (DBH)	NOTES	REMAIN/REMOVE
001	Blue Spruce	12"		Remove, Development Impacts
002	Western Red Cedar	4"		Remove, Development Impacts
003	Western Red Cedar	8"		Remove, Development Impacts
004	Blue Spruce	10"		Remove, Development Impacts
005	Western Red Cedar	8"		Remove, Development Impacts
006	Windmill Palm	10"		Remove, Development Impacts
007	Windmill Palm	6"		Remove, Development Impacts
008	Conifer (Unknown)	10"	Dead	Remove
009	Holly	4"		Remove, Development Impacts
010	Sugar Maple	14"		Remove, Development Impacts
011	Cherry	14"		Remove, Development Impacts
012	Douglas Fir	24"		Remove, Development Impacts
013	Cherry	6"		Remove, Development Impacts
014	Filbert	14"		Remain
015	Douglas Fir	26"		Remain
016	Redbud	5"	Located on Property Line	Remain
017	Holly	5"	Located on Property Line	Remain
018	Thundercloud Plum	4"	Located on Property Line	Remain
019	Redbud	5"	Located on Property Line	Remain
020	Thundercloud Plum	4"	Located on Property Line	Remain
021	Red Maple	10"	Located on Adjacent Property	Remain
022	Filbert	6"		Remove, Development Impacts
023	Cherry	4"	Located on Property Line	Remain
024	Red Maple	6"	Located on Adjacent Property	Remain
025	Cherry	10"	Located on Property Line	Remain
026	Cherry	6"	Located on Property Line	Remain
027	Redbud	5"		Remove, Development Impacts
028	Douglas Fir	18", 18"	Located on Property Line	Remove, Development Impacts
029	Douglas Fir	12", 12", 12"	Located on Property Line	Remove, Development Impacts
030	Douglas Fir	36"	Located on Adjacent Property	Remain
031	Douglas Fir	36"	Located on Adjacent Property	Remain
032	Douglas Fir	36"	Located on Adjacent Property	Remain
033	Douglas Fir	24"		Remove, Development Impacts
034	Douglas Fir	24"		Remove, Development Impacts
035	Douglas Fir	12"		Remove, Development Impacts



N. BLUFF RD

MT. HOOD HWY 26