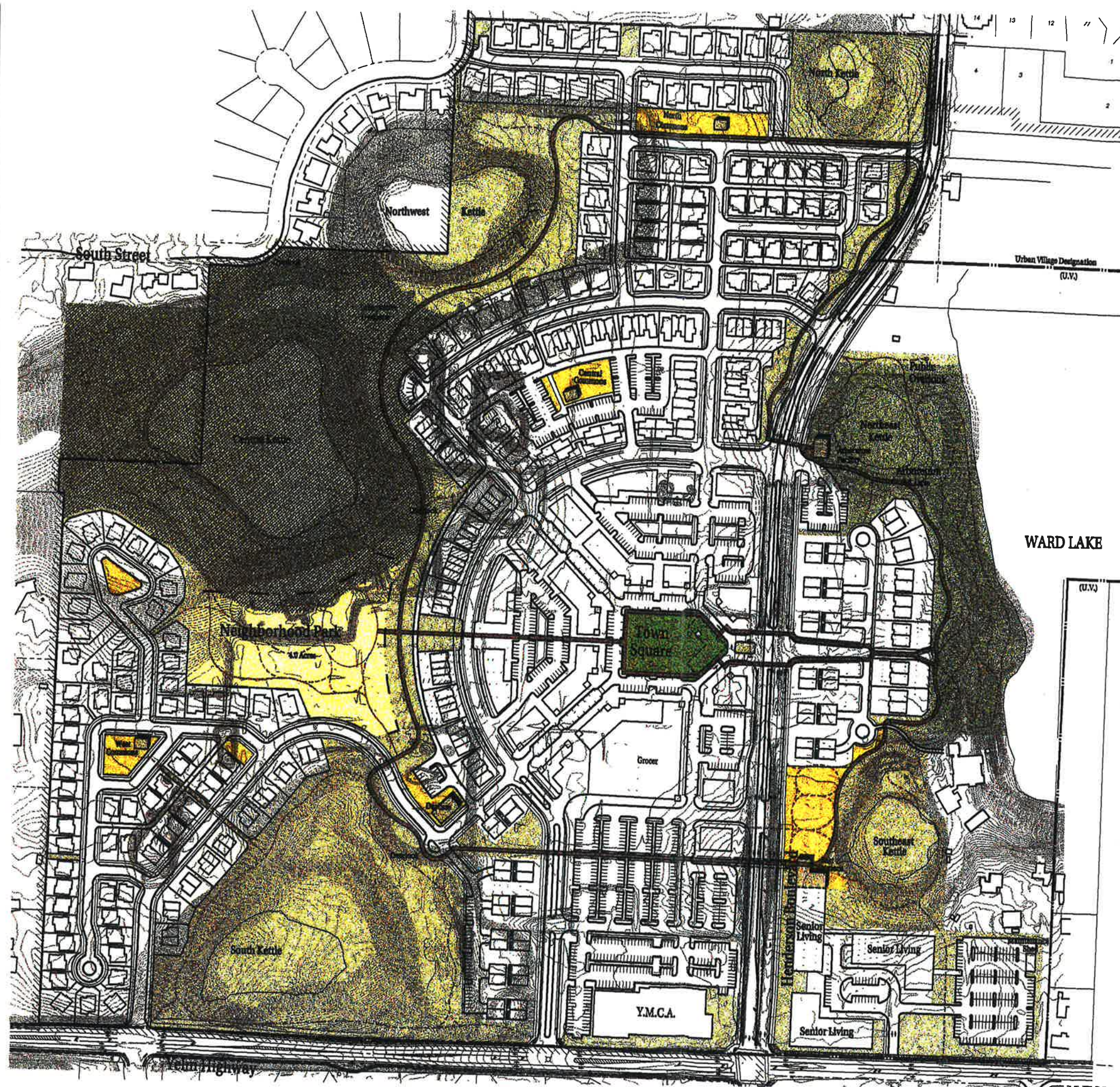


Briggs Village

Open Space Plan



Legend

	Acres	
	Neighborhood Park 4.0	City Owned
	Commons 2.5	
	Town Square 1.0	
	Arboretum 6.7	
	Greenbelt 43.1	
TOTAL: 57.3		
	Wetlands Restoration Area Overlay 17.3	

NOTE: Open space acreage consists of all landscape areas intended for village-wide use, and excludes parking areas and building footprints of community-type facilities.

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Tree Plan

The Briggs Village Tree Plan is intended to meet the City of Olympia Tree Ordinance and Urban Forestry Manual Requirements for a Level V Tree Plan. The three main elements of a tree plan, as identified in the ordinance, are:

- Tree Survey
- Tree Protection Plan
- Tree Planting Plan

Briggs Master Plan Approach & Methodology

The phased nature of the Briggs Village may warrant a modified approach to meeting the requirements of the tree ordinance. This proposed Briggs Tree Plan intends to show how the overall intent of the tree ordinance is satisfied at a Master Plan scale and level of detail, particularly the 30 tree unit per acre density requirement. The detailed planting plans (showing critical root zones), cost estimates, and detailed site prep, installation and maintenance plans are more appropriately submitted at the time of preliminary plat for each phase of the project.

Tree Survey

The Briggs tree inventory was completed by nurserymen from the Briggs Nursery, the landscape architect, and project planner. The inventory was completed in February and March of 1997 through field surveys, using the methods described in the tree ordinance. The existing conditions for the five major areas of tree cover are shown on the schematic map, Tree Survey, and listed in a matrix of trees by type, size, protection potential, and tree "units" for each of the areas in Appendix D, Tree Survey.

Tree Protection Plan

General locations of tree removal are described below, as relates to the five major areas of tree cover. Specific groves or individual trees will be identified at the preliminary plat of each development phase. Potential tree protection and maintenance measures will be applied as described in Urban Forestry Manual at the time of preliminary plat.

- | | |
|--------------------------|---|
| Arboretum: | Tree removal shall be limited to creation of view corridors for the village and arboretum facility, and as needed to maintain health of trees and safety of residents. Limbing trees and maintaining cover, rather than tree removal, is the preferred method for protecting both views and the necessary canopy. The Arboretum Foundation will present a landscaping and tree plan as part of the Arboretum's overall development for review and approval. When approved, the Arboretum Plan will become part of the overall Briggs Village Master Plan. The Arboretum Plan is expected to be developed in connection with the East Residential Phase. |
| Northeast Kettle: | Tree removal shall be limited as needed to maintain the health of existing trees and the safety of residents. |
| North Kettle: | Tree removal shall be limited as needed to maintain the health of existing trees and the safety of residents. |

- Central Kettle:** Tree removal not needed, "snags" shall be left in Central Kettle as part of wetland mitigation plan to restore habitat functions.
- South Kettle:** Tree removal shall be limited to that needed to create an entry road to the village from Yelm Highway, to create a limited number of buildable lots on the west edge of the kettle, and to construct the regional stormwater facility serving the village and Yelm Highway.

Briggs Tree Planting Plan

Briggs Village easily meets the required tree densities through the protection of the existing tree cover and the significant planting of the upland forest surrounding the Central Kettle (as part of the wetland mitigation plan). Required tree density calculations are shown in Appendix D.

Opportunities for new tree plantings are described below. The amount, type, and placement of trees will be determined during future stages of development, once the Master Plan has been approved and as part of the preliminary plat process, where street and lot layout is confirmed and refined. Site prep, installation and maintenance measures, timelines and cost estimates will be determined during preliminary plat for each development phase. (Please see the Briggs Village Design Guidelines for descriptions of appropriate street tree types.)

North Residential Phase Neighborhood

Opportunities for tree planting in the North Residential Phase include the street trees (please see Street Tree Plan), the area adjacent to the North Kettle along Henderson Boulevard, and the commons area.

West Residential Phase Neighborhood and Central Kettle

Opportunities for tree planting in the West Residential Phase include:

- Street trees (please see Street Tree Plan).
- The significant upland forest planting described in the Central Kettle wetland mitigation plan.
- Planting designed by the City in developing the Neighborhood Park.
- The area adjacent to the South Kettle screening the regional stormwater treatment facility.
- The commons area.

Central Residential Phase: Multi-family Housing Development

The commons area within the multi-family development should offer limited opportunities for tree plantings, given the need to provide some recreational facilities within the project. Tree planting along the alleyway and the pedestrian connection to the Northwest Kettle, shall be considered during the site planning for this development.

Appendix D

Tree Inventory and Plan Calculations

Briggs Tree Plan		Tree Inventory: Tree Units by Area				
		Area A: Wards Lake Slope & Arboretum	Area B: Mead Property & Northeast Kettle	Area C: Northwest Kettle	Area D: Central Kettle	Area E: South Kettle
Ornamental Tree Units						
Mobile Fir		242				242
California Incense Cedar		1	1		1	1
Norway Spruce		1	2		2	2
Oregon Spruce		20	1		16	42
English Holly						1
Prun					13	13
Apple				2		2
CrabApple						
Native Tree Units						
Big Leaf Maple	2,035	569	27	255	423	2,290
Red Alder	2,132	661	868	1,195	135	4,711
Flbort	35	40	71	97	141	284
Indian Plum	150			15	150	315
Cherry	7	28			36	71
Douglas Fir	688	228	45		1,005	1,967
Willow	14	15	200		346	775
Western Red Cedar	328	1			3	332
Unknown	68				1	69
Cottonwood	1				201	272
Hawthorne		71		2	195	2
Black Locust					5	155
Elderberry						6
Specimen Tree Units						
Cottonwoods						174
Big Leaf Maple		174				71
Douglas Fir					71	71
Other						142
Total Tree Units by Area		5,480	2,054	911	1,655	3,001
Site Tree Density:						13,082
Site Area	137					
Buildable Area	100					
Min. Tree Density	2,000					

Briggs Tree Plan										
Tree Inventory: Tree Units by Area, by %										
	Area A: Wards Lake Slope & Arboretum		Area B: Mead Property & Northeast Kettle		Area C: Northwest Kettle		Area D: Central Kettle		Area E: South Kettle	
	Count	%	Count	%	Count	%	Count	%	Count	%
Ornamental Tree Units										
Plum			1					13		13
Apple								2		2
CrabApple										
Subtotal			1				15			16
Native Tree Units										
Big Leaf Maple	2,744	40%	529	28%	27	3%	255	15%	423	14%
Red Alder	2,715	28%	687	34%	568	62%	1,195	72%	135	4%
Firbelt	35	1%	40	2%	71	6%	87	6%	141	5%
Indian Plum	150	2%				0%	15	1%	150	5%
Cherry	19		28	1%		0%			36	1%
Douglas Fir	785	11%	228	11%	45	5%			1,005	33%
Willow	14		15	1%	200	22%			546	18%
Western Red Cedar	329	5%	1						3	
Western Hemlock	88	1%							89	
Unknown	1								1	
Noble Fir			242	12%					242	
California Incense Cedar			1						1	
Norway Spruce			1						2	
Oregon Spruce			2						2	
Cottonwood			71	3%					201	7%
Hawthorne							2		195	6%
Black Locust									6	
Elderberry									195	6%
English Holly									42	
Subtotal	6,890		20	1%	911		6		16	
Specimen Tree Units										
Cottonwoods			98	5%					98	
Big Leaf Maple			74	4%			71	4%	145	
Douglas Fir							71		142	
Subtotal			172				142	5%	142	
Total Tree Units by Area	6,890		2,068		911		1,656		3,001	14,495

Briggs Tree Plan
Tree Units Lost & Planted

	Area A				Area B				Area C			
	Wards Lake Slope & Arboretum				Mead Property & North Kettle				Northwest Kettle			
	Existing	% Lost	Planted	Total	Existing	% Lost	Planted	Total	Existing	% Lost	Planted	Total
Ornamental Tree Units												
Noble Fir					242	100%	-	-				-
California Incense Cedar					4	100%	-	-				-
Norway Spruce					1	100%	-	-				-
Omerika Spruce					2	100%	-	-				-
English Holly					20	100%	-	-				-
Plum					1	100%	-	-				-
Apple								-				-
CrabApple								-				-
								-				-
Native Tree Units								-				-
Big Leaf Maple	2,036				549	10%		494	27			27
Red Alder	2,132				681	10%		613	568			568
Filbert	35				40	10%		36	71			71
Indian Plum	150							-				-
Cherry	7				28	10%		25				-
Douglas Fir	689				228	50%		114	45	50%		23
Willow	14				15			15	200			200
Willow								-				-
Western Red Cedar	328				4	10%		1				-
Western Hemlock	68							-				-
Unknown	1							-				-
Cottonwood					71	10%		64				-
Hawthorne								-				-
Black Locust								-				-
Elderberry								-				-
Ash								-				-
								-				-
Specimen Tree Units								-				-
Cottonwoods					174			174				-
Big Leaf Maple								-				-
Douglas Fir								-				-
Other								-				-
								-				-
Total Tree Units by Area	5,460	30%		3,822	2,054			1,536	911			889

**Briggs Tree Plan
Tree Units Lost & Planted**

	Area D Central Kettle				Area 6 South Kettle				Totals			
	Existing	% Lost	Planted	Total	Existing	% Lost	Planted	Total	Existing	% Lost	Planted	Total
Ornamental Tree Units												
Noble Fir				-				-	242		-	-
California Incense Cedar				-				-	1		-	-
Norway Spruce				-	1	100%		-	2		-	-
Omerika Spruce				-				-	2		-	-
English Holly	6	100%		-	16	100%		-	42		-	-
Plum				-				-	1		-	-
Apple	13	100%		-				-	13		-	-
CrabApple	2	100%		-				-	2		-	-
Native Tree Units												
Big Leaf Maple	255		1,723	1,978	423	10%		381	3,290		1,723	2,880
Red Alder	1,195	50%	1,381	1,978	135	10%		122	4,711		1,381	3,280
Filbert	97			97	141	10%		127	384		-	331
Indian Plum	15			15	150			150	315		-	165
Cherry			61	61	36	10%		32	71		61	119
Douglas Fir			6,510	6,510	1,005	50%		503	1,967		6,510	7,149
Willow			1,132	1,132	546			546	775		1,132	1,893
Willow			252	252								
Western Red Cedar				-	3	10%		3	332		-	4
Western Hemlock			3,441	3,441	1			1	69		3,441	3,442
Unknown				-				-	1		-	-
Cottonwood				-	201	10%		181	272		-	245
Hawthorne	2			2				-	2		-	2
Black Locust				-	195			195	195		-	195
Elderberry				-	6			6	6		-	6
Ash			194	194								
Specimen Tree Units												
Cottonwoods				-				-			-	-
Big Leaf Maple	71			16				-	174		-	174
Douglas Fir				-	142			142	71		-	71
Other				-				-	142		-	142
Total Tree Units by Area	1,656		14,694	15,731	3,001			2,388	13,082		14,694	24,365

**Briggs Village
Tree Removal and Planting Plan**

Tree Removal

Retain "removal" trees as habitat, especially snags

Tree loss: Roads & Trails, Residential Lots, Stormwater Facilities

**Central Kettle: West edge, "plug", of central kettle; up to 50% of small alders
Trails along north edge; will grade to avoid trees**

**South Kettle: Stormwater facilities mean loss of willow (est. 100%)
Yelm Highway widening may mean loss of doug firs (await Tumwater plan)
Roads may mean loss of doug firs (est. 10%); will plan around specimen trees
Residential development may retain trees on lots**

NW Kettle: Residential development may result in 50% loss of doug firs

**North Kettle: Roads and residential lots may result in 50% loss of doug firs,
10% of alder/maple mix
Residential lots will likely eliminate ornamentals on Mead property**

**Arboretum: Trails to be graded to avoid trees
View Corridors**

Remove non natives, ornamentals, within wetland areas

Wetland mitigation will involve removal of non-native, invasive plants

Tree Planting

Tree planting densities based on % of cover as in reference wetlands:

**Central Kettle: 125% coverage equals 1388 stems/acre
(including existing trees)**

South Kettle: 75% - 100% coverage equals 1000 - 1100 stems/acre

North/NW kettles: No planting

Arboretum: No planting

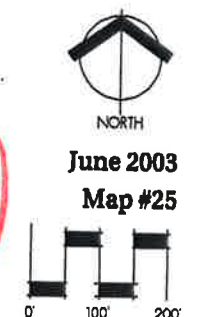
Briggs Village Tree Inventory

Legend

-  *Salix lasiandra*
-  *Corylus cornuta*
-  *Pseudotsuga menziesii*
-  **Mix as Noted:**
Predominant tree types account for over 10% of area total.)
 - Arboretum Mix:**
 - *Acer macrophyllum*
 - *Alnus rubra*
 - Northeast Kettle Mix:**
 - *Acer macrophyllum*
 - *Alnus rubra*
 - Northwest Kettle Mix:**
 - *Alnus rubra*
 - *Salix lasiandra*
 - Central Kettle Mix:**
 - *Acer macrophyllum*
 - *Alnus rubra*
 - Foley/ DeNike Area Mix:**
 - *Alnus rubra*
 - *Pseudotsuga menziesii*
 - South Kettle Mix:**
 - *Acer macrophyllum*
 - Specimen *Pseudotsuga menziesii*

NOTE: See Tree Inventory Table for complete list of tree types.

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