

PARKS, RECREATION TREES, & TRAILS ADVISORY BOARD SPECIAL MEETING AGENDA December 14, 2021 | 4:30 p.m. | Virtual Meeting

****The State of Emergency declared by Governor Inslee temporarily prohibits in-person contacts with the public required by the Open Public Meetings Act and the Public Records Act. The May 29, 2020 Public Health Order by Jefferson County Health Officer Thomas Locke also states no in-person meetings are allowed. Participation will be by teleconference****

- Join via computer or tablet at <u>http://joinwebinar.com</u> enter 9 digit Webinar ID 489-143-707
- Join by phone in listen-only mode: (360) 390-5064 Ext. 3 access code: 177-060-048#
- Submit public comment emails to be read aloud (up to three minutes per person) to: publiccomment@cityofpt.us

I. Call to Order/Roll Call

II. Public Comment (3 minutes per person/agenda items only)

III. Old Business

- A. Boatyard Expansion and Sims Way Poplar Replacement See attached recommended process for public engagement and tree replacement (Staff recommendation and board discussion) - 20 min
- B. Tree list discussion See attached lists (Chair Jahnke and board discussion) 20 min

IV. New Business

- A. 2022 Work Planning Process and Training (Heidi Greenwood, no action) 15 min
- B. Discovery Road Project Landscaping Introduction (Steve King and Laura Parsons, no action) 20 min

V. Staff update – Steve (5-10 minutes)

- A. Pool Brief
- B. Kearney Street intersection WSDOT project options
- C. Park Maintenance Accomplishment See attached

VI. Next Regularly Scheduled Meeting: February 22, 2022

VII. Adjourn

Parking Lot/Future Meetings

Right of Way Principles

PARKS, RECREATION & TREE ADVISORY BOARD MEETING MINUTES

Date: October 26, 2021

Time: 4:30 p.m.

Location: City Hall (virtual)

Members Present: Debbie Jahnke, Jennifer Rotermund, Jim Todd, John Nowak, Sean Koomen, Brenda McMillan

Members Excused:

Members Absent:

Staff Present: City Manager Mauro, Public Works Director Steve King, Parks Lead Operator Bre Ganne, and Deputy City Clerk Haylie Clement

Торіс	Motions/Recommendation/Action
Approval of Agenda:	The agenda was unanimously approved.
Approval of Minutes:	The minutes of August 24, 2021 were unanimously approved.
Public Comment:	There was none.
Old Business: Gateway Park Tree Replacement. Public Works Director Steve King provided a list of tree replacement options and encouraged discussion amongst the board regarding the priority of tree variety. The following options were considered: California Ash (not readily available), Monterey Cypress, Palm, Corkscrew Willow, Scarlet Oak, Sweet Gum, Shore Pine, Linden, and Himalayan Cedar.	Through consensus, the Board recommended three possibilities. From the August meeting, California Ash. Alternatively, Monterey Cypress or an Interior Live Oak (landmark tree at Pierce and Lawrence). A Monterey Cypress is doing well nearby in similar conditions at Kah Tai.
Old Business: Arbor Day Report: Board member Jennifer Rotermund shared an overview of her acceptance of the proclamation on Oct. 4 th . Jennifer also provided a summary of the Adopt a Native Tree event on Oct. 17 th as a great success. Chair Jahnke also reflected positively on both.	No action. The Board issued thanks to Jennifer and recognition of her acceptance speech and how it related to the Poplar Replacement project.

Old Business: Poplar Tree Removal and Replacement along Sims Way. Public Works Director Steve King briefed the Board on development since the last meeting as well as announced a virtual town hall meeting planned for November 9 th at 5:00 p.m. Steve solicited advice and comments concerning the project and public response.	 No Action Taken. The Board offered the following comments: Ensure that there is adequate funding to complete the replacement project. There is concern based on past experience that the funds run out and the replacement of trees suffer. Recommend doing more proactive outreach to the media to get the facts out. Recognize local expertise and comments such as the letters to the editor and comments to Council. Stay away from monoculture; focus on natives Clarify the funding sources Highlight the values desired to be addressed.
Old Business: Retroactive Review of Work Plan Summary for Council Retreat . Chair Jahnke provided an overview of the information provided to the City Manager and City Council dated July 4, 2021. Chair Jahnke asked if the Board concurred with the priorities given they had not had the chance to review.	No Action was taken. The Board reviewed the work plan summary retroactively. By consensus, the board supported and agreed with Chair Jahnke's recommendations to the City Council. The next meeting will include an overview of the work planning process by City Attorney Heidi Greenwood.
New Business: Safe Space for Youth . John Nowak provided a summary of his work with youth and their desire to identify locations where youth can gather in a safe outdoor or large building environment.	No Action was taken. The Board, City Manager Mauro, and Steve King brainstormed options. The group acknowledged that the City does not have a space that meets the goal. The group suggested contacting the PDA regarding Fort Worden, the County regarding the Community Center, and the YMCA regarding space at Mountain View.
New Business: ARPA Funding . City Manager Mauro provided the board with an overview of how ARPA funding will be utilized to bring on a 2-year contract position to facilitate strategic planning for the Golf Course, Mountain View Campus, and sustainable parks and recreation funding.	No Action: The Board provided unanimous support and suggested very proactive community outreach.

New Business: DNR TreeLink, Tree of Heaven and Spotted Lantern Fly . Chair Jahnke provided an overview of concerns raised by DNR regarding the spread of the invasive species, Ailanthus (Tree of Heaven) and that it is the natural host for the invasive pest, the Spotted Lantern Fly. Chair Jahnke suggested a volunteer approach to mapping Ailanthus as a way to engage the community and raise awareness around the issue or potential problem that	No Action: The Board discussed and suggested involving the School (Middle School/High School). The Board was supportive of this effort.
 would result from an infestation of the Spotted Lantern Fly. New Business: Trails and Volunteering. Steve King presented acknowledgement of the desire of volunteers to work on trails and expressed thanks. Steve expressed that this is a goal to empower volunteers given the great needs around 31 miles of the City trail system. 	No Action. The Board expressed support for growing volunteer involvement.
Staff Update: Steve King provided a brief update on a number of park, trails, and tree related topics including pool operations being officially transferred to the YMCA, the skatepark fence project being completed, Pickleball discussion clarification that the City Council has not approved the project, and staffing including introducing our new employee, Shawn Wiles. Kurt Hardesty with the Street Dept. was also recognized as our new arborist. A future meeting will include right of way principles.	No Action. The Board was supportive of the next meeting including right of way principles discussion and overview.
Public Comment and Board Comment:	No public comment.
Next Meeting : The next regular meeting is scheduled early for December 14, 2021 at 4:30	
The meeting adjourned at approximately <mark>5:45</mark> p.m.	



Boat Yard Expansion and Sims Way Poplar Replacement Project Recommended Public Process

Introduction:

Public engagement and local stakeholder involvement in this Boat Yard Expansion and Sims Way Poplar Replacement project is critical for successful outcomes. The focus of this recommended public process is its focus on the tree replacement and Sims Way gateway enhancement elements of the project. Based on public feedback to date, the following process is recommended to provide for stepwise stakeholder process that affords the opportunity to bring well thought out information to the public in several steps prior to the City Council making decisions on elements of the final plan.

Stepwise Stakeholder Process

- After the December 15th Public Meeting, the partners (City, Port, and PUD) will solicit for professional services to include engineering for the boatyard expansion, general electrical design associate with the expansion and location of the underground transmission, and Sims way improvements including the path, Poplar replacement, and landscaping. For the Poplar replacement and Sims Way work we will be soliciting for expertise in Landscape Architecture and Arboriculture with knowledge of our Municipal Code's guidance on the importance of native species, species diversity and conifer/deciduous ratios.
- Once a team of professionals is hired, the City will convene a 10 member stakeholder committee made up of 2-3 local experts in arboriculture, a Parks Recreation Trail and Tree Advisory Board (PRTTAB) liaison, and representatives for tourism, Port/boatyard/marine trades, PUD/safety, Admiralty Audubon/Kah Tai. City, Port, and PUD staff will also participate.
- 3. A series of stakeholder meetings will help the team establish the appropriate replacement plan. The intent being that developing the poplar replacement plan will be a participatory process, inclusive of community members and agency stakeholders. However, there will be guardrails in place such as project budget and having PRTTAB and City Council approval.
- 4. Once the plan has been established, the plan will be presented to the PRTTAB for recommendation of approval or not to the City Council.
- 5. Once the PRTTAB has provided a recommendation, City staff will provide the final decision making to the City Council.
- 6. City Council's final decision will be on the replacement plan for the poplars. The boat yard expansion and overhead undergrounding work are independent of the decision making for the poplar replacement, yet the City, Port, and PUD agree that a single well-coordinated project with the final vision for the poplar replacement known early in the design development process is a key element to the overall project success.

Public Engagement

Public engagement and transparency of the process are critical. The use of town hall events in this era of COVID safety is a forum for providing transparency and soliciting public feedback. Periodic townhall events are anticipated. In addition, presentations to the PRTTAB and the City Council are opportunities for public engagement. The PRTTAB is the forum for the public to engage in the decisions making process.

Draft Recommendations to Accompany Street Tree List Update

Introduction

The City of Port Townsend has been a TreeCity USA for approximately 15 years. A Tree Committee, Commission, Board or Department is required to maintain TreeCity status. The responsibilities of a Tree Committee are listed in Resolution 09-029, which added Tree Committee duties to those of the existing Parks and Recreation Advisory Board.

Port Townsend's current Street Tree List is dated 2009. Street tree guidance in the City's Engineering and Design Standards dates back to 1997. Guiding documents for best practices require regular updates to incorporate new information. In keeping with Resolution 09-029 Section 2.A.2.g., the Parks, Recreation and Tree Advisory Board (PRTAB) has examined the City's current Street Tree List and the relevant sections on street trees in the Port Townsend Engineering and Design Standards with the goal of recommending updates. Street tree and urban forestry guidance was collected from Washington Department of Natural Resources Urban Forestry and other regional jurisdictions in Washington and Oregon as well as government and research websites and published documents. The PRTAB considered the following guidelines stated by Eugene OR Street Tree List Update Evaluation Criteria (2014) in updating the list:

'Goals for the updated list include:

• Remove species that are invasive, overplanted, susceptible to insects or diseases, frequently fail or cause damage or require high levels of maintenance; and

• Add species that are native, species that require low maintenance, are durable, provide habitat and environmental benefits and that will be climate resilient' (1)

In addition, Port Townsend's current street tree documents are silent on the important concern of species diversity in street tree planning. In the past, street tree plantings have favored monocultures in the pursuit of visual uniformity but PRTAB has more commonly found support in the literature for guidelines such as a 10:20:30 rule with no single species representing more than 10%, no genus representing more than 20% and no family representing more than 30% of trees planted (cf. 1-3). Recent guidance suggests that visual similarity and species diversity can be accomplished with careful planning (2).

The proposed update has been reformatted to be more concise and inclusive of information. It includes updates of Sections A, C, E, and F in the current list. It omits updates of Lists B and D, as those are both for large and large columnar trees. Given Port Townsend's street scale, available planting strip widths, and expected life span of street trees, large trees are generally inappropriate for street trees. A separate list could be developed for parks and open spaces that can accomodate large trees.

Recommendations

PRTAB recommends:

- that staff adopt the proposed 2017 update of the street tree list;
- that Council append by ordinance the proposed 2017 update to the Engineering and Design Standards to update the 20-year old street tree list in the Standards;
- that the City not exempt itself from its own Municipal Code Tree Conservation Ordinance with regard to species diversity in street tree planting plans, specifically Title 19.06.130.B.5;
- that future street tree planting plans be shared with PRTAB for discussion prior to City approval so that any concerns observed or changes recommended by the advisory board can be contributed in a timely manner.

References

1. *City of Eugene Approved Street Tree Species List: Selection Process, Definitions, and Evaluation Criteria* (2014) Eugene Public Works Department, Eugene OR.

2. Bassuk, N., P. Trowbridge, and C. Grohs. [n.d.] *Visual Similarity and Biological Diversity: Street Tree Selection and Design*. Cornell University Urban Horticulture Institute. (accessed March 2017). http://www.hort.cornell.edu/uhi/outreach/pdfs/ visually_compatible_trees.pdf.

3. Pittsburgh Urban Forest Master Plan: A Road Map for the Effective Management of our Urban Forest, Appendix D. Tree Diversity Goals and Recommendations (2012) (accessed April 2017).

Other resources consulted for tree list update

City of Dupont Citizen's Tree Care Manual (2012) Dupont WA.

City of Eugene Approved Street Tree Species List (2014) Eugene Public Works Department, Eugene OR.

City of Kent Street Trees: Development Assistance Brochure #14 (2012) Kent WA.

Cornell University, Urban Horticulture Institute. http://www.hort.cornell.edu/uhi/ (accessed April 2017).

Global Invasive Species Database. http://www.invasivespecies.net/ (accessed April 2017).

Invasive Plant Atlas of the United States. https://www.invasiveplantatlas.org/ (accessed April 2017).

Kirkland Street Tree Selection List and Planting and Pruning Procedures (2010) Kirkland WA.

Oregon State University, College of Agricultural Sciences, Department of Horticulture, Landscape Plant List. http://landscapeplants.oregonstate.edu/ (accessed April 2017).

Portland Plant List Update (2016) Bureau of Planning and Sustainability, Portland OR.

Seattle Department of Transportation – Approved Street Tree List (2011) Seattle WA.

Spokane Urban Forestry Approved Street Tree List (2014) City of Spokane Parks and Recreation Urban Forestry.

United States Forest Service Invasive Species, Pests and Diseases. https://www.fs.fed.us/science-technology/invasive-species-pests-disease (accessed April 2017).

University of Washington Herbarium: Plants of Washington http://biology.burke.washington.edu/herbarium/imagecollection.php. (accessed April 2017).

Vancouver Street Tree Selection (2012) Vancouver WA.

Washington State Department of Natural Resources Urban and Community Forestry. http://www.dnr.wa.gov/urbanforestry (accessed April 2017).

Port Townsend Street Tree List Update

	А	В	С	D	E	F G	Н	I	J	К	L
1											
2	Acer buergianum	Trident Naple	0		<u>on</u>	OIR	50			25x20	round, shrublike; firm hand, red fail color
3	Acer campestre	Hedge Maple Queen Elizabeth				1048				35830	supprous upright, reliable city tree
4	Acer glabrum Acer grandidentatum Schmidt	Boogras Rocky Mountain Maple Rocky Mountain Glow maple				DUR .	SW SW			30.30	son to part stade vellow set odd exteriors copper-rest bark, adaptable
6	Acerteany	Henry maple	D		Dry	DIR		6		30x30	trifoliste leaves, sun, interesting bark
7	Acer pennsylvanicum	Moosewood	D					6	10	20920	perf shade station core, attracture chiped bark
8	Acer pseudosieboldianum	korean maple	0						- 10	22820	new sur/stade upright good fell ofor
9	Acer tatancom Petdell	Pattern Perfect Tatarian maple								25x20 20x15	and shape, antire leafed (no lotes), starte, for other antice howers; educe that, red fail color
10 11	Amelanchier grandiflora Amelanchier x grandiflora	Reinbow Pillar Glenn's Upright Serviceberry Robin Hill					510			25x15	apprint over, sun, colorful, los mentenance
11	Amelanchier leevis IFS-ARB	Serviceberry Spring Plurry								28,20	apriptic over, suit, restable street pre-
13	Amelanchier laevis	Serviceberry Snowcloud								26.015	aprophi andi, san/part shade, relisible street tree
14	Amelanchier laevis	Serviceberry Cumulus						4		25.10	upright, early bloom, reliable street tree
15	Arbutus unedo	Strawberry tree	BE		- Dry	Dia				30×30	maggy bark: full sum tree form difficult to maintain
16	Carpinus caroliniana JFS-KW6 Cercocarpis montanus v. glaber	American nombean Native Hame Birchieaf mountain matiogany	BE							1243	arright and: South rel tail rater
17 18	Chamaecyperis obtusa	Hindki ovoress Graciis			Ory I	DIR De			N.	25x15	site growth, sun to egit shate, columnar, the branching
19	Chionanthus retusus	Chinese Innoe tree	0			Diff			- 14	20,25	sun, white fringed flower clusters
20	Chichenthus retusus Tokyo Tower	Tokyo Tower Stinge Stee								20.10	new tiphty optight. May bloch low mentanance
21	Comus nuttatii x fionda	Dogwood Eddie's White Wonder	0			<u>D18</u>		5		30.20	white flowers: red tail color
22	Cornus kousa Chinensis	Kouse dogwood	р			Dia.	SW			20520	partic Rowers's diversities and fail contr
23 24	Corrius & Ruttern	Aurora dogenoo Constellation Jogenood				DIR				20x20 25x20	upright, white somers, sterile name
25	Comus kousa x nuttalli 'KN 30-6'.	Venus dogwood	Ē.			DIR				25x20	voriate over giant white blossares tolerant
26	Cornus mas	Comelan cherry	Ð			OIR			- 11	25.20	early strail yellow flowers, soldlife raise, eable fruit
27	Cotinus coggygna	Purple smoketree	0		Ory				90	10x15	sun, tough, adaptables tree form hand to maintain
28	Cotinus adavatus	American smoketree			00	DIR De				25.25	sun, attaptable, colortul fail foliage
29 30	Crataeous stavallet	Douglas nawthorn Lavalle hawthorn								28620	State Userant, widthe value megular wase: persistent competituit
31	Crataegus phaenopyrum	Washington hawthorn	6							20x20	uproblemal care multicrum, tolerant: parastant trut
32	Cryptomena Japonica Elegans	lapanese plume ceder				DIR				20×10	Drunze/brains in written, several varieties, daw standing
33	Fagus sylvetice. Fastigiate	Copper beech Red Obeliss				DIR				30×10	columnari sun iblerant borgunde leaves
34	Fraxinus latifslia	Oregon ash			<u>On</u>					60x35	only netweash, needs consistent part mostors; big
35	Ginkgo bilobe	Proceton Sentry (males only Rocky Mountain Jumper			Ony Net	- 1917 				65x20 40x12	entrating and fall care makes any, from hand, boy sun, writingande drought, many cultivers, any branching
36 37	Maackia arourensis				Dry Dry	DIR	SW SW			25.20	turn view charges charters of white Romans
38	Magnolia illiffora x M. sprengen	Galaxy magnetia	D			Dir		6		30x15	sun late spring traggert bloom, low maintenance
39	Megnolie kobus x. M. salicifolie	Magnolia: Wada's Memory	D							30x35	sun, ovramidal: white flowers; fail cour
40	Magnolia e loconer	Mernil magnolia	BE			010					acid soil, early fragtent white flowers

Port Townsend Street Tree List Update

	A	В	С	D	E	F	G	Н	I	J	К	L		
1														
41	Magnolia kobus	N. Japanese magnolia	D						6		35x25	large late spring white flowers; sun/part shade; tolerant		
42	Malus floribunda 'Adirondack'	Adirondack crabapple	D			DiR			4	W	20x10	columnar; white flowers; orange fruit		
43	Malus 'Jarmin'	Marilee crabapple	D					SW	4	W	24x10	upright; nearly fruitless; large mid-spring white flowers		
44	Malus 'Royal Raindrops'	Malus x JFS-KW5	D						4		15x15	purplish leaves; late spring pink flowers; maroon fruit		
45	Malus 'Sugar Tyme'	Malus Sutyzam	D						4		18x15	upright spreading; early spring white flowers; red fruit		
46	Myrica (Morella) californica	Pacific wax myrtle	BE	Ν	Dry	DiR	De		4		18x15	tolerant; wildlife value; tree form hard to maintain		
47	Oxydendron arboreum	Sourwood tree	D			DiR			6		35x20	needs summer water/acid soil; fall color		
48	Parrotia persica	Ironwood	D		Dry	DiR			5		35x20	early red apetalous flower; mix of fall color		
49	Parrotia persica 'Ruby Vase'	Ruby Vase ironwood	D		Dry	DiR		SW	4	W	28x16	upright; new foliage red; bright fall color		
50	Parrotia persica 'JLColumnar'	Persian Spire parrotia	D			DiR			4	W	25x10	new; columnar; bronze leaf edges		
51	Parrotia persica 'Vanessa'	Vanessa parrotia	D						4		28x14	upright, red fall foliage & winter flowers; tolerant		
52	Pinus contorta	Shore Pine	С	Ν	Dry	DiR	De		8		40x20	twisted shape; salt-tolerant; low branching		
53	Pinus densiflora 'Imbraculifera'	Umbrella pine	С		Dry	DiR	De		8		30x25	slow-growing; sun; well-drained soil; low branching		
54	Pistacia chinensis	Chinese pistache	D			DiR			8		25x20	sun; pinnate leaves; early pruning needed; tolerant		
55	Prunus serrulata 'Amanogawa'	Amanogawa cherry	D						6	W	20x8	columnar; pink double flowers; fall color		
56	Prunus serrulata `Mt Fuji'	Mt Fuji cherry	D						6		15x20	spreading; white flowers; fall color		
57	Prunus 'Snow Goose'	Snow Goose cherry	cherry D						6	W	20x20	white early flowers; full sun; good drainage		
58	Prunus x yedoensis 'Akebono'	Akebono cherry	D						6	W	25x25	soft pink flowers; WA DC 'cherry trees'		
59	Pyrus betulifolia	Birch-leaf pear 'Dancer'	D		Dry	DiR			5		30x20	oval; tolerant; white flowers; burgundy purple in fall		
60	Quercus garryana	Oregon white oak/Garry oak	D	Ν					8		65x50	only native oak; slow-growing; sun; big at maturity		
61	Quercus ilex	Holly Oak	BE				De		6		40x30	salt-tolerant; sun to light shade; adaptable		
62	Quercus robur 'Fastigiata'	English oak, columnar	D			DiR			6		40x15	upright; columnar; low-maintenance, big at maturity		
63	Quercus robur x Q. alba	Crimson Spire Oak 'Crimschmidt'	D		Dry	DiR			6		45x15	tightly upright; red fall color; tolerant of urban setting		
64	Rhamnus purshiana	Cascara	D	Ν					4	W	30x25	moist soil; sun or shade; wildlife value		
65	Rhus typhina	Staghorn sumac	D		Dry	DiR	De		4		20x20	fragrant flowers; wildlife value		
66	Stewartia pseudocameillia	Japanese stewartia	D			DiR		SW	5	W	25x20	oval shape; summer 'camellia' flowers; peeling bark		
67	Styrax japonicus	Snowbell (JFS-D)	D		Dry				5	W	25x25	bell-shaped flowers; yellow fall color		
68	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	D			DiR			4		20x15	rounded; sun; fragrant flowers; low maintenance; tolerant		
69	Zelkova serrata	City Sprite Zelkova JFS-KW1	D		Dry	DiR		SW	4	W	25x20	bright green foliage; low maintenance		
70	Zelkova serrata	Wireless; Schmidtlow	D		Dry	DiR			8	W	25x35	spreading vase shape; elm-like; firm hand when young		
71														
72		key to type D=deciduous					o comn			. h				
73											und and be difficult to maintain sightlines and tree integrity ti-trunk shrub; require pruning to maintain tree form			
74		C=conifer BE=broadleaf evergreen										ets and overwhelm root space, may be better in parks		
76					new=relatively new cultivar in 2017									
77											runing to tr	ain leader		
78						toleran	nt=toler	ant of u	urban p	ollutior	and other	stressors		



S	cientific	Common Name	Mature Height	Spread	Under Wires?	Min Strip Width	Flower Color	Fall Color	PRTAB on list	Comments
ge	Columnar Trees									
A	cer nigrum 'Green Column'	Green Column Black	50	10	No	6	N/A			Good close to buildings.
	reen Column	Sugar Maple	50	05		0	N1/A			Los for anno edicent to teller buildings when each two
	<i>raxinus americana</i> 'Empire'	Empire Ash	50	25	No	6	N/A			Use for areas adjacent to taller buildings when ash tree desired species.
G	inko biloba 'Princeton Sentry'	Princeton Sentry	40	15	No	6	N/A			Very narrow growth.
Λ	lyssa sylvatica	Ginkgo Tupelo	60	20	No	6	N/A			Handsome chunky bark.
	yssa sylvalica	Гирею	60	20	INO	0	N/A			
Q	uercus 'Crimschmidt'	Crimson Spire Oak	45	15	No	6	N/A		Yes	Hard to find in the nursery trade. Tightly upright, red fa color, tolerant of urban setting.
Q	uercus frainetto	Italian Oak	50	30	No	6	N/A			Drought resistant – beautiful green, glossy leaves in
								R		summer.
Q	uercus robur 'fastigiata'	Skyrocket Oak	40	15	No	6	N/A	2		Columnar variety of oak.
T	axodium distichum	Shawnee Brave Bald	55	20	No	6	N/A	$\overline{\mathcal{O}}$		Deciduous conifer - tolerates city conditions.
	Mickelson' Juercus robur x alba Skinny	Cypress Skinny Genes	45	10			N1/A			
	enes	Skilling Genes	45	10			N/A			
100	Trees									
A	cer saccharum 'Bonfire'	Bonfire Sugar Maple	50	40	No	6	N/A			Fastest growing sugar maple.
Δ	cer saccharum	Commemoration Sugar	50	35	No	6	N/A			Resistant to leaf tatter.
	Commemoration'	Maple	50		NO	0	IN/A			
	cer saccharum 'Green	Green Mountain Sugar	45	35	No	6	N/A			Reliable fall color.
	lountain' <i>cer saccharum</i> 'Legacy'	Map Legacy Sugar Maple	50	35	No	5	N/A			Limited use - where sugar maple is desired in limited
								\nearrow		planting strip area.
A	esculus flava	Yellow Buckeye	60	40	No	6	263	2		Least susceptible to leaf blotch – large fruit – fall color varied, but quite beautiful.
С	ercidiphyllum japonicum	Katsura Tree	40	40	No	6	N/A			Needs lots of water when young – can produce large
										surface roots.
	agus sylvatica	G reen Beech	50	40	No	6	N/A	\sim		Silvery-grey bark.
F	agus sylvatica 'Asplenifolia'	Fernleaf Beech	60	50	No	6	N/A			Beautiful cut leaf.
E	raxinus latifolia	Oregon Ash	60	35	No	6	N/A			Only native ash in Pacific Northwest.
								Ø	Yes	
	<i>raxinus pennsylvanica</i> Patmore'	Patmore Ash	45	35	No	6	N/A	\swarrow		Extremely hardy, may be seedless.
	raxinus pennsylvanica	Urbanite Ash	50	40	No	6	N/A			Tolerant of city conditions.
	Jrbanite'	Manuan Ointana	50	05	NL-	0	N1/A			more upright and narrow than 'Autumn Gold'.
G	inkgo biloba 'Magyar'	Magyar Ginkgo	50	25	No	6	N/A		Yes	more upright and harrow than Autumn Gold.
	ymnocladus dioicus	Espresso Kentucky	50	35	No	6	N/A			Very coarse branches - extremely large bi-pinnately
	spresso' iquidambar styraciflua	Coffee Rotundiloba Sweetgum	45	25	No	8	N/A			compound leaves. Only sweetgum that is entirely fruitless. Smooth round
	Rotundiloba'	noturialioba oweetgam	40	20		0				leaf lobes.
L	iriodendron tulipifera	Tulip Tree	60	30	No	8	N/A	2		Fast-growing tree – can get very large in open condition
N	letasequoia glyptostroboides	Dawn Redwood	50	25	No	6	N/A			Fast growing deciduous conifer.
	<i>latanus x acerifolia</i> Bloodgood'	Bloodgood London Planetre	50	40	No	8	N/A	2		More anthracnose resistant than other varieties – large tree that needs space.
	latanus x acerifolia 'Yarwood'	Yarwood London	50	40	No	8	N/A			High resistance to powdery mildew.
	huarana biaslar	Planetree	00	4.5	NL -	0	N1/A	/		Interacting charges pooling bark
G	luercus bicolor	Swamp White Oak	60	45	No	8	N/A	R		Interesting shaggy peeling bark.
Q	uercus coccinea	Scarlet Oak	60	40	No	6	N/A			Best oak for fall color.
	uercus garryana	Oregon Oak	50	40	No	8	N/A			Native to Pacific Northwest.
						0	11// 1		Yes	
Q	uercus imbricaria	Shingle Oak	60	50	No	6	N/A	$\mathbf{\Sigma}$		Nice summer foliage - leaves can persist throughout th winter.
Q	uercus muhlenbergii	Chestnut Oak	60	50	No	6	N/A			Coarsely toothed leaf
			00							Lowe should have Assume do not pool downout cold
G	luercus robur	English Oak	60	40	No	8	N/A		Yes	Large, sturdy tree. Acorns do not need dormant cold period to germinate, so can be invasive.
Q	luercus rubra	Red Oak	60	45	No	8	N/A			Fast growing oak – large tree that needs space.
0	uercus velutina	Black Oak	60	50	No	8	N/A			More drought tolerant than red oak.
								\nearrow		
T	axodium distichum	Bald Cypress	55	35	No	8	N/A			A deciduous conifer, broadly spreading when mature –
$\left u \right $	Ilmus 'Homestead'	Homestead Elm	60	35	No	6	N/A			columnar when young. Complex hybrid - close in form to American elm -
								$\boldsymbol{\varnothing}$		Resistant to Dutch elm disease.
U	Ilmus 'Frontier'	Frontier Elm	50	35	No	6	N/A			Resistant to Dutch elm disease.
	elkova serrata 'Greenvase'	Green Vase Zelkova	45	40	No	6	N/A			Attractive exfoliating bark provides Winter appeal. Dark
Z									1	green leaves turn orange-red and purple in Fall.
Z								1		

e	Scientific	Common Name	Mature Height	Spread	Under Wires?	Min Strip Width	Flower Color	Fall Color	PRTAB on list	Comments
ed	lium / Large Trees									
	Acer campestre	Hedge Maple	50	30	No	5	N/A	Ø		Contrary to its name, this is not a small tree – nice overa shape and structure.
	Acer campestre 'Evelyn'	Queen Elizabeth Hedge Maple	40	30	No	5	N/A	Z	Yes	More upright branching than the species.
	Acer freemanii 'Autumn Blaze'	Autumn Blaze Maple	50	40	No	6	N/A			Cross between red and silver maple – fast growing with good fall color.
	Acer miyabei 'Morton'	State Street Maple	40	30	No	6	N/A	\swarrow		Similar to, but faster growing and larger than Hedge maple.
	Acer pseudoplatanus 'Atropurpureum'	Spaethii Maple	40	30	No	5	N/A	Ø		Leaves green on top purple underneath.
	Acer Rubrum	Autumn Spire	50	30	No		N/A			Full sun, partial shade narrow upright
	Acer rubrum ' Scarsen'	Scarlet Sentinel Maple	40	25	No	6	N/A	2		Leaves are darker green and larger than those of other Red Maples, and they hold up well in summer heat.
	Aesculus x carnea 'Briottii'	Red Horsechestnut	30	35	No	6	*	Ø		Resists heat and drought better than other horsechestnuts.
	Betula jacquemontii	Jacquemontii Birch	40	30	No	5	N/A	R		White bark makes for good winter interest – best for aphid resistance, but does have issues with Bronze Bird Borer.
	Corylus colurna	Turkish Filbert	40	25	No	5	N/A			Tight, formal, dense crown - not for areas with high pedestrian traffic as tree can have significant debris fro nut production.
	<i>Fraxinus americana</i> 'Autumn Applause'	Autumn Applause Ash	45	25	No	6	N/A			Purple fall foliage - Compact tree - reportedly seedless.
	Fraxinus pennsylvanica 'Cimmzam'	Cimmaron Ash	50	30	No	6	N/A	\swarrow		More upright than 'Patmore' with more bronze/cinnamc fall color.
	Ginko biloba 'Autumn Gold'	Autumn Gold Ginkgo	45	35	No	6	N/A	Ø		Narrow when young.
C	lium / Large Trees, Conti	nued								
	<i>Liquidambar styraciflua</i> 'Moraine'	Moraine Sweetgum	40	25	No	8	N/A	\swarrow		Light green foliage. More compact than other varieties sweet gum. Brittle branches.
	Nothofagus antarctica	Antarctic Beech	50	35	No	5	N/A	Ø		Rugged twisted branching and petite foliage – difficult t find in the nursery trade.
	Tilia americana 'Redmond'	Redmond Linden	50	30	No	8	N/A	Ø		Pyramidal, needs extra water when young.
	Tilia cordata 'Greenspire'	Greenspire Linden	40	30	No	6	N/A	Ø		Symmetrical, pyramidal form – sometimes has structur issues due to tight branch attachements.
	Ulmus parvifolia 'Emer II'	Allee Elm	45	35	No	5	N/A	2		Exfoliating bark and nice fall color – Resistant to Dutch Elm Disease.
d	ium Columnar Trees									
	Acer rubrum 'Bowhall'	Bowhall Maple	40	20	No	6	N/A	\swarrow		An upright, pyramidal form that is significantly wider th 'Armstrong' or 'Columnare'.
	Carpinus betulus 'Fastigiata'	<i>P</i> yramidal European Hornbeam	40	15	No	5	N/A	Ø		Broadens when older.
	Cornus nuttallii x florida	Dogwood Eddie's Whiter Wonder	30	20	No	5	දියි		Yes	White flowers, red fall color
	Fagus sylvatica 'Dawyck Purple'		40	12	No	6	N/A	Ø		Purple foliage.
	Fagus sylvatica 'Fastigiata'	Copper beed 'Red Obelisk'	30	10	No	6	N/A	N/A	Yes	Column, sun, tolerant, burgundy leaves.
	Liriodendron tulipifera 'Fastigiatum'	Columnar Tulip Tree	40	10	No	6	දිදිය			Good next to buildings – can have problems with tight branch angles.
	Malus 'Tschonoskii'	Tschonoskii Crabapple	30	15	Yes	5	දිදිය			Sparse green fruit, pyramidal.
	Oxydendron arboreum	Sourwood	35	12	No	5	දිලි3		Yes	Consistent and brilliant fall color.
	Prunus sargentii 'Columnaris'	Columnar Sargent Cherry	35	15	No	8	263			Upright form. The cherry with the best fall color. Can suffer from brown rot in spring.
	Prunus x hillieri 'Spire'	Spire Cherry	30	10	Yes	6	263			One of the few 'wire friendly' columnar cherries. Can suffer from brown rot in spring.
	<i>Pyrus calleryana</i> 'Cambridge'	Cambridge Pear	40	15	No	5	ध्वि			Narrow tree with better branch angles and form than th species – brittle limbs may still be a problem with breakage due to ice or wet snow.

	Common Name	Mature Height	Spread	Under Wires?	Min Strip Width	Flower Color	Fall Color	PRTAB on list	Comments
ium Trees									
Acer grandidentatum 'Schmidt'	Rocky Mt. Glow Maple	25	20	Yes	5	N/A		Yes	Intense red fall color - Limited availability in nursery trade.
Acer henryi	Henry's maple	30	30	No	6	<mark>26</mark> 3	\swarrow	Yes	
Acer rubrum 'Karpick'	Karpick Maple	40	20	No	6	N/A	1		Finer texture than other narrow forms of columnar map
Acer truncatum x A. platanoides 'Warrensred'	Pacific Sunset Maple	30	25	Yes	5	N/A			Limited use under higher wires.
Betula albosinenesis var	Chinese Red Birch	40	35	No	5	N/A			White and pink peeling bark.
septentrionalis Carpinus caroliniana	American Hornbean	25	20	Yes	5	N/A		Yes	Outstanding fall color (variable – yellow, orange, red) – nice little tree.
Cladrastis kentukea	'Native Flame' Yellowwood	40	40	No	5	263			White flowers in spring, resembling wisteria flower – blooms profusely only every 2 to 4 years – yellow/gold fall color.
	Giant Dogwood	40	30	No	5	දියි			Frothy, 6-inch clusters of white flowers in June.
Snow' Cornus 'Eddie's White Wonder'	Eddie's White Wonder	30	20	Yes	5	දියි			A hybrid of C. florida and C. nuttalii.
Crataegus crus-galli 'Inermis'	Dogwood Thornless Cockspur	25	30	Yes	5	දිවි			Red persistent fruit.
Crataegus phaenopyrum	Hawthorne Washington Hawthorne	25	20	Yes	5	සිය		Yes	Thorny – do not plant in high use areas.
Crataegus x lavalii	Lavalle Hawthorne	25	20	Yes	5	202		Yes	Thorns on younger trees.
Davidia involucrata	Dove Tree	40	30	No	5	263	N/A	100	Large, unique flowers in May.
Eucommia ulmoides	Hardy Rubber Tree	50	40	No	6	N/A	N/A		Dark green, very shiny leaves – insignificant fall color.
gfagus	Purple Oak Leaf Beech	50	30	No	6	N/A	N/A		Attractive purple leaves with wavy margins.
Halesia monticola	Mountain Silverbell	45	25	No	5				Attractive small white flower.
Halesia tetraptera	Carolina Silverbell	35	30	No	5	263 CD	\mathcal{D}		Attractive bark for seasonal interest.
	Goldenrain Tree	30	30	Yes	5	263			Midsummer blooming – slow growing.
· · · · · · · · · · · · · · · · · · ·						83			6" inch fragrant white flowers in spring.
Magnolia denudata	Yulan Magnolia	40	40	No	5	දියි	N/A		
Magnolia grandiflora 'Victoria'	Victoria Evergreen Magnolia	25	20	Yes	5	263	N/A		Evergreen magnolia – can be damaged in years with we heavy snow.
<i>Magnolia kobus '</i> Wada's Memory'	Wada's Memory Magnolia'	30	20	Yes	5	263		Yes	Does not flower well when young.
Ostrya virginiana	Ironwood	40	25	No	5	N/A	Z	Yes	Hop like fruit – slow growing.
Phellodendron amurense 'Macho'	Macho Cork Tree	40	40	No	5	N/A	\nearrow		This variety is fruitless – fall color can be varied. High drought tolerance.
<i>Prunus cerasifera</i> 'Krauter Vesuvius'	Vesuvius Flowering Plum	30	20	Yes	5	263	N/A		Burgundy colored leaves – tree best used as an accent rather than in mass plantings.
Pterostyrax hispida	Fragrant Epaulette Tree	40	30	No	5	263	Z		Pendulous creamy white flowers – fragrant – difficult to find in the nursery trade.
Pyrus betulifolia	Birch-leaf pear 'Dancer'	30	20	No	5	දියි	N/A	Yes	Oval, tolerant, white flowers, burgundy purple in fall.
Pyrus calleryana 'Aristocrat'	Aristocrat Pear	40	30	No	5	263			One of the tallest flowering pears – good branch angles but wood is brittle. Reported as invasive in other area
	Chanticleer or	40	20	No	5	දියි			Selected variety of callery pear – good spring flowering
	Cleveland Select Pear	05	05	NL-					Reported as invasive in other areas. Selected variety of callery pear – good spring flowering
<i>Pyrus calleryana</i> 'Redspire'	Redspire Pear	35	25	No	5	263			Reported as invasive in other areas.
Quercus ilex	Holly Oak	40	30	No	5	N/A	N/A	Yes	Evergreen oak - Underside of leaf is silvery-white. Often has a prominent umbrella form.
Rhamnus purshiana	Cascara	30	20	Yes	5	N/A	\swarrow	Yes	Native tree – fall color depends on exposure – purplish fruit feeds many native birds.
Robinia x ambigua	Pink Idaho Locust	35	25	No	5	263	Ø		Fragrant flowers. Sterile variety. Drought tolerant. So varieties will sucker profusely.
Sophora japonica 'Regent'	Japanese Pagodatree	45	40	No	6	දිදිය	\nearrow		Has a rapid growth rate and tolerates city conditions, heat, and drought.
Sorbus aucuparia 'Mitchred'	Cardinal Royal Mt. Ash	35	20	No	5	දියි	Z		A vigorous tree with upright branches and a very symmetrical habit, invasive.
Sorbus x hybridia	Oakleaf Royal Mt. Ash	30	20	Yes	5	දිලි3			It has leaves which are similar to English oak, and interesting bark for seasonal features.
Styrax japonica	Japanese Snowbell	25	25	Yes	5	දියි	\swarrow	Yes	Reliable and easy to grow, it has plentiful, green $\frac{1}{2}$ " inc seeds. Flowers similar to lily in the valley.
Tilia cordata 'De Groot'	De Groot Littleleaf Linden	30	20	Yes	5	N/A	\mathbb{Z}		One of the smaller stature littleleaf lindens.
Tilia cordata 'Chancole'	Chancelor Linden	35	20	No	6	N/A			Pyramidal when young. Fragrant flowers that attract be
Ulmus parvifolia 'Emer l'	Athena Classic Elm	30	35	No	5	N/A			High resistance to Dutch Elm Disease. Drought resistar

Iumnar Trees kia amurensis floribunda 'Adirondack' floribunda 'Adirondack' i'Red Barron' tia persica 'JLColumnar' tis serrulata 'Amanogawa' tis seurosana forown' tis seurosana forown' tis americana forown' tis americana forown' tis americana forown' tis americana forown' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora nchier laevis 'JFS-ARB'	Amur Maackia Adirondack Crabapple Red Barron Crabapple Persian Spire parrotia Amanogawa Flowering Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Vine Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Uright'	30 20 20 25 20 20 30 25 25 30 30 30 20 22 25 25 25 25 25 25 20 20	20 10 10 10 8 10 8 10 30 25 20 30 25 20 20 25 20 20 20 20 20 20	Yes Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes	5 5 4 6 5 5 5 5 5 5 5 5 5 4 4	Image: Constraint of the sector of the se	N/A	Yes Yes Yes Yes Yes	Interesting exfoliating bark – flowering in June or July - varies in intensity from year to year. Very resistant to apple scab – one of the narrowest crabapples – persistant reddish ¼" fruit. Deep pink blossom and persistent red berries for seasonal interest. New, columnar, bronze leaf edges. Pinkish flower bud, changing to white flower. Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ver fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest. Many varieties available – select larger varieties for stree
floribunda 'Adirondack' i'Red Barron' tia persica 'JLColumnar' tis serrulata 'Amanogawa' tis serrulata 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Adirondack Crabapple Red Barron Crabapple Persian Spire parrotia Amanogawa Flowering Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Vine Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20 20 25 20 20 30 25 25 30 30 20 22 25 25 25 25 20	10 10 10 8 10 30 25 20 30 20 25 20 25 20 20 20 20 20	Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes	5 5 4 6 5 5 5 5 5 5 5 5 4	E S N/A S S S N/A N/A N/A S N/A S N/A N/A N/A S N/A S N/A S N/A S N/A S N/A N/A N/A N/A N/A N/A		Yes Yes Yes Yes	 varies in intensity from year to year. Very resistant to apple scab – one of the narrowest crabapples – persistant reddish ¼" fruit. Deep pink blossom and persistent red berries for seasonal interest. New, columnar, bronze leaf edges. Pinkish flower bud, changing to white flower. Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ver fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
 'Red Barron' tia persica 'JLColumnar' is serrulata 'Amanogawa' is americana forown' es uergerianum ircinatum) innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess inchier grandiflora inchier grandiflora 	Red Barron Crabapple Persian Spire parrotia Amanogawa Flowering Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Vine Maple Flame Amur Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20 25 20 20 30 25 25 30 30 20 22 25 25 25 25 20	10 10 8 10 30 25 20 30 20 25 20 25 20 20 20 20 20	Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes	5 4 6 5 5 5 5 5 5 5 4	N/A N/A SS3 N/A		Yes	crabapples – persistant reddish ¼" fruit. Deep pink blossom and persistent red berries for seasonal interest. New, columnar, bronze leaf edges. Pinkish flower bud, changing to white flower. Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ver fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
tia persica 'JLColumnar' Is serrulata 'Amanogawa' Is americana forown' PES uergerianum ircinatum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora	Persian Spire parrotia Amanogawa Flowering Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 20 20 30 25 25 30 30 20 22 25 25 25 25 20	10 8 10 30 25 20 30 20 25 20 25 20 20 20 20	Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes	4 6 5 5 5 5 5 5 5 5 4	N/A 2003 2003 N/A N/A 2003 N/A N/A N/A		Yes	seasonal interest. New, columnar, bronze leaf edges. Pinkish flower bud, changing to white flower. Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ver fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
es serrulata 'Amanogawa' es americana fcrown' Pes uergerianum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' iflorum nchier grandiflora 'Princess nchier grandiflora	Amanogawa Flowering Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Flame Amur Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20 20 30 25 25 30 30 20 22 25 25 25 20	8 10 30 25 20 30 20 25 20 20 20 20 20	Yes Yes Yes Yes Yes No Yes Yes Yes Yes	6 5 5 5 5 5 5 5 4	E 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		Yes	Pinkish flower bud, changing to white flower. Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
Is americana fcrown' Pes uergerianum ircinatum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum inchier grandiflora 'Princess inchier grandiflora	Cherry Red Cascade Mountain Ash Trident Maple Vine Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Korean maple Rorean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20 30 25 25 30 30 20 22 25 25 20	10 30 25 20 30 20 25 20 20 20 20 20	Yes Yes Yes Yes No Yes Yes Yes Yes	5 5 5 5 5 5 5 4	ES3 N/A N/A SS3 N/A N/A N/A		Yes	Nice winter form - Red berries in clusters. Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
fcrown' PES uergerianum ircinatum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora	Red Cascade Mountain AshAshTrident MapleVine MapleVine MapleFlame Amur MapleDouglas (Rocky Mountain) MaplePaperbark MapleJapanese MapleJapanese MapleKorean maplePattern Perfect Tatarian mapleThree-Flower MaplePrincess Diana ServiceberryRainbow Pillar 'Glenn's Upright'	30 25 25 30 30 20 22 25 25 20	30 25 20 30 20 25 20 20 20 20 20	Yes Yes Yes No Yes Yes Yes Yes	5 5 5 5 5 5 4	N/A N/A E83 N/A N/A N/A			Somewhat shrublike – must train to a single stem – interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
Pess uergerianum ircinatum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' iflorum inchier grandiflora 'Princess inchier grandiflora	Trident Maple Vine Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Korean maple Rattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 25 30 30 20 22 25 25 20	25 20 30 20 25 20 20 20 20	Yes Yes No Yes Yes Yes Yes	5 5 5 5 5 4	N/A N/A E83 N/A N/A N/A			interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
ircinatum innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' iflorum nchier grandiflora 'Princess nchier grandiflora	Vine Maple Flame Amur Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Japanese Maple Korean maple Rattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 25 30 30 20 22 25 25 20	25 20 30 20 25 20 20 20 20	Yes Yes No Yes Yes Yes Yes	5 5 5 5 5 4	N/A 2833 N/A N/A N/A			interesting bark. Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
innala 'Flame' labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Flame Amur Maple Flame Amur Maple Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 30 30 20 22 25 25 25 20	20 30 20 25 20 20 20 20	Yes No Yes Yes Yes Yes	5 5 5 5 4	N/A N/A N/A		Yes	Avoid using on harsh sites – native tree. Clusters of small cream colored flowers in spring – ve fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
labrum riseum almatum seudosieboldianum ataricum 'Patdell' riflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Douglas (Rocky Mountain) Maple Paperbark Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	30 30 20 22 25 25 20	30 20 25 20 20 20 20	No Yes Yes Yes Yes	5 5 5 4	N/A N/A N/A		Yes	fragrant. Nice fall color. Informal branch structure. Sun to part shade, yellow fall color. Peeling cinnamon colored bark for seasonal interest.
riseum almatum seudosieboldianum ataricum 'Patdell' riflorum inchier grandiflora 'Princess inchier grandiflora	Mountain) Maple Paperbark Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	30 20 22 25 25 20	20 25 20 20 20 20	Yes Yes Yes Yes	5 5 4	N/A N/A		Yes	Peeling cinnamon colored bark for seasonal interest.
almatum seudosieboldianum ataricum 'Patdell' iflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Paperbark Maple Japanese Maple Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20 22 25 25 20	25 20 20 20	Yes Yes Yes	5	N/A N/A			
seudosieboldianum ataricum 'Patdell' iflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Korean maple Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	22 25 25 20	20 20 20	Yes Yes	4				Many variatios available - coloct larger variation for at
ataricum 'Patdell' iflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 25 20	20 20	Yes		N/A			
iflorum nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Pattern Perfect Tatarian maple Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 25 20	20 20	Yes		1		Vac	planting. Sun, shade, upright, good fall color.
nchier grandiflora 'Princess nchier grandiflora nchier grandiflora	Three-Flower Maple Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	25 20	20			3		Yes Yes	Oval shape, entire-leafed (no lobes), strudy, fall color
nchier grandiflora nchier grandiflora	Princess Diana Serviceberry Rainbow Pillar 'Glenn's Upright'	20			5	263 N/A		res	Multi seasonal interest with tan, exfoliating bark and r
nchier grandiflora nchier grandiflora	Serviceberry Rainbow Pillar 'Glenn's Upright'			Yes	4				orange/red fall color. Good for narrower planting strips.
nchier grandiflora	Upright'	ZU	15	Yes	4	දිදිය			White flowers; edible fruit; red fall color.
	Namiaahan UDahim UUU					263		Yes	
nchier laevis 'JES-ARR'	Serviceberry 'Robin Hill'	25	15	Yes	4	263	2	Yes	Upright oval;sun; colorful, low maintenance
	Serviceberry 'Spring Flurry'	28	20	No	4	දියි	2	Yes	Upright oval, sun, reliable street tree
nchier laevis	Serviceberry 'Snowcloud'	25	15	Yes	4	263	1	Yes	Upright oval, sun/part shade, reliable street tree.
nchier laevis	Serviceberry 'Cumulus'	25	10	No	4	දිදිය	\swarrow	Yes	Upright, early bloom, reliable street tree.
nchier x grandiflora 'Autumn ice'	Autumn Brilliance Serviceberry	20	15	Yes	4	දිලි3	2		Good for narrower planting strips – reliable bloom and color.
s 'Marina'	Strawberry Tree	25	20	Yes	5	දිලි3	N/A	Yes	Substitute for Pacific madrone – Shaggy bark, evergre full sun tree form difficult to maintain.
a triloba	Paw Paw	30	20	Yes	5	2	N/A		Burgundy flower in spring before leaves. Shaggy bark sun, tree form difficult to maintain.
us japonica	Japanese Hornbeam	20	25	Yes	5	N/A	\swarrow		Wide spreading, slow growing – fall color is not outstanding.
canadensis	Eastern Redbud	25	30	Yes	5	දියි	\swarrow		Deep pink flowers on bare twigs in spring.
siliquastrum	Judas Tree	25	30	Yes	5	දිදු	2		Deep pink flowers on bare twigs in spring – drought resistant.
s alternifolia	Pagoda Dogwood	25	25	Yes	5	දිදි3			Small white flowers in flat clusters – fall color is varied
s kousa 'Chinensis'	Kousa Dogwood	20	20	Yes	4	ध्वि		Yes	Does not do well on harsh, dry sites.
s x 'Rutban'	Aurora dogwood	20	20	No	5	දියි		Yes	Upright to spreading, pink flowers, red fall color.
s mas	Cornelian chorny	25	20	Yes	5	8	N/A	Yes	Early small yellow flowers, wildlife value, edible fruit.
s obovatus	American Smoke Tree	25	25	Yes	4			Yes	Showy pinkish panicles of flowers in the spring – redo purple leaves on some varieties.
troemia 'tuscarora'	Tuscarora Hybrid Crape Myrtle	20	20	Yes	4	263	<i>7</i>		Light cinnamon brown bark lends year round interest drought resistant – likes a warm site.
lia 'Elizabeth'	Elizabeth Magnolia	30	20	Yes	5	2 <mark>6</mark> 3	N/A		Yellowish to cream colored flower in spring.
<i>lia</i> 'Galaxy'	Galaxy Magnolia	25	25	Yes	5	263	Ø	Yes	Showy pink flowers.
	Loebner Magnolia	20	20	Yes	5		-	Yes	Flower is 'star' shaped rather than tulip like – white to pinkish white in March or April.
lia x loebneri		20	20	Yes	5				Disease resistant – persistent yellow fruit in fall and
<i>ilia x loebneri</i> 'Golden Raindrops'			25	Yes	5		\sim		winter. Large white blossom – nice green foliage in summer.
s s s s	alternifolia kousa 'Chinensis' x 'Rutban' mas obovatus roemia 'tuscarora' a 'Elizabeth' a 'Galaxy' a x loebneri	alternifoliaPagoda Dogwoodkousa 'Chinensis'Kousa Dogwoodkousa 'Chinensis'Kousa Dogwoodx 'Rutban'Aurora dogwoodmasCornelian cherry American Smoke Treeroemia 'tuscarora'Tuscarora Hybrid Crape Myrtlea 'Elizabeth'Elizabeth Magnoliaa 'Galaxy'Galaxy Magnoliaa x loebneriLoebner Magnolia	alternifoliaPagoda Dogwood25kousa 'Chinensis'Kousa Dogwood20kousa 'Chinensis'Aurora dogwood20x 'Rutban'Aurora dogwood20masCornelian cherry American Smoke Tree25obovatusAmerican Smoke Tree25roemia 'tuscarora'Tuscarora Hybrid Crape Myrtle20a 'Elizabeth'Elizabeth Magnolia30a 'Galaxy'Galaxy Magnolia25a x loebneriLoebner Magnolia20Golden Raindrops'Golden Raindrops20	alternifoliaPagoda Dogwood2525kousa 'Chinensis'Kousa Dogwood2020x 'Rutban'Aurora dogwood2020masCornelian cherry Obovatus2525roemia 'tuscarora'Tuscarora Hybrid Crape Myrtle2020a 'Elizabeth'Elizabeth Magnolia3020a 'Galaxy'Galaxy Magnolia2525a x loebneriLoebner Magnolia2020Golden Raindrops'Golden Raindrops Crabapple2020Donald Wyman'Donald Wyman2525	AlternifoliaPagoda Dogwood2525YesalternifoliaPagoda Dogwood2020Yeskousa 'Chinensis'Kousa Dogwood2020Yesx 'Rutban'Aurora dogwood2020NomasCornelian cherry obovatus2525Yesroemia 'tuscarora'Tuscarora Hybrid Crape Myrtle2020Yesa 'Elizabeth'Elizabeth Magnolia3020Yesa 'Galaxy'Galaxy Magnolia2525YesGolden Raindrops'Golden Raindrops Crabapple2020Yes	AlternifoliaPagoda Dogwood2525Yes5alternifoliaPagoda Dogwood2020Yes4kousa 'Chinensis'Kousa Dogwood2020Yes4x 'Rutban'Aurora dogwood2020No5masCornelian cherry obovatus2520Yes5masCornelian cherry American Smoke Tree2525Yes4roemia 'tuscarora'Tuscarora Hybrid Crape Myrtle2020Yes5a 'Elizabeth'Elizabeth Magnolia3020Yes5a 'Galaxy'Galaxy Magnolia2525Yes5Golden Raindrops'Golden Raindrops Crabapple2020Yes5	iliquastrumJudas Tree2530Yes558alternifoliaPagoda Dogwood2525Yes558kousa 'Chinensis'Kousa Dogwood2020Yes458x 'Rutban'Aurora dogwood2020No558masCornelian cherry obovatus2525Yes558cornelian cherry obovatus2520Yes558roemia 'tuscarora'Tuscarora Hybrid Crape Myrtle2020Yes458a 'Elizabeth'Elizabeth Magnolia3020Yes55858a 'Galaxy'Galaxy Magnolia2525Yes55858Golden Raindrops' CrabappleGolden Raindrops Crabapple2020Yes558Donald Wyman'Donald Wyman2525Yes55858	iliquastrumJudas Tree2530Yes56alternifoliaPagoda Dogwood2525Yes566alternifoliaPagoda Dogwood2020Yes566kousa 'Chinensis'Kousa Dogwood2020Yes466x 'Rutban'Aurora dogwood2020No5666x 'Rutban'Aurora dogwood2020No5666masCornelian cherry obovatus2520Yes5686roemia 'tuscarora'Tuscarora Hybrid Crape Myrtle2020Yes466a 'Elizabeth'Elizabeth Magnolia3020Yes5686a 'Galaxy'Galaxy Magnolia2525Yes5666Golden Raindrops' CrabappleGolden Raindrops2020Yes5666Deneld Wurmen2525Yes566666	iliquastrumJudas Tree2530Yes56777alternifoliaPagoda Dogwood2525Yes56777kousa 'Chinensis'Kousa Dogwood2020Yes467Yeskousa 'Chinensis'Kousa Dogwood2020Yes467Yesx 'Rutban'Aurora dogwood2020No567YesmasCornelian cherry obovatus2525Yes467YesmasCornelian cherry obovatusAmerican Smoke Tree2525Yes467Yesa 'Elizabeth'Elizabeth Magnolia3020Yes5687Yesa 'Galaxy'Galaxy Magnolia2525Yes5687YesGolden Raindrops'Golden Raindrops Crabapple2020Yes567Yes

 \bigcirc

S	cientific	Common Name	Mature Height	Spread	Under Wires?	Min Strip Width	Flower Color	Fall Color	PRTAB on list	Comments
all	Trees									
N	lalus 'Jarmin'	Marilee crabapple	24	10	Yes	4	දිලි3	N/A	Yes	Upright, nearly fruitless, large mid-spring white flowers.
M	falus 'Lancelot' ('Lanzam')	Lancelot Crabapple	15	15	Yes	4	263	Ø		Red flower buds, blooming white – red persistent fruit.
M	lalus 'Royal Raindrops'	Malus x JFS-KWS	15	15	No	4	263	N/A	Yes	Purplish leaves, late spring pink flowers, maroon fruit.
N	lalus 'Sugar Tyme'	Malus Sutyzam	18	15	No	4	දිලි3	N/A	Yes	Upright spreading, early spring white flowers, red fruit.
P	arrotia persica	Persian Parrotia	30	20	No	5	*	\swarrow	Yes	Blooms before it leafs out – drought tolerant - Varied fal color - reds, oranges and yellows.
P	arrotia persica 'Ruby Vase'	Ruby Vase ironwood	28	16	Yes	4	*		Yes	Upright, new foliage red, bright fall color.
P	arrotia persica 'Vanessa'	Vanessa parrotia	28	14	No	4	*		Yes	Upright, red fall foliage & winter flowers, tolerant.
P	runus 'Frankthrees'	Mt. St. Helens Plum	20	20	Yes	5	දිදුය	N/A		Burgundy colored leaves – tree best used as an accent rather than in mass plantings.
P	runus 'Newport'	Newport Plum	20	20	Yes	5	දුදු	N/A		Burgundy colored leaves – tree best used as an accent rather than in mass plantings.
P	runus 'Snowgoose'	S now Goose Cherry	20	20	Yes	5	දිදු	1	Yes	This selection sports abundant white flowers and healthy green, disease-resistant foliage.
P	runus cerasifera 'Thundercloud'	Thundercloud Plum	30	20	No	5	र्ह्युउ	N/A		Burgundy colored leaves – tree best used as an accent rather than in mass plantings – can produce significant fruit
P	runus x yedoensis 'Akebono'	Akebono Flowering Cherry	25	25	Yes	6	දියි		Yes	Has masses of large, semi-double, pink flowers, most widely planted cherry in Pacific Northwest.
S	orbus alnifolia	Korean Mountain Ash	35	30	No	5	දියි	2		Simple leaves and beautiful pink/red fruit.
S	tewartia monodelpha	Orange Bark Stewartia	30	20	Yes	5	දියි	\swarrow		Extraordinary cinnamon colored bark – avoid hot, dry sites.
S	tewartia psuedocamellia	Japanese Stewartia	25	15	Yes	5	දියි	\swarrow	Yes	Patchwork bark, white flower in spring.
S	tyrax obassia	Fragrant Styrax	25	20	Yes	5	දියි	\swarrow		Smooth gray bark and fragrant white flowers.
S	yringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	20	15	No	4	દુરિ	N/A	Yes	Rounded, sun, fragrant flowers, low maintenance, tolerant.
Z	elkova serrata	City Sprite Zelkova JFS- KWI	25	20	Yes	4	N/A	Ø	Yes	Bright green foliage, low maintenance.
Z	elkova serrata	Wireless; Schmidtlow	25	35	Yes	8	N/A	1	Yes	Spreading vase shape, elm-like, firm hand when young.



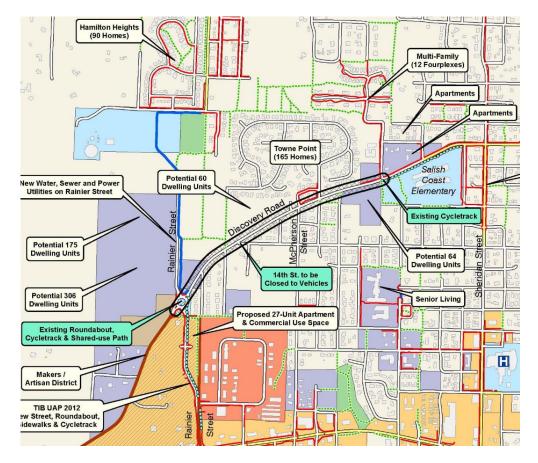
Discovery Road Project Landscaping

Introduction

The Discovery Road project will be providing sidewalk, a bike path, and rebuild the existing street between the Rainier Roundabout and Salish School. As part of the design of this project, there will be strategic landscaping placed along the road. City staff and our project design team landscape architect will be working through landscape design details between now and the next PRTTAB meeting. The objective of this agenda item is to introduce the design elements we are seeking to address, obtain preliminary thoughts and suggestions as well as prepare for the review of a final design at the February PRTTAB meeting.

Project Limits and Landscaping Areas

The following illustrates show the extend of the project and the typical cross section which shows a landscaping strip on the north and south sides of the street.



Project Limits are circled in the above illustration.



Typical Cross Section. Note the landscape strip on the left is 5-7 feet wide and will contain a drainage swale. The landscape strip on the right is 4 feet wide.



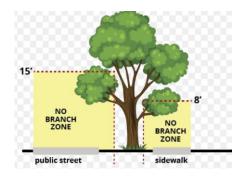
Oblique Illustration of the Roadway showing stormwater swale and planter strips.

Landscaping Design Objectives

The following objectives are key consideration for the landscaping design. In no particular order, these objectives must be balanced.

- Environmental sustainability and resiliency to climate change
- Low water use
- Low maintenance (mowing, trimming, weeding, and irrigation). Staff cannot keep up with what they have.
- Irrigation to be used only for 3 years for plant establishment
- Landscaping budget is limited by grant funds
- Traffic calming is a key function of landscaping for the street operations
- Plants must be compatible with stormwater treatment goals
- A mix of trees and bushes may be desirable.

The following illustrations demonstrate some of the design goals.



Shows general vertical clearance goals for mature vegetation





Vegetation creates a confined appearance to the street versus an open highway inducing lower traffic speeds

Landscaping that works exists through out the City of Port Townsend. Could a combination of bushes and trees accomplish the objective. We do not anticipate a plan like Rainier or Downtown, but rather like other streets that have more diverse landscaping and less intensity.



Parks Maintenance Staff 2021 Accomplishments

This year we would like to take a minute to celebrate accomplishments in 2021. The parks staff spent a large part of the year with only two staff members until Shawn Wiles joined the team late this summer. Thankfully, we had one seasonal position. The projects completed are in addition to the normal day to day work the staff performs including janitorial, mowing and trimming, park checks, playground equipment inspection, responding to the public, fixing vandalism and so much more. The following list is in no particular order.

- Obtained Tree Assessment Reports on Large trees at Chetzemoka, Gateway and Bell Tower
- Completed ACAC Grant ADA Trail and Kiosk at Chetzemoka
- Obtained a Garden Club grant \$500 for plants for volunteers at Chetzemoka gardens
- Installed 3 memorial benches at Pope Marine Park and Haller Stairs
- Painted Chetzemoka benches and tables painted, gazebo floor sanded and repainted
- Rebuilt Rose arbor rebuilt, roses and other climbers rejuvenated and returning
- Rebuilt the lower bridge at Chetzemoka tropical garden
- Installed the Storywalk Trail at Kah Tai and added gravel to main trail
- Removed the failing basketball hoops at Mountain View
- Installed gravel trail in front of Library
- Replaced and treated/repainted Skate park fence (Risk management grant = \$23,000)
- Removed ivy off the back fence at Chetz, on Roosevelt St.
- Planted trees at Rotary (shore pines), Kah Tai prairie (Garry oaks), Haller (palm), and Pope Marine park (Vine Maple), Golf course along San Juan (Sequoias)
- Installed ADA accessible trail at 9th and McPherson
- Repaired/replaced plumbing and irrigation manifold at Haller
- Engaged more volunteer gardeners at Chetzemoka, Gateway, City Hall and on trail work
- Removed failing raingardens at Bishop Play park and installed underdrain system playground to road
- Removed buildup of large graffiti at Skatepark from when we were understaffed in 2020
- Repaired Haller Fountain statue as designed
- Helped PT Main Street with the Adams street pocket park, installed hose bib, added trail between
- Installed Creative District trail signs (60+)
- Installed Adopt a Park signs
- Adjusted grade of Adams street trail from Jefferson to Washington, used PUD poles
- Addressed failing landmark tree at Gateway Park
- Addressed shoreline erosion at Adams street end
- Repaired Erosion on Howard Street Trail
- Added ADA railing extensions to the Haller Stairs.
- Prepared information for Banked Capacity process.

Parks appreciates the help from other City Departments. Considerable help was provided by the Streets crew for addressing the Gateway Trees, Adams Street erosion, and the Adams Street Buggy Trail. Additionally, the Fleets crew performed most of the welding and steel replacement at the Skate Park and at the Haller Stairs. The Water Department helped with leaks at the Golf Course and Haller Fountain.