

SUF

SOUND URBAN FORESTRY

Appraisals, Planning, Urban Landscape Design and Management

Kingswood Commercial Project

1401 & 1551 Kingswood Drive SW

Tumwater, Washington 98501

Tree Protection Plan

Prepared for: KCI Commercial Inc., Trevor Colby

Prepared by: Kevin M. McFarland, SUF

Consulting Urban Forester/ISA Certified Arborist & Tree Risk Assessor Qualified

Date: 4/28/2022

This report has been developed as part of the proposed 8.97-acre Kingswood commercial project, in Tumwater, Washington. This plan will satisfy the requirements as specified by the Tumwater Protection of Trees and Vegetation Ordinance (TMC 16.08) pursuant to the City of Tumwater Development Guidelines and Standards.

I. Overall Vegetation Description

The majority of the property is field grass with small pockets of trees around the outer edges in the southern portion. The species found are a mix of natives with Douglas fir the dominant, and invasives such as black locust and poplars.

II. Inventory of Trees

A 100% inventory of the trees within the parcels was conducted on April 18, 2022. This information is presented in the table below and the approximate locations are shown on the attached aerial.

Table 1. Inventory of Trees within Property

ID#	Species	DBH	Condition
*1	Cottonwood	20"	Good
2	Douglas Fir	14"	Good
3	Douglas Fir	20"	Good
4	Red Oak	6"	Good
5	Crabapple	16"	Fair
6	Black Locust	12"	Good
7	Black Locust	14"	Good
8	Black Locust	10"	Good
9	Black Locust	16"	Good
10	Douglas Fir	28"	Good
11	Black Locust	16"	Fair
12	Black Locust	20"	Fair
13	Black Locust	16"	Fair
14	Black Locust	20"	Fair
*15	Poplar	18"	Fair
16	Black Locust	14"	Fair
*17	Poplar	12"	Fair
18	Bitter Cherry	15"	Fair
19	Scots Pine	18"	Fair
20	Scots Pine	20"	Fair
21	Douglas Fir	20"	Fair
22	Douglas Fir	25"	Fair
*23	Douglas Fir	24"	Poor
*24	Douglas Fir	22"	Poor
25	Douglas Fir	18"	Fair
*26	Douglas Fir	14"	Poor
27	Douglas Fir	22"	Fair
28	Douglas Fir	17"	Fair
**29	Douglas Fir	26"	Fair
30	Douglas Fir	18"	Fair
31	Douglas Fir	20"	Good

ID#	Species	DBH	Condition
**32	Douglas Fir	24"	Good
33	Douglas Fir	17"	Fair
34	Douglas Fir	22"	Good
**35	Douglas Fir	24"	Good
**36	Western Red Cedar	50"+	Good
**37	Douglas Fir	26"	Fair
*38	Black Locust	26"	Poor
**39	Black Locust	24"	Fair
40	Black Locust	6"	Fair
41	Black Locust	8"	Fair
42	Black Locust	6"	Fair
43	Black Locust	6"	Fair
44	Black Locust	8"	Fair
45	Black Locust	6"	Fair
46	Black Locust	10"	Fair
47	Black Locust	6"	Fair
48	Port Orford Cedar	23"	Good
49-62	Black Locust	6-18"	Poor to Fair
63	Black Locust	8"	Fair
64	Black Locust	10"	Fair
*65	Poplar	26"	Poor
*66	Poplar	12"	Poor
*67	Poplar	14"	Poor
*68	Poplar	16"	Poor
*69	Poplar	16"	Poor
*70	Poplar	20"	Poor
*71	Cottonwood	6"	Fair
72	Black Locust	8"	Fair
*73	Cottonwood	14"	Good
*74	Cottonwood	23"	Fair
*75	Cottonwood	14"	Fair

*Denotes trees subtracted from tree retention calculations due to species or poor condition.

**Denotes trees that are to be retained and count as 2 trees due to their 24"+ diameters.

Landmark Trees

I found no trees within the site that would be considered specimen or 'Landmark' trees.

Off-Site & Edge Trees

No offsite trees were identified with the potential of impacts.

III. Tree Retention Calculations

Per TMC 16.08.070, cottonwoods, poplars and trees that do not have a post construction life expectancy greater than 10 years are not considered for the purposes of calculating tree retention standards. Therefore, 17 trees were subtracted from the total of 75 listed in Table 1 (noted *).

Trees to be retained are located within the southeast corner of the project and include #19-47. Of these, 4 trees were subtracted due to their poor conditions (*) and 6 trees are of size that they count as two trees (**). Therefore, this project has a total of 31 tree retention credits.

Table 6. Summary of Tree Retention Calculations

Gross Acreage	8.97
Total Trees Within Site (75 – 17)	58
20% Tree Retention	12 Trees
*12 Trees/ Acre Retention	108 Trees
Proposed Tree Retention	31 Trees
Shortfall on Required Retention	77 Trees
Required Replanting (1:1)	77 Trees

*This is the greater amount and therefore required by TMC

IV. Replanting

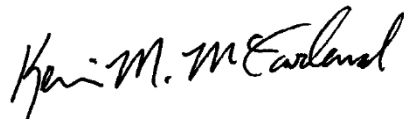
This project falls short of the minimum retention by 79 trees and is therefore required to replant at a rate of 1:1 within the site. This requirement will be met with the landscape plans and will follow the standards as outlined in TMC 16.08.070.3.

IV. Tree Protection

I recommend tree protection fencing be installed along the outer edges of the area of trees to be retained (#19-47). I have indicated approximate location in orange on the attached site plan. Fencing shall meet the City's standards and in place and inspected by myself or another certified arborist prior to any site work. The fencing shall remain in place during the entire construction process with absolutely no equipment or materials allowed beyond the fencing.

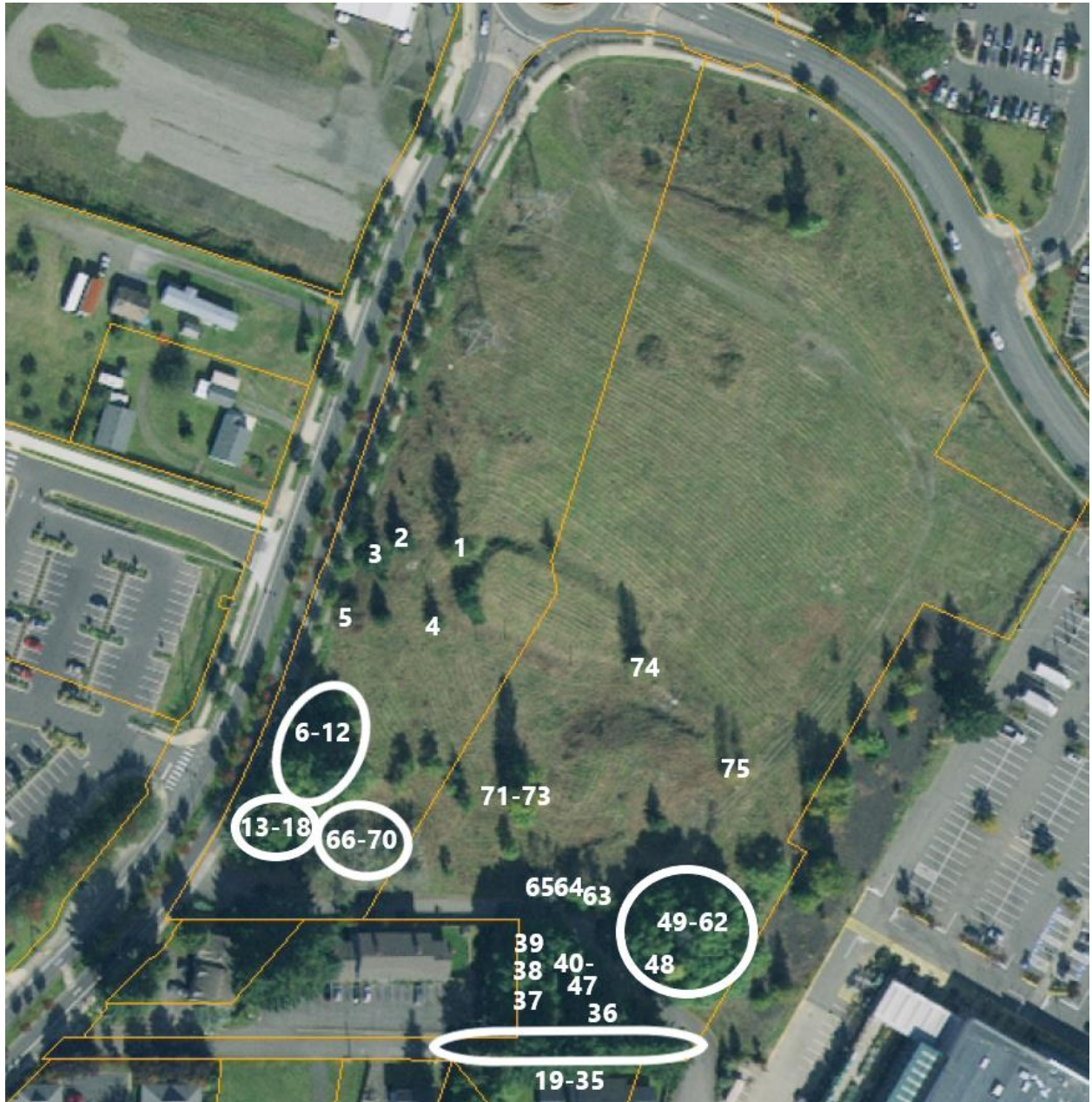
I am also recommending that the English ivy be removed from the trees to be retained. This will start having a negative effect on the condition of the trees.

Professionally Submitted,



Kevin M. McFarland, Principal
ISA Certified Arborist PN-0373 & ISA Tree Risk Assessment Qualified
Sound Urban Forestry, LLC

Locations of Inventoried Trees



Recommended Tree Protection Fencing

