

TALMACK

URBAN FORESTRY

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1 Centennial Square, Victoria, BC

Construction Impact Assessment

PREPARED FOR:

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REVISION RECORD

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
Original	Original TPP report	2024-05-16	GW
R1	Revision to original TPP report dated 2024-05-16 to reflect review of the updated tree management site plan information.	2024-12-09	NT

1. INTRODUCTION

Dialog BC Architecture Engineering Interior Design Planning Inc. (Client) retained Talmack Urban Forestry Consultants Limited (Talmack) to complete a tree inventory, tree management plan and construction impact assessment for the following proposed project:

Site:	1 Centennial Square, Victoria BC
Municipality:	City of Victoria
Client Name:	Dialog BC Architecture Engineering Interior Design Planning Inc.
Dates of Site Visit(s):	March 14, 2024
Site Conditions:	No ongoing construction

The purpose of this report is to address requirements of the City of Victoria arborist report terms of reference, and Tree Preservation Bylaw No. 21-035. The construction impact assessment section of this report (section 8) is based on plans reviewed to date, which includes the tree management site plan (Dialog Design; September 09, 2024), and the civil concept design (McElhanney Ltd.; May 14, 2024).

2. TREE INVENTORY METHODOLOGY

For this report, the size, health, and structural condition of trees within influencing distance of the proposed construction were documented (*Appendix A*). On-site municipal trees were not tagged but, were identified as M# in the inventory. Each tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

3. EXECUTIVE SUMMARY

The proposed project involves an alteration to the landscape and design of Centennial Square. These alterations include the addition of new seating areas, a tree bosque, new water feature, a new stage area, new hard surfaces (retaining walls, and paved surfaces), as well as new storm water catch basins and sanitary manholes. Current designs show alterations to raised planting areas for two Garry oaks (M12 and M20).

A total of twenty-seven (27) trees were included in the inventory. All of the inventoried trees are municipal trees belonging to the City of Victoria. A total of four (4) trees are expected to require removal due to impacts from the proposed project.

4. TREE INVENTORY DEFINITIONS

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbor.

DBH: Diameter at breast height – diameter of trunk, measured in centimeters at 1.4m above ground level. For multi-stemmed trees, the DBH is equal to the summation of the DBH of the three largest stems. For trees on a slope, it is taken at the average point between the high and low side of the slope. * Measured over ivy, ~ Approximate due to inaccessibility or on neighbouring property

Dripline: Indicates the radius of the crown spread measured in meters to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not consider individual tree characteristics, such as health and vigor. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in meters from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development: A Technical Guide to Preservation of Trees During Land Development."

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

Health Condition:

- Poor – significant signs of visible stress and/or decline that threaten the long-term survival of the specimen
- Fair – signs of stress
- Good – no visible signs of significant stress and/or only minor aesthetic issues

Structural Condition:

- Poor – Structural defects that have been in place for a long period of time to the point that mitigation measures are limited

- Fair – Structural concerns that are possible to mitigate through pruning
- Good – No visible or only minor structural flaws that require no to very little pruning

Suitability ratings are described as follows:

Rating: Suitable.

- A tree with no visible or minor health or structural defects, is tolerant to changes to the growing environment and is a possible candidate for retention provided that the critical root zone can be adequately protected.

Rating: Conditional.

- A tree with good health but is a species with a poor tolerance to changes to its growing environment or has a structural defect(s) that would require that certain measures be implemented, in order to consider it suitable for retention (i.e., retain with other codominant tree(s), structural pruning, mulching, supplementary watering, etc.)

Rating: Unsuitable.

- A tree with poor health, a major structural defect (that cannot be mitigated using ANSI A300 standards), or a species with a poor tolerance to construction impacts, and unlikely to survive long term (in the context of the proposed land use changes).

Retention Status:

- Remove – Not possible to retain given proposed construction plans
- Retain – It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our recommended mitigation measures are followed
 - Retain * - See report for more information regarding potential impact

5. SITE INFORMATION & PROJECT UNDERSTANDING

The proposed project is within the existing Centennial Square, Victoria BC. It is understood that the following items will be completed under the proposal:

- Removal of selected on-site trees
- Removal of existing water feature
- Removal of some existing retaining walls and raised planting beds
- Installation of manholes and catch basins to tie into existing storm and sanitary services
- Installation of new water feature
- Installation of new stage area
- Installation of new landscape/hardscape features

6. FIELD OBSERVATIONS

The sites contain existing buildings, trees, and hardscaping. The tree resources within influencing distance of the project are predominately located within the central area of the square.

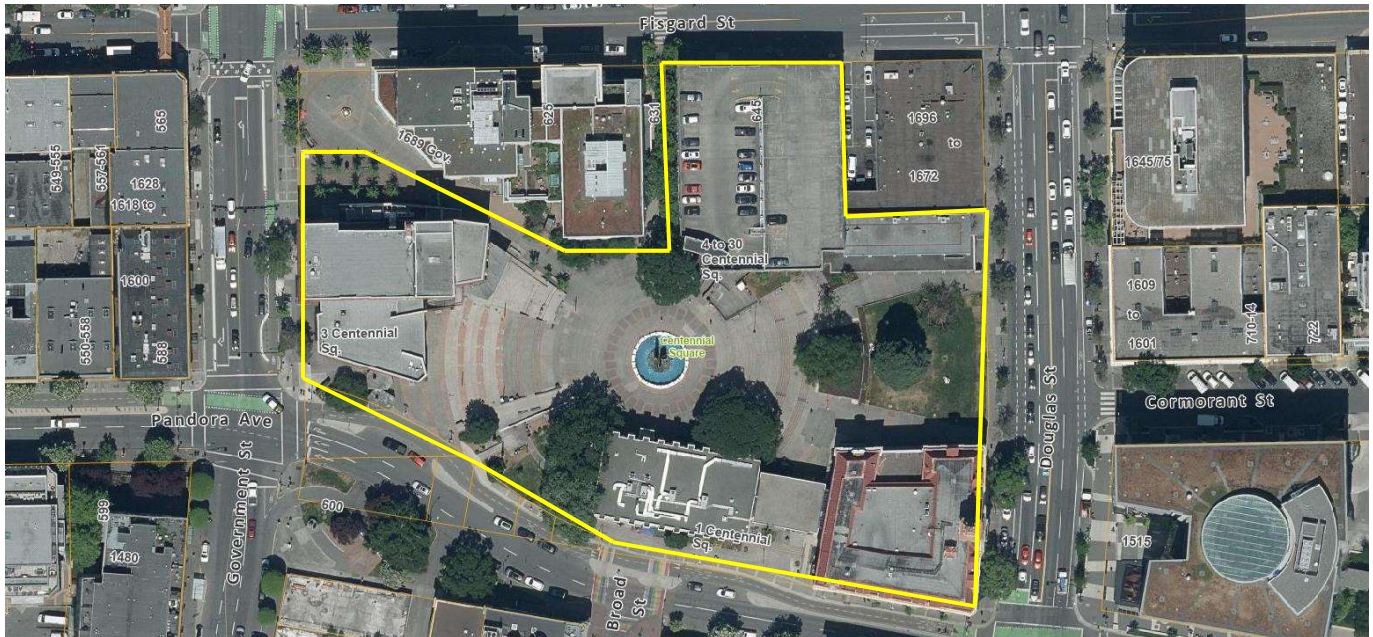


Figure 1 : Site context aerial photo. The approximate boundary of the proposed project at Centennial Square, Victoria BC is outlined in yellow.

7. TREE RISK ASSESSMENT

During our March 14, 2024 site visit and in conjunction with the tree inventory, on-site trees were assessed for risk, on a limited visual assessment basis (level 1), and in the context of the existing land uses. The time frame used for the purpose of our assessment is one year (from the date of the tree inventory). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

Existing Land Uses

Only one (1) tree was deemed to have been a moderate risk in the context of existing land uses. Tree M12 was brought to the attention of the City of Victoria Parks department due to its history of partial failure and unknown inspection interval. Upon further discussion with the CoV Parks department we have been assured that the tree is regularly monitored for risk. We did not observe any other trees that were deemed to be moderate, high, or extreme risk in the context of the existing land uses, that would require hazard abatement to eliminate present and/or future risks (within a 1-year timeframe). Targets considered during this TRAQ assessment included: existing structures (constant use), occupants of existing structures (frequent use), pedestrians and employees on-site (frequent use), occupants of vehicles travelling on Government Street and Pandora Avenue (frequent use), and pedestrians travelling along Government Street and Pandora Avenue (frequent use).

Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact			
	Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Figure 2: Likelihood and Risk Rating Matrices used to evaluate tree risk in the ISA Tree Risk Assessment Manual, Second Edition (Dunster et al. 2017).

8. CONSTRUCTION IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following municipal trees (indicated by ID #) are located where they are likely to be impacted by proposed on-site construction and are proposed for removal (shown on the tree management plan in [Appendix B](#)):

Remove four (4) municipal trees

- M6, M7, M10, M11

The following municipal trees (indicated by ID #) are located where they are possible to retain, provided the mitigation measures outline in this report are followed.

Retain and Protect twenty three (23) municipal trees

- M1-M5, M12-M19, *M20, M21-M29

indicates that the tree has been identified as “Retain”

8.1.1. Additional Mitigation Measures for Municipal Trees

There are several available mitigation options for the retained municipal trees during construction:

- Install tree barrier fencing as shown in Appendix B
- Have all excavations within the CRZs of retained trees be supervised by the project arborist
- Avoid the storage of fill, materials, or equipment within the CRZs of retained trees

The trees most likely to be impacted by the project are M12 and M20 due to the proposed changes within their CRZs. These trees are both currently growing in raised planting beds with limited soil volume and rooting area. With the current design the total rooting space and soil volume will increase for tree M12 and M20.

One main concern for the works around these trees will be in the removal of the retaining walls that currently make-up their respective rooting areas. We recommend that during the pre-construction meeting that a strategy be developed to retain the soil around the trees while the new retaining walls are being built. The main goal will be to

prevent the existing soil from sloughing out from around the tree as well as preventing root desiccation. Additionally, if the trees are currently being irrigated, the irrigation should continue throughout the construction phase of the project.

Based on our review of the current civil plans it does not appear that the proposed works will affect any retained trees. If future civil plans are altered and work is planned within the CRZs of retained trees, we recommend that an updated report be issued that addresses the changes.

8.2. TREE IMPACT SUMMARY TABLE

Pursuant to City of Victoria Tree Preservation Bylaw No. 21-035, the tree replacement calculations are as follows:

Table 1: Tree Impact Summary

Tree Status	Total # of Trees	Total # of Trees - REMOVED	NEW or REPLACEMENT Trees to be Planted*	# of Existing Non-Protected Trees Counted as Replacements
Municipal Trees	27	4	25*	N/A
Total	27	4	25*	N/A

A total of four trees will be removed for the Centennial Square upgrade project. There are fourteen (14) trees have been proposed to be planted within the square (*refer to the Landscape package for replacement tree planting information).

9. IMPACT MITIGATION

Tree Protection Barrier: The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see [Appendix B](#) for municipal barrier specifications). Where possible, fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e., demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- All excavation within the critical root zones of retained bylaw protected trees
- Any required pruning efforts should be completed under the direction of the project arborist and fulfilled by an ISA certified arborist

Methods to Avoid Soil Compaction: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

Paved Surfaces Above Tree Roots:

If the new paved surfaces within the critical root zones of trees to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Mulching: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See “methods to avoid soil compaction” if the area is to have heavy traffic.

Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

Arborist Role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing
- Reviewing the report with the project foreman or site supervisor
- Locating work zones, where required
- Supervising any excavation within the critical root zones of trees to be retained
- Reviewing and advising of any pruning requirements for machine clearances

Review and site meeting: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talmack Urban Forestry Consultants Ltd. for the exclusive use of the Client and may not be reproduced, used, or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talmack Urban Forestry Consultants Ltd. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talmack Urban Forestry Consultants Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's health and structure or to mitigate associated risks. Trees are living organisms whose health and structure change and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talmack Urban Forestry Consultants Ltd. cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

It is not possible for an Arborist to identify every flaw or condition that could result in failure, nor can he/she guarantee that the tree will remain healthy and free of risk. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If new information is discovered in the future during such events or other activities, Talmack Urban Forestry Consultants Ltd. should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

11. IN CLOSING

We trust that this report meets your needs. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talmack Urban Forestry Consultants Ltd.

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TRA Qualified

12. REFERENCES

Capital Regional District (CRD). 2022. CRD Regional Map. Retrieved data from
<https://maps.crd.bc.ca/Html5Viewer/?viewer=public&>

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society
of Arboriculture (ISA).

The City of Victoria Tree Preservation Bylaw No. 21-035.

13. COMPANY INFORMATION

General Liability: Intact Insurance, Policy No. 5V2147122: \$5,000,000

APPENDIX A - TREE INVENTORY TABLE

Table 2: Tree Inventory Table

Tag #	Surveyed (Yes/No)	Location (On, Off, Shared, City)	Name		DBH (cm)	Crown Radius (m)	Critical Root Zone Radius (m)	Condition		Relative Tolerance	General Field Observations/Remarks	Tree Retention/Location Comments	Retention status
			Common	Botanical				Health	Structural				
M1	No	City (Street Tree)	Chanticleer Pear	<i>Pyrus calleryana</i> 'Chanticleer'	24	3.5	2.9	Good/Fair	Fair/Poor	Moderate	Growing in sidewalk planting pit (limited rooting space), historic stem failure (tear out ~2m AGL), irregular taper, crown raised on east side, codominant (included)		Retain
M2	No	City (Street Tree)	Chanticleer Pear	<i>Pyrus calleryana</i> 'Chanticleer'	26	3.5	3.1	Good/Fair	Fair/Poor	Moderate	Growing in sidewalk planting pit (limited rooting space), socket tear out of lowest eastern limb, codominant (included and somewhat active)		Retain
M3	No	City (Street Tree)	Chanticleer Pear	<i>Pyrus calleryana</i> 'Chanticleer'	10	1.25	1.2	Good	Fair	Moderate	Growing in sidewalk planting pit (limited rooting space), tri-dominant, some structural pruning	Improving Douglas Street frontage	Remove
M4	No	City (Street Tree)	Persian Ironwood	<i>Parrotia persica</i>	11	2.5	1.3	Good	Fair	Moderate	Growing in sidewalk planting pit (limited rooting space), lowest limbs on east side broken (likely bus damage),	Improving Douglas Street frontage	Remove
M5	No	City (Street Tree)	Chanticleer Pear	<i>Pyrus calleryana</i> 'Chanticleer'	23	3	2.8	Fair/Poor	Fair/Poor	Moderate	Growing in sidewalk planting pit (limited rooting space), dieback on southern side of crown, codominant (active inclusion), southern most leader has a historical tear out wound, mechanical damage to base on west side, mechanical damage to stems on east side (likely bus damage), leans to the east		Retain
M6	Yes	City (On-site)	Japanese flowering cherry	<i>Prunus serrulata</i>	96	5	11.5	Fair/Poor	Poor	Moderate	Ganoderma around base of tree, 5 scaffold limbs originating at ~2m, limbs end weight reduced, seams at attachment point of some scaffold limbs, tear out wound in lowest southern facing limb, sparse canopy, stressed, dieback, girdling roots and large surface roots	Impacts from patio area	Remove
M7	Yes	City (On-site)	Giant sequoia	<i>Sequoiadendron giganteum</i>	165	8	19.8	Good	Good	Moderate	Growing within split railed fencing	Impacts from tree bosque	Remove
M10	Yes	City (On-site)	Garry oak	<i>Quercus garryana</i>	15	2.5	1.5	Good/Fair	Fair	Good	Original top likely died or failed, re-established leaders deflected, canopy weighted to the north and east side, limited rooting space, compacted soils	Conflicts with bosque	Remove
M11	Yes	City (On-site)	Sweetgum	<i>Liquidambar styraciflua</i>	71	8	8.5	Good	Fair	Moderate	Cavity at ~4m AGL, tear out wound on lowest eastern limb, growing within irrigated garden, historic tear out wound on northern side ~5m AGL, canopy weighted to the west, over extended limbs to the west, response to most wounds	Impacts from tree bosque	Remove

Tag #	Surveyed (Yes/No)	Location (On, Off, Shared, City)	Name		DBH (cm)	Crown Radius (m)	Critical Root Zone Radius (m)	Condition		Relative Tolerance	General Field Observations/Remarks	Tree Retention/Location Comments	Retention status
			Common	Botanical				Health	Structural				
M12	Yes	City (On-site)	Garry oak	<i>Quercus garryana</i>	92 below unions	12	9.2	Good	Poor	Good	Codominant stems have split (may have been cabled after the partial failure), extended limbs to the north and west, responding well to wounds	Recommend level 3 risk assessment	Retain
M13	Yes	City (On-site)	Garry oak	<i>Quercus garryana</i>	72	11	7.2	Fair	Fair	Good	Pruned for building clearance on east side, over extended limbs to the north, largest northern facing limb has been end weight reduced,		Retain
M14	Yes	City (On-site)	London Plane	<i>Platanus X acerfolia</i>	77	11	7.7	Good/Fair	Good/Fair	Good	Large historic pruning wounds (responding well, decay in lowest on north side), extended limbs to the southeast and northwest		Retain
M15	No	City (On-site)	Dogwood	<i>Cornus spp.</i>	5	1	0.8	Fair	Fair	Poor	Tear out wound on north side,		Retain
M16	No	City (On-site)	Hawthorn	<i>Crataegus spp.</i>	~13	1.25	1.3	Good	Fair	Good	Multiple limbs competing for apical dominance		Retain
M17	No	City (On-site)	Garry oak	<i>Quercus garryana</i>	22	2.25	2.2	Good/Fair	Fair	Good	Codominant, asymmetrical canopy		Retain
M18	No	City (On-site)	Garry oak	<i>Quercus garryana</i>	25	3.5	2.5	Good	Fair	Good	Codominant (included)		Retain
M19	No	City (On-site)	Garry oak	<i>Quercus garryana</i>	21	3.5	2.1	Good	Good	Good	Tridominant		Retain
M20	Yes	City (On-site)	Garry oak	<i>Quercus garryana</i>	73	8	7.3	Good	Good/Fair	Good	Historic pruning wounds (response growth), canopy weighted to the south, deadwood, growing in raised planting bed (limited rooting space)		Retain
M21	Yes	City (On-site)	Katsura	<i>Cercidiphyllum japonicum</i>	36	3.25	4.3	Good/Fair	Fair	Moderate	Growing in raised planting area (limited rooting space), surface roots, girdling roots, large pruning in F wound on north side (responding), pruned for building clearance, included bark, tight unions, epicormics		Retain
M22	Yes	City (On-site)	Katsura	<i>Cercidiphyllum japonicum</i>	32	3.5	3.8	Fair	Fair	Moderate	Growing in raised planting area (limited rooting space), large surface roots, tridominant, clearance pruning on northside, limited interior branching		Retain

Tag #	Surveyed (Yes/No)	Location (On, Off, Shared, City)	Name		DBH (cm)	Crown Radius (m)	Critical Root Zone Radius (m)	Condition		Relative Tolerance	General Field Observations/Remarks	Tree Retention/Location Comments	Retention status
			Common	Botanical				Health	Structural				
M23	Yes	City (On-site)	Katsura	Cercidiphyllum japonicum	37	2.25	4.4	Fair	Fair/Poor	Moderate	Growing in raised planting area (limited rooting space), surface roots, girdling roots, pruned more heavily than others, epicormics		Retain
M24	Yes	City (On-site)	Katsura	Cercidiphyllum japonicum	36	3.5	4.3	Fair/Poor	Fair	Moderate	Growing in raised planting area (limited rooting space), large surface roots, girdling roots, included bark, codominant, bark sloughing in both tops		Retain
M25	Yes	City (On-site)	Katsura	Cercidiphyllum japonicum	15	3	1.8	Good	Fair	Moderate	Growing in tree well (covered by grate), limited rooting area, codominant		Retain
M26	Yes	City (On-site)	Katsura	Cercidiphyllum japonicum	19	2.75	2.3	Good	Fair	Moderate	Growing in tree well (covered by grate), limited rooting area, codominant included		Retain
M27	Yes	City (On-site)	Eddie's White Wonder	<i>Cornus nuttallii</i> X <i>florida</i>	6, 5, 5, 4	1	1.8	Fair	Fair	Poor	Multiple leaders, limited rooting zone, surrounded by hardscaping	Park's request for removal	Remove
M28	Yes	City (On-site)	Eddie's White Wonder	<i>Cornus nuttallii</i> X <i>florida</i>	6	1	0.9	Fair	Fair	Poor	Mechanical damage to lower limbs	Park's request for removal	Remove
M29	Yes	City (On-site)	Eddie's White Wonder	<i>Cornus nuttallii</i> X <i>florida</i>	6, 6, 5	1.5	1.8	Fair	Fair	Poor	Mechanical damage to limbs (removed), limited rooting space, surrounded by hard surfaces, compacted soil	Park's request for removal	Remove