

Arborist Report

Site: Stanley Street – Project Manawa

Asset ID: Carpark Trees

Introduction:

1. Queenstown Lakes District Council (QLDC) is proposing the development of vacant council land situated at 57 and 61 Stanley Street, Queenstown. Currently there are of 21 trees situated within and near to the vacant land. 17 of these trees are being assessed for removal to allow the construction of 12 additional carparking spaces (the Trees).
2. The proposal includes two options. Option 1 is to remove all trees within the vacant land. Option 2 is to remove three trees within the vacant land and retain 17 trees. Option 2 will result in the loss of 12 carparking spaces. Both options require a minimum of 3 trees to be removed.
3. QLDC has requested that the Trees be assessed by Council's Arborist for their current condition and monetary value. The method used to assess both the condition and monetary value is the Melbourne Tree Valuation Tool adjusted for New Zealand dollar value.
4. The Trees were not assessed for carbon benefits or stormwater retention abilities.

Assessment:

5. A total of 17 Trees were assessed within the proposed carpark area.
6. Two additional trees situated adjacent to the informal carpark were also valued, these are identified in the map in Appendix 1 with a blue square. *Taxus baccata* – Yew Trees located on the berm of 49 Stanley Street. These two trees are assessed to have historical value. They were planted by school students at the original Queenstown Primary School in 1941. It is noted that some of the 17 trees assessed have a similar age range to these Yew Trees.
7. The trees numbered TT-29- T43 in the reserve adjacent to carpark were not assessed.
8. The original Queenstown Primary School buildings that were more recently used as the Queenstown Art centre and Playcentre have been relocated off the now vacant site. This has exposed the trees to new environmental changes. All trees showed signs of good vitality and minimal pest infestation. New elongation growth was evident on this season's spring growth. Some trees showing striation supporting reaction wood in stems adhering to additional strength for retaining axion uniform of stress (trees ability to stay in optimal growing conditions).
9. The Trees were previously conditionally assessed in September 2022. At this time they were classified having low, medium and high structure and health condition combined with a future "Useful Life Expectancy" (ULE) (see previous report for this explanation). These results were not significantly different to new ratings obtained for the current assessment.
10. Of the trees T-18 and T-19 have had approximately half the canopy removed as part of the recently building removal.
11. When onsite it was noted the QLDC generic Tree Protection Management Plan was not being implemented by contractors.

Tree	Species	Value NZ \$	Benefits	Rating
T 15	<i>Prunus accolade</i> – Flowering Cherry	3,406.00	Mature Cherry	Moderate
T-16	<i>Betula pendula</i> – Silver Birch	9,346.65	Motel Screening	Moderate
T-17	<i>Prunus cerasifera</i> 'Nigra' – Purple Leaf Plum	6,539.93	Screening for motel	Low
T-18	<i>Tsuga heterophylla</i> – Western Hemlock	8,858.32	Unique tree	Moderate
T-19	<i>Griselinia littoralis</i> x2 – Broadleaf (Kapuka)	829.25 829.25	Native	Low
T-20	<i>Malus sp.</i> – Apple Tree	4,085.65		Low
T-21	<i>Betula pendula</i> – Silver Birch	12,462.00		Moderate / Low

T-22	<i>Fagus sylvatica</i> 'Purpurea' – Copper Beech	10,597.00	Excellent species	High
T-23	<i>Acer negundo</i> – Box Elder	8,138.58	Mature tree	Moderate
T-24	<i>Pittosporum euginoides</i> – Lemonwood x5	1,307.98 581.33 10,681.88 3,487.96 7,266.58	Screening	Mod / High
T28	<i>Betula pendula</i> – Silver Birch	14,539.23	Nice Specimen	High
T25/ T26/ T27	<i>Pittosporum euginoides</i> x2, <i>Sycamore</i> x1	0.00	Removed	
Totals		102,959.53		
Tree Id- 12517	<i>Taxus baccata</i>	76,640.00	Significant Tree	High
Tree Id- 12518	<i>Taxus baccata</i>	76,640.00	Significant Tree	High
Trees in Carpark		256,239.53		

Conclusion:

12. The value of the trees in the carpark is calculated to be \$102,959.53 with an additional value of \$153,280.00 totalling **\$256,239.53**.
13. The Trees are assessed as critical infrastructure, providing ecological and environmental benefits to the Queenstown CBD.
14. Retention of the trees should be considered to continue to provide screening of the adjacent motel carpark, dust reduction, storm water retention in combination with further environmental benefits, including carbon sequestration.
15. Trees naturally adapt their structure to withstand wind over time. Annual monitoring, especially over the next 3 to 5 years is recommended as the Trees continue to adapt to the changes brought by the increased site exposure and ground compression which will result from use of the site as a carpark.
16. Policy 4.6 of the QLDC Tree Policy 2024 requires the following:

Consider tree removal for public works only where all available alternatives have been explored and are not viable.
17. All trees removed are subject to Policy 5.1 of the QLDC Tree Policy 2024 requiring 2:1 replacement, as set out below:
 - a. *Require the planting of a minimum of two new trees for every tree removed, with the projected*
 - b. *Canopy cover replacing what is lost within 20 years. This means more than two trees may be required. (QLDC Tree Policy P22. 2024).*
18. Any works around the Trees will require a Tree Protection Management Plan, combined with structural design to minimise damage to tree roots, and ability for optimal water absorption and gas exchange.

Assessment outside of scope:

19. It is noted that in the alternative to the two options assessed, tree numbers T-15, T-18, T-19 could be removed to retain green space that is in a practical location in a more usable layout in northwestern corner the carpark. The existing Option 2 layout would implicate the structural root zone and canopy of tree T-15. This option could be considered as a hybrid option between existing options 1 and 2.

Recommendations:

20. All 17 trees retained as the assessed value is greater than the estimated income of the proposed carpark.
21. Retain trees T-20, T-21, T-22, T-23, T-24, T-28 – as these have the highest monetary value combined with ULE retaining designated reserve area.
22. Recommend communications with hotel regarding screening - Trees T-16, T-17.

23. Two *Taxus baccata* require minimum Structural Root Zone protection - bump stops at 6m from centre of tree as shown in Appendix 1.

Appendix 1: Yew Trees Tree Id- 12517 and Tree Id- 12518 identified with blue square.

