GreenTrees Ltd
Peter Waymouth - Consulting Arborist
11 Bouverie St, Dunedin, NZ, 9010
p 03 473 8065
m 027 432 9646
e pw@greentrees.co.nz
w https://greentrees.co.nz

09.02.26

DCC hearing for resource consent application
per significant Pin Oak tree (T666)
LUC-2025.420 27- King Street, Mosgiel

Introduction

My name is Peter Waymouth & my role is arborist consultant in the above hearing, for Phiillpa & Darren Bain of 27 King Street, Mosgiel; who are the owners the Pin Oak tree (T666), in question. It is my understanding that my original report (1_17.04.24) relating to resource consent LUC.2024.171,(declined October 2024) is now included as evidence in the above application, along with another 2_23.08.24 report to the Bains.

Qualifications

In relation to this hearing, my current certifications & qualifications are:
ISA_BMCA NZ-0039BTM, ISA_TRAQ risk qualification,
ISA_Urban Forester, ISA_Tree Worker, ASCA membership
Through links on my website https://www.greentrees.co.nz the above are easily verified.

Request for release of 6x reports

I would like to thank the hearing panel for their direction to release the above reports, because the LUC.2024.171 reports series map my trajectory through the RMA process.There are another 6x LUC.2024.171 reports which would be of assistance *(ie 10x LUC.2024.171 reports - Pin Oak T666 for the period 17.04.24 to 06.09.25)*. At present, reports 9_06.8.25 & 10_06.09.25 are already in the published hearing agenda.The panel's *direction minute_1* made for release of 2x further reports 1_17.04.24 & 2_22.08.24. If the 6x remaining reports 3,4,5,6,7,8 from LUC.2024.171 were able to released at the panel's discretion, I would be greatly appreciative. The 10x reports are bundled chronologically, with table of contents & numbered 1-100 pages & are available as PDF hard drive - print quality, providing complete overview of Pin Oak T666.

Discussion

In approaching the current resource consent hearing LUC.2025.420 there are 3 areas of health & safety concern & I would like to discuss briefly. The material within the10x reports has a cumulative value in understanding the structural integrity Pin Oak (T666) vis-à-vis other East Taieri Pin Oaks/English Oaks which I have tended for 30 years; the precis below provides a summary.

1. Bark-included branch (10.0m x 250mmø representative)
2. 5.0m Torsional spiral trunk crack (DBH = 0.8mø)
3. Root collar internal decay

1. Basal bark-included branch overhanging wires (refer reports 7_21.07.25 & 6_04.06/25)

There is a large branch (10.0m x 250mmø- mid-canopy) leaning over the electricity cables on King Street, which has a weak basal attachment. This branch with a basal bark-included vee-junction arises in the mid-canopy branch-cluster. It has clear pathway to fall into the electricity wires should it be torn off in a Sou'wester or Nor'west gale. In terms of TRAQ terminology it is 'likely' to impact the wires with considerable force after falling 3.0m. Impact would cause 'significant' consequential damage to infrastructure. With a strong possibility of outage occurring & also possible harm to people or vehicles on King Street. (TRAQ risk rating = High)

N.B. David Glenn in his TRAQ tree risk assessments (01.07.25) on 2x separate ISA forms for the same targets as above & with the risk of harm being to people & property (ie powerlines). When assessing the branches overhanging the King Street electricity lines he noted co-dominant leaders, included bark, & over-extended branches, giving the risk TRAQ rating = Low.

2. 5.0 Torsion spiral trunk crack (refer reports 8_02.08.25,.9_06.08.25, 10_06.09.26)

Initially, the 5.0m spiral trunk crack immediately below an occluding pruning wound 75mmø was obscured, being high up on the nor'west trunk face & close to the Holly hedge. It went unnoticed until low July winter light, caused it to be seen when the tree was out of leaf. It seemed to be only 1.m long, but on closer inspection it is easily seen to run 5.0m to a sinus on the west face of the root buttress. At the suggestion my client we inspected the opposite sou'east face finding an echo tracery of the spiral crack on the nor'west trunk face. In short, the trunk has likely been twisted by the oscillation of the huge mass of the heavy mid-canopy branch-cluster in gales. At certain point, the effective torque/twisting has been so great, that a sheer fracture in the trunk wood has occurred. Ed Gilman in his pruning book mentions that such a fracture causes a loss of trunk strength for the life of the tree. Being world authority from Florida USA he has no doubt seen many destructive hurricanes. He clearly recommends serious consideration for tree removal be given, when long deep trunk cracks are detected (page 80) because of strength loss.

3.

Internal decay in Pin Oak roots (refer 1_17.04.24,4_31.10.24

Root rot in mature Pin Oaks was mentioned in my original report because I had recently felled 3x Pin Oak trees in February 2024 at East Taieri. When cutting up the 5m logs (0.6mø - 0.8mø) rot columns were found in the root collar & up into the trunk to a height of 1.0m. There no external evidence of fungal decay (ie ganoderma sp - Bracket fungus) to be seen 2x of these trees. The 3rd tree clearly had visible brackets on the root collar a photo (page 42) with 66% dead tissue & 33% live tissue. A peer reviewed scientific article published 10.05.23 by MDPI out of Switzerland of a study at University of Massachusetts, Amherst, USA by Brazee & Burcham. It examines the nature of root rot in various North American Oaks, including Pin Oaks where internal fungal decay was found using sonic tomography with no external no fruiting bodies being present.