

**Before the Hearings Panel
At Porirua City Council**

Under Schedule 1 of the Resource Management Act 1991

In the matter of the Proposed Porirua District Plan

Between **Various**

Submitters

And **Porirua City Council**

Respondent

**Statement of evidence of David Spencer on behalf of Porirua City Council
(Arboriculture)**

Date: 28/10/2021

INTRODUCTION:

- 1 My full name is David Spencer. I am the Director of Tend Trees Ltd and work as a Consultant Arborist and Urban Forester.
- 2 I have prepared this statement of evidence on behalf of the Porirua City Council (**Council**) in respect of technical related matters arising from the submissions and further submissions on the Proposed Porirua District Plan (**PDP**).
- 3 Specifically, this statement of evidence relates to the matters in Chapter TREE – Notable Trees and the Notable Trees Schedule.
- 4 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 5 I hold the qualifications of
 - Level 3 Technicians Certificate in Arboriculture (UK),
 - BTEC National Diploma in Horticulture (UK),
 - Quantified Tree Risk Assessment (QTRA - Advanced User),
 - VALID Tree Risk Assessment,
 - ISA's Tree Risk Assessment Qualification (TRAQ)
- 6 I have worked in the following positions for the following companies
 - Consultant Arborist and Director, Tend Trees Consultancy Ltd, New Zealand, (August 2020 – Present),
 - Tree Officer, Enable Leisure and Culture, Wandsworth, London, England (March 2020 – August 2020),
 - Principal Consultant, Arborlab Consultancy Services, Wellington, New Zealand (June 2014 – March 2020),
 - Team Manager Arboriculture, Wellington City Council, Wellington, New Zealand (June 2012 – June 2014),

- Customer Liaison Arborist Wellington City Council, Wellington, New Zealand (June 2008 – June 2012)
- Prior to this I was a practicing climbing arborist for 7 years.

7 I am a member of the following organisations

- Member of New Arboricultural Association 2010 – Present
- Corporate Gold Member Eastwoodhill 2021 - Present
- Executive Board Member New Zealand Arboriculture Association (NZArb) October 2016 – 2021.
- Treasurer New Zealand Arboriculture Association (NZArb) 2017 – 2020

Code of conduct

8 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Environment Court. My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

SUMMARY

9 My name is David Spencer.

10 I have been asked by the Council to provide Arboricultural evidence in relation to the submissions on Chapter TREE – Notable Trees, which primarily relates to trees and their protection under the District Plan.

11 My statement of evidence addresses the trees proposed for inclusion in the District Plan at the following sites.

- 22 Whanake Street, Titahi Bay (TREE008)

- 26 Tireti Road, Titahi Bay (TREE001)
- 4 Paekākāriki Hill Road, Pāutahanui (TREE021)
- 49 Mungavin Ave, Ranui (TREE030)
- 346B State Highway 58, Judgeford Porirua – a proposed additional listing.

INVOLVEMENT WITH THE PROPOSED PLAN

12 I have been involved in the PDP since 2019 when working at Arborlab. I was the initial contact for the Council while working at Arborlab and received the scope of work and passed this on to Mr Saxon to deliver. I additionally reviewed his work prior to delivery to the Council. Although I have not seen the final documentation since that time.

13 I have subsequently been engaged to reassess some proposed listings based on the submissions of others and an additional proposed listing.

SCOPE OF EVIDENCE

14 My statement of evidence addresses the following matters:

14.1 At 22 Whanake Street, Titahi Bay. (TREE008) I inspected the trees at the site and their worthiness for inclusion in the PDP. I did not complete a Standard Tree Evaluation Method (STEM) evaluation.

14.2 At 26 Tireti Road, Titahi Bay (TREE001) I assessed the worthiness of the trees for listing using the STEM.

14.3 At 4 Paekākāriki Hill Road, Pāutahanui (TREE021). I inspected the trees for any unacceptable risk posed to people or property.

- 14.4 At 49 Mungavin Ave, Ranui (TREE030). I inspected the trees for any unacceptable risk posed to people or property.
- 14.5 At 346B State Highway 58, Judgeford Porirua – a proposed additional listing. I assessed the worthiness of the tree for listing using the STEM.

EVIDENCE

- 15 During October 2021 I visited each of the sites as requested.
- 16 At 22 Whanake Street, Titahi Bay. (TREE008) I found 6 Nikau Palms (*Rhopalostylis sapida*) and one Puriri (*Vitex lucens*).
- 16.1 All six of the Nikau Palms would meet the threshold for addition into the PDP listing as a group. I did not complete a full stem assessment, but rather used my experience noting that these Nikau Palms are excellent examples of the species.
- 16.2 The Puriri proposed for listing had recently been pruned, affecting its form, which would score as 'Moderate' using the STEM criteria. Additionally, its vigour was somewhat reduced and would score as 'Some' using the STEM criteria. This may have affected its overall score and worthiness of listing.
- 17 At 26 Tireti Road, Titahi Bay (TREE001) I assessed two large Norfolk Island Pines (*Araucaria heterophylla*) in the property frontage close to the road junction with Windley Avenue.
- 17.1 I attributed the following STEM scores to the trees.

Condition Evaluation		
Form	Good	15
Occurrence	Common	9
Vigour	Good	15
Function	Useful	9
Age	40 to 79	15
Amenity Evaluation		
Stature	15 to 20	15
Visibility	2km	15
Proximity	2 plus	21
Role	Important	15
Climate	Moderate	9

17.2 The total score for the combined Condition and Amenity evaluation is 138 thus meeting the 120 threshold.

18 At 4 Paekākāriki Hill Road, Pāutahanui (TREE021) I inspected the group of Macrocarpa trees and found the risk to be Broadly Acceptable using the Quantified Tree Risks Assessment (QTRA) framework. There are broken and dead branches within the tree's canopy, however if these were to fall, they would only fall onto a small patch of shrubs and trees beneath their canopy.

19 At 49 Mungavin Ave, Ranui (TREE030). I have previously inspected these trees for risk in July 2016 and December 2020.

- 19.1 The initial assessment in 2016 was carried out to determine the risk posed by the trees after concern had been raised by a resident.
- 19.2 The report concluded that the level of risk posed by this group of trees to the users of Mungavin Avenue and the neighbouring properties is within tolerable limits even after a variety of scenarios have been explored.
- 19.3 Remedial tree pruning options were suggested and carried out to the trees within the group which is part of good proactive tree management.
- 19.4 The report in 2020 was commissioned after one of the Eucalyptus fell. The most likely reason for the tree failure was the loss of soil cohesion from the persistent wet weather. The tree root plate no longer had a cohesive soil structure in which to anchor itself, giving rise to the tree failing at the root plate.
- 19.5 The remaining trees pose a risk that is either Broadly Acceptable or Tolerable using the QTRA framework. No further action is required.
- 19.6 Of note was the recent construction of a car-parking pad within the root zone of four of the trees. It is not known how this car-parking pad was constructed and whether a tree sensitive design was used to avoid root damage.
- 19.7 It has been constructed after the latest risk assessment in December 2020, as it was not observed at that time and photographs from the report show open grass area where the car-parking pad now sits.
- 19.8 The car-parking pad can be seen in the following images.



Photographs 1 and 2. Car-parking pad recently constructed within the root zone of four of the Eucalyptus trees.

19.9 It can typically take 3 to 5 years for damage to a tree caused by this type of work (if a non-tree sensitive design was used) to be discernible. This usually appears as dead sections or 'die back' in the trees upper canopy.

19.10 Removal of deadwood of this nature is likely to be a permitted activity under the current proposed rules. The trees will likely need annual inspections to look for signs of root damage by a suitably qualified and experienced arborist.

20 At 346B State Highway 58, Judgeford Porirua a Tulip Tree (*Liriodendron tulipifera*) has been proposed for listing.

20.1 I inspected this tree and attributed the following STEM scores to the tree.

Condition Evaluation		
Form	Good	15
Occurrence	Rare	21
Vigour	Very Good	21
Function	Significant	21
Age	80 to 99	21
Amenity Evaluation		
Stature	15 to 20	15
Visibility	0.5Km	3
Proximity	Solitary	27
Role	Significant	21
Climate	Moderate	9

20.2 The total score for the combined Condition and Amenity evaluation is 174 thus meeting the 120 threshold. The following photographs show the tree.



Photographs 3 and 4. The Tulip tree at 346B State Highway 58.

20.3 The tree has been regularly maintained to its current form. This is most likely to reduce the load on the main branch unions. Some of these unions are included¹.

Date: 28/10/2021

David Spencer

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¹ **included bark:** the bark embedded in the union between a branch and the trunk or between two or more stems that prevents the formation of a normal branch bark ridge. Included bark has a higher likelihood of failure than a normal branch attachment.