

RMA FORM 5



Submission on publicly notified Proposed Porirua District Plan

Clause 6 of the First Schedule, Resource Management Act 1991

To: Porirua City Council

1. Submitter details:

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2. This is a **submission** on the **Proposed District Plan** for Porirua.

3. I could not gain an advantage in trade competition through this submission.
(Please tick relevant box)

If **you could** gain an advantage in trade competition through this submission please complete point four below:

4. I am I am not directly affected by an effect of the subject matter of the submission that:
(a) adversely affects the environment; and
(b) does not relate to trade competition or the effects of trade competition.
(Please tick relevant box if applicable)

Note:

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

5. I wish
 To be heard in support of my submission
(Please tick relevant box)

6. I will
 Consider presenting a joint case with other submitters, who make a similar submission, at a hearing.
(Please tick relevant box)

Please complete section below (insert additional boxes per provision you are submitting on):

The specific provision of the proposal that my submission relates to:
Notable Tree Provisions – Definition of Root Protection Area (RPA), allowing permitted works within RPA, selection and justification of 120 point STEM threshold, requirements to engage a L6 qualified Arborist relating to Notable Tree Rules R3 and R4, and the use of the term ‘terminal decline’ in Notable Tree Rule 4.
Do you: Support? Oppose? Amend?
Oppose in principal, but amendment could provide sufficient relief
What decision are you seeking from Council? What action would you like: Retain? Amend? Add? Delete?
Delete or amend.
Reasons:
<p>Porirua Proposed DP Notable Trees</p> <p>Main areas of concern:</p> <p>1) Definition of Root Protection Area (RPA)</p> <p>Council’s proposed method of definition is defined as a radius to the outer most extent of the spread of the tree’s branches, and for a columnar tree the area beneath the canopy extending to a radius half the height of the tree.</p> <p>My concern is that there is no reference to where this methodology is derived from or on what basis, scientific or other it has been made. It is important for Council to protect the roots of Notable Trees and especially those that anchor the tree. Tree roots often spread well beyond the edge of a tree’s dripline or beyond a distance equal to half its height, whether or not the retention of such roots are critical to its stability and health is often requires an expert arboricultural assessment to determine.</p>

Council's position effectively allows the roots of a Notable Tree outside its RPA definition of its RPA to be cut or damaged without the need for Council consent, and this has the potential to be damaging or fatal for trees which do not conform to an idealised radial circle. The method takes no account of damage to tree root systems that are not found within the Council defined RPA. For example, for trees adjacent to structures such as roads, their root growth towards the road may well be prevented, and as a consequence important feeding or structural roots may be displaced to another area which is outside its dripline. In this type of situation, a Notable Tree could be significantly damaged to the extent that important structural or a large percentage of feeding roots could be harmed.

There is no discussion of the rationale for the method in the Section 32 Report or any cost benefit analysis of this method against other methods which could be used, or discussion of trees which do not possess symmetrical root systems. The term Root Protection Area (RPA) emanates from British Standard 5837 - Trees in Relation to Construction (2012). Under that British Standard the RPA is a radius with a measurement equal to 12 times the stem diameter for single stemmed tree and there is a conversion formula for multi stemmed trees. The same 12 times stem diameter approach is taken in Australian Standard 4970 – Protection of Trees on Development Sites (2009).

BS5837 and AS4970 are recognised as world leading standards in tree and roots protection and both use the 12 times stem diameter method to determine where important roots are that ideally should not be damaged or pruned unless there is expert justification. It is therefore curious that the dripline/half tree height method has been used by Council. Within the Section 32 Report there appears no evaluation or cost benefit analysis of why the method was chosen over the British and Australian Standards.

In Standard S1 Council states that 'works shall not affect any more than 10% of the trees protected root zone'. This would appear to reference AS4970 which describes works that effect more than 10% of the protected root area as being significant. It is not explained why an AS4970 requirement can be used in this way, but not the RPA reference.

The dripline/half height method dates back to an older BS5837 version from 1991. The method was withdrawn and improved in the revised BS5837 2005 and the improved method was then kept as part of the BS5837 2012 revision. It is therefore the case that Council is proposing to use a method for determining the RPA which is well out of date and is no longer recommended by the UK and Australian Arboricultural Associations as best practice. The method used to determine the RPA does not therefore reflect international best practice and has the potential to cause significant harm to Notable Trees.

Roots within the RPA should not be compacted or damaged unless an Arboricultural Impact Assessment and Method Statement has been approved by Council in accordance with AS4970. Such works can often be highly sensitive and require special engineering solutions, root exposure and pruning. These are complex operations requiring a high level of expertise and these would ideally not be permitted activities where Council effectively has no oversight or ability to peer review proposed activities. For example, if underground services are to be placed within an RPA the Council may prefer directional drilling as opposed to open trenching using an air vac to ensure critical roots are not damaged. Because such works are permitted under this Rule 2, Council would have no ability to require its preferred root protection methodology. BS5837 contains the following advice pertinent to this submission:

4.6.3 Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:

- a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus);
- b) topography and drainage;
- c) the soil type and structure;
- d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

Standard S1 allows hydro excavation as a means of exposing roots. This method often strips the external bark from roots causing significant damage and should ideally only be undertaken at lower depths where there are fewer roots. Similarly to the S1 requirement for directional drilling to be undertaken at a depth of at least 1 metre, hydrovacating should also only be allowable at this depth.

Relief Sought:

- 1) Council undertakes Cost Benefit Analysis of International best practice methods used to determine the area of roots which cannot be disturbed without consent. Council selects a methodology for Rule 2 which represents best practice in terms of tree root protection, which would ideally be the AS4970 or BS5837 method.
- 2) Council does not allow permitted works within the RPA of a Notable Tree
- 3) Standard S1 is amended to specify that hydrovac is only undertaken at a specific depth

2) STEM threshold adopted by Council –

Council has set a STEM threshold of 120 points and has provided some explanation of how and why it decided to adopt this threshold. The S32 states that Arborlab recommended setting a STEM threshold of 120 based on their professional experience, and that 16 trees assessed by Arborlab did not meet the 120 point threshold and were therefore not listed as Notable. Council provides two examples of Councils that use STEM in 5.2.2 of the S32 Report and both of these Councils have relatively high STEM thresholds of 130 and 145. Appendix 1 provides examples of STEM threshold from 8 Councils which use STEM. Of the thresholds cited in Appendix 1, two of these are below 120 points, one is 120 points and the remaining five are above 120 points. It would appear that the S32 Report has disproportionately cited relatively high STEM thresholds as examples.

There is no cost benefit analysis within the S32 Report of the effects of setting a lower or higher STEM threshold, and the analysis is therefore incomplete. Council should really have looked at the implications of setting at least one lower and higher threshold and the environmental, economic, social and cultural costs and benefits of these. This would represent best practice and would be in accordance with the requirements of Trees in Urban Environments (MfE Guidance 2012).

It would have been really useful to have seen details and photos of the 16 trees which scored less than 120 points, or at least a cross section of examples, and reasons provided as to why these trees were not considered significant enough to be listed as Notable. For instance, was it because of their small size or poor condition or were they not sufficiently visible to the public? How many of these trees scored just below 120 points, and was a peer review of trees which didn't reach 120 points undertaken? A more robust and evidence based approach would have provided more confidence in the process, especially where the scores for subjective STEM criteria could have been scored differently by a different consultant arborist.

Arboricultural evaluations of STEM criteria such as landscape, and ecological value are bound to vary between assessors. This is because a score obtained may be based on the experience and personal preference of the evaluator. It is widely accepted that STEM has flaws and is not wholly objective. As a result, a number of Councils including Auckland have decided not to utilise STEM and to instead use a more empirical approach. It is therefore important in this context that Council provides more detail and justification as why it chose not to protect 16 trees which were put forward for consideration. Also it is important that these trees are scrutinised as whoever nominated them, presumably hoped that they may be scheduled as Notable.

Council's Section 32 Report does not explore in sufficient detail or sufficiently explain why a 120 point STEM threshold was selected as opposed to an alternative threshold. In Appendix 1 there is a select list of other TA's and their STEM threshold. However, there is no discussion of why 120 points was selected, why was this threshold preferred against a higher or lower threshold and what would the consequences of a higher or lower threshold have been? For instance if a lower threshold of 100 was chosen, how many additional trees would have been listed as Notable in the Porirua DP? Why were these trees considered not significant enough to be protected. Why was a lower threshold not chosen? There is no cost benefit analysis of selecting a lower STEM threshold or any examples provided of why trees scoring below 120 were not sufficiently significant to be listed as Notable.

Relief Sought:

1) Council undertakes Cost Benefit Analysis of the effects of selecting a lower and higher threshold against its proposed District Plan Policies and Objectives in regard to Notable Trees.

2) Council explains in detail and using examples of actual trees assessed why trees which fall below Council's STEM threshold are not suitable for protection, in the context of the subjective STEM criteria and how these may have affected total scores, and other Councils in the Region which have STEM thresholds below the one recommended by Council.

3) For trees which score below Council's recommended STEM threshold, that STEM assessments where subjective criteria scores resulted in trees not reaching the required threshold, are peer reviewed by a third party Consultant Arborist.

4) Council considers adopting a lower STEM threshold so that more trees can be protected

3) Requirements to engage a L6 qualified Arborist

In regard to the R3 and R4 requirements to use a L6 qualified arborist, it is the case that a Level 4 (L4) qualified arborist is able to competently and professionally accomplish all the requirements cited by Council. The L4 qualification trains arborists on activities such as best arboricultural practice in regard to trimming and pruning of trees, being able to determine if a tree is dead or in terminal decline, hazard analysis, and to be able confirm that tree works are in accordance with good arboricultural practice.

The R3 and R4 requirements are all covered as part of a L4 qualification (see [https://www.wintec.ac.nz/study-at-wintec/courses/arboriculture/advanced-horticultural-trades-\(level-4\)-\(arboriculture\)](https://www.wintec.ac.nz/study-at-wintec/courses/arboriculture/advanced-horticultural-trades-(level-4)-(arboriculture))), and a L4 arborist's skillset may well be complemented by on the job experience and achieving additional certifications such as an industry recognised tree risk-assessment method. The R3 and R4 arboricultural knowledge requirements represent arboricultural skills covered by a L4 qualification and a Level 6 (L6) qualification is not required to achieve these Council requirements.

The L6 qualification covers more advanced arboricultural knowledge, but being able to prune a tree and recognise if a tree is dead or in terminal decline is basic arboricultural knowledge which a L4 qualified arborist would already possess.

Relief Sought:

- 1) The requirement to engage a L6 qualified arborist to undertake, supervise or sign off works related to rule R3 and R4 are removed and replaced by the requirement to engage at least a L4 arborist. A requirement to possess an industry recognised tree risk assessment certification such as TRAQ, QTRA or VALID be added to the requirements.**

4)Use of the term 'terminal decline' in Rule R4

Removal of a tree which is assessed as dead or in terminal decline is permitted. This is a concern as 'terminal decline' as a descriptive term is open to interpretation. Veteran trees which are over mature often 'retrench' as they age and their canopies reduce in size and may become hollow. These could be very significant and valuable veteran trees which could survive for 100 years or more and these could potentially be described as in terminal decline even though may survive for 100 years more. This rule could therefore be misused to justify removal of veteran post mature trees.

Relief Sought:

- 1) Remove the term terminal decline, or add a definition of the term terminal decline which is definitive and leaves no room for misuse, or do not allow removal as a permitted activity on the basis of 'terminal decline'.**

Please return this form no later than **5pm on Friday 20 November 2020** to:

- Proposed District Plan, Environment and City Planning, Porirua City Council, PO Box 50-218, PORIRUA CITY or
- email dpreview@pcc.govt.nz

Signature of submitter

(or person authorised

to sign

on behalf of submitter): _____

Date: _____

*A signature is not required if you make
your submission by electronic means*