

**OFFICER'S REPORT FOR:**

Hearing Panel

**SUBJECT:**

Proposed Waimakariri District Plan:  
Rākau hirahira – Notable Trees

**PREPARED BY:**

Bryony Steven

**REPORT DATED:**

21 July 2023

**DATE OF HEARING:**

Hearing Stream 5  
(21 – 25 August 2023)



**WAIMAKARIRI**  
DISTRICT COUNCIL

## Executive Summary

1. This report considers submissions received by the District Council in relation to the relevant objectives, policies, rules, advice notes, matters of discretion, schedules, definitions, and maps of the Proposed Plan as they apply to the Notable Trees chapter. The report outlines recommendations in response to the issues that have emerged from these submissions.
2. There were a number of submissions and further submissions received on the Notable Trees chapter (TREE chapter). The submissions received were diverse and sought a range of outcomes. The following are considered to be the key issues in contention in the chapter:
  - A lack of hyperlinks from provisions in the TREE chapter to relevant provisions in the EI chapter;
  - The potential addition of two new policies; to provide for limited physical works around notable trees, and to recognise the social and landscape values of notable trees in the District;
  - Opposition to the definition of 'root protection area' to determine the root area of notable trees that cannot be disturbed, and opposition to various permitted activities in the root protection area;
  - The lack of a definition for 'severe event' in TREE-R6;
  - Proposed amendments to TREE-MD1 and TREE-MD2 to include maintenance, repair and upgrades to network utilities or the functional and operational need of network utilities;
  - The lack of indigenous trees in TREE-SCHED1– Notable Trees;
  - Requests for trees to be added to TREE-SCHED1; and
  - Request for a tree to be deleted from TREE-SCHED1.
3. This report addresses each of these matters, as well as any other issues raised by submissions.
4. The TREE chapter may be subject to a number of consequential amendments arising from submissions to the whole of the Proposed Plan and other chapters.
5. I have recommended some changes to the Proposed Plan provisions to address matters raised in submissions and are summarised below:
  - Amend TREE-R6(2) to replace "a natural hazard or severe event" with "an emergency event".
  - Amend TREE-SCHED1 and the planning maps to add the English Oak tree at 100 Parsonage Road, Woodend, and the Lombardy Poplar shelterbelts at 431 Tuahiwi Road, Tuahiwi as scheduled notable trees.
  - Amend TREE-SCHED1 and the planning maps to delete TREE038 at 77 Hilton Road, Kaiapoi.
6. Having considered all the submissions and reviewed all relevant statutory and non-statutory documents, I recommend that the Proposed Plan should be amended as set out in **Appendix A** of this report.

7. For the reasons set out in the Section 32AA evaluation and included throughout this report, I consider that the proposed objectives and provisions, with the recommended amendments, will be the most appropriate means to:
- achieve the purpose of the RMA where it is necessary to revert to Part 2 and otherwise give effect to higher order planning documents, in respect to the proposed objectives; and
  - achieve the relevant objectives of the Proposed Plan, in respect to the proposed provisions.

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## Interpretation

8. The Officer's report utilises a number of abbreviations for brevity as set out in 1 and 2 below:

**Table 1: Abbreviations**

Abbreviation	Means
District Council	Waimakariri District Council / territorial authority
ECan	Environment Canterbury/Canterbury Regional Council
NPS	National Planning Standards 2019
Operative Plan	Operative Waimakariri District Plan
Proposed Plan	Proposed Waimakariri District Plan
RMA	Resource Management Act 1991
RPA	Root protection area
STEM	Standard Tree Evaluation Method
TREE chapter	Notable Trees chapter
EW chapter	Earthworks chapter
EI chapter	Energy and Infrastructure chapter

**Table 2: Abbreviations of Submitters' Names**

Abbreviation	Means
Chorus, Spark and Vodafone	Chorus New Zealand, Spark New Zealand Trading Limited, and Vodafone New Zealand Limited
Forest and Bird	Royal Forest and Bird Protection Society of New Zealand Inc
KiwiRail	KiwiRail Holdings Limited
MainPower	Mainpower New Zealand Ltd
Ngāi Tūāhuriri	Te Ngāi Tūāhuriri Rūnanga
RIDL	Rolleston Industrial Developments Ltd
WDC	Waimakariri District Council

In addition, references to submissions includes further submissions, unless otherwise stated.

# 1 Introduction

## 1.1 Purpose

9. The purpose of this report is to provide the Hearings Panel with a summary and analysis of the submissions received on the TREE chapter and to recommend possible amendments to the Proposed Plan in response to those submissions.
10. This report is prepared under section 42A of the RMA. It considers submissions received by the District Council in relation to the relevant objectives, policies, rules, advice notes, matters of discretion, schedules, definitions, and maps as they apply to the TREE chapter in the Proposed Plan. The report outlines recommendations in response to the key issues that have emerged from these submissions.
11. This report discusses general issues or topics arising, the original and further submissions received following notification of the Proposed Plan, makes recommendations as to whether or not those submissions should be accepted or rejected, and concludes with a recommendation for changes to the Proposed Plan provisions or maps based on the preceding discussion in the report.
12. The recommendations are informed by the Arboricultural Report and associated STEM assessments provided by Ms Liz Warner *Consultant Arborist, Asplundh, Christchurch*, which are available in **Appendix D** and **Appendix E**, the expert opinion of Mr Greg Barnard, *Parks Community Assets Officer, Waimakariri District Council*, which is available in **Appendix F**, and the evaluation I have undertaken as the Reporting Officer. I state where I have relied on Ms Warner or Mr Barnard in my assessment below.
13. In preparing this report I have had regard to recommendations made in the Energy and Infrastructure S42A Evaluation Report. I have had regard to recommendations made on SD-O2(1) and (2) in the Strategic Direction S42A Evaluation Report and the Strategic Directions Right of Reply Report.
14. The TREE chapter is subject to an amendment to the Introduction that identifies the chapter as subject to a qualifying matter. These amendments were introduced by Variation 1: Housing Intensification in response to the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021. Any submissions on the TREE chapter as part of Variation 1 are not addressed within this report and are instead addressed in the S42A Report for Variation 1.
15. This report is provided to assist the Hearing Panel in their role as Independent Commissioners. The Hearings Panel may choose to accept or reject the conclusions and recommendations of this report and may come to different conclusions and make different recommendations, based on the information and evidence provided to them by submitters.

## 1.2 Author

16. My name is Bryony Annette Steven. My qualifications and experience are set out in **Appendix G** of this report.
17. My role in preparing this report is that of an expert planner.

18. I was not involved in the preparation of the Proposed Plan and did not author the Section 32 Evaluation Report for Notable Trees. However, I have reviewed this evaluation report in preparing my evidence.
19. Although this is a District Council Hearing, I have read the Code of Conduct for Expert Witnesses contained in the Practice Note issued by the Environment Court 2023. I have complied with that Code when preparing my written statement of evidence and I agree to comply with it when I give any oral evidence.
20. The scope of my evidence relates to the TREES chapter. I confirm that the issues addressed in this statement of evidence are within my area of expertise as an expert policy planner.
21. Any data, information, facts, and assumptions I have considered in forming my opinions are set out in the part of the evidence in which I express my opinions. Where I have set out opinions in my evidence, I have given reasons for those opinions.
22. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

### 1.3 Supporting Evidence

23. The expert evidence, literature, legal cases or other material which I have used or relied upon in support of the opinions expressed in this report includes the following:
  - The Arboricultural Report prepared by Ms Liz Warner, who is a suitably qualified and experienced arborist, who undertook Standard Tree Evaluation Method (STEM) assessments to respond to submissions on the TREE chapter (**Appendix D** and **Appendix E**).
  - The expert opinion of Mr Greg Barnard, *Parks Community Assets Officer, Community and Recreation Department* at the Waimakariri District Council, on his view of the advantages and disadvantages of the dripline approach and the 12 times stem diameter methods for determining the extent of the root protection area (**Appendix F**).
  - The memo prepared by Mr Andrew Maclellan on behalf of the Waimakariri District Council and titled '*Integration between EI Chapters and the rest of the Proposed Plan*'.

Note: The memo by Mr Maclellan was prepared to address questions of integration by the Hearings Panel and was tabled at Hearing 4.

### 1.4 Key Issues in Contention

24. The TREE chapter received a total of 33 submission points from ten submitters and two further submitters. The submissions received sought a range of outcomes; including for example a new policy to recognise the social and landscape values of notable trees to the District, and amendments to the matters of discretion to provide for the functional and operational needs of network utilities.
25. I consider the following to be the key issues in contention in the chapter:
  - A lack of hyperlinks from provisions in the TREE chapter to relevant provisions in the EI chapter;



- The potential addition of two new policies; to provide for limited physical works around notable trees, and to recognise the social and landscape values of notable trees in the District;
  - Opposition to the definition of 'root protection area' to determine the root area of notable trees that cannot be disturbed, and opposition to various permitted activities in the root protection area;
  - The lack of a definition for 'severe event' in TREE-R6;
  - Proposed amendments to TREE-MD1 and TREE-MD2 to include maintenance, repair and upgrades to network utilities or the functional and operational need of network utilities;
  - The lack of indigenous trees included on TREE-SCHED1; and
  - Requests for trees to be added to and deleted from TREE-SCHED1.
26. I address each of these key issues in this report, as well as any other issues raised by submissions.

## 1.5 Procedural Matters

27. At the time of writing this report there have not been any pre-hearing conferences, clause 8AA meetings or expert witness conferencing in relation to submissions on this chapter.

## 2 Statutory Considerations

### 2.1 Resource Management Act 1991

28. The Proposed Plan has been prepared in accordance with the RMA and in particular, the requirements of:

- section 74 Matters to be considered by territorial authority; and
- section 75 Contents of district plans.

29. There are a number of higher order planning documents that provide direction and guidance for the preparation and content of the Proposed Plan. These documents are discussed in detail within the Section 32 Evaluation Report Notable Trees.

### 2.2 Section 32AA

30. I have undertaken an evaluation of the recommended amendments to provisions since the initial section 32 evaluation was undertaken in accordance with s32AA. Section 32AA states:

***32AA Requirements for undertaking and publishing further evaluations***

*(1) A further evaluation required under this Act—*

*(a) is required only for any changes that have been made to, or are proposed for, the proposal since the evaluation report for the proposal was completed (the changes); and*

*(b) must be undertaken in accordance with section 32(1) to (4); and*

*(c) must, despite paragraph (b) and section 32(1)(c), be undertaken at a level of detail that corresponds to the scale and significance of the changes; and*

*(d) must—*

*(i) be published in an evaluation report that is made available for public inspection at the same time as the approved proposal (in the case of a national policy statement or a New Zealand coastal policy statement or a national planning standard), or the decision on the proposal, is notified; or*

*(ii) be referred to in the decision-making record in sufficient detail to demonstrate that the further evaluation was undertaken in accordance with this section.*

*(2) To avoid doubt, an evaluation report does not have to be prepared if a further evaluation is undertaken in accordance with subsection (1)(d)(ii).*

31. The required section 32AA evaluation for changes proposed as a result of consideration of submissions with respect to the TREE chapter is contained within the assessment of the relief sought in submissions in section 3 of this report, as required by s32AA(1)(d)(ii).

### 2.3 Trade Competition

32. Trade competition is not considered relevant to the TREE chapter provisions of the Proposed Plan.

33. There are no known trade competition issues raised within the submissions.

### 3 Consideration of Submissions and Further Submissions

#### 3.1 Overview

34. The Notable Tree chapter received 33 original submission points from ten submitters. The notified objective and policies were unanimously supported, and amendments were sought to rules, matters of discretion and schedule 1. Two general submission points sought new policies to be added to the chapter. A further submission was made by Forest and Bird in support of Canterbury Botanical Society, and the Ohoka Residents Association further submitted in opposition to every RIDL submission point.
35. The following provisions are supported as notified by submitters and the provisions are therefore recommended to be retained as notified:
- TREE-O1 by RIDL [326.230];
  - TREE-P1 by RIDL [326.231];
  - TREE-P2 by RIDL [326.232] and KiwiRail [373.52];
  - TREE-P3 by RIDL [326.233];
  - TREE-P4 by RIDL [326.234], MainPower [249.183] and KiwiRail [373.53];
  - TREE-P5 by RIDL [326.235], MainPower [249.184] and KiwiRail [373.54];
  - TREE-R1 by RIDL [326.236];
  - TREE-R2 by RIDL [326.237] and MainPower [249.186];
  - TREE-R3 by RIDL [326.238] and MainPower [249.187];
  - TREE-R5 by RIDL [326.240];
  - TREE-R6 by RIDL [326.241] and MainPower [249.188];
  - TREE-R7 by RIDL [326.242].
36. The following submissions seek changes to provisions or the TREE chapter generally:
- TREE-R4 is supported as notified by RIDL [326.239]. Chorus, Spark, and Vodafone [62.44] seek amendments to the rule to link with the Energy and Infrastructure chapter. Jez Partridge [126.1] opposes the 'root protection area' method to determining the area of roots that cannot be disturbed and seeks Council does not allow permitted works within the root protection area.
  - TREE-MD1 is supported as notified by RIDL [326.243]. MainPower [249.189] seek a new clause to be added to the matter of discretion;
  - TREE-MD2 is supported as notified by RIDL [326.244]. MainPower [249.190] seek a new clause to be added to the matter of discretion;
  - TREE-SCHED1 received submissions to add new items to the schedule from Canterbury Botanical Society [122.3], Rainer and Ursula Hack [201.10] and Julia and Anthony Holcroft [356.1]. Waimakariri District Council [367.48] seek a scheduled tree to be deleted;

- MainPower [249.182] submitted generally on the chapter seeking hyperlinks between the TREE chapter and the Energy and Infrastructure chapter; and
  - Two new policies are sought by MainPower [249.185] and Michael de Hamel [261.3].
37. An additional four general submission points by Clampett [284.1] and RIDL [326.1, 326.2, and 326.3] seek amendments across the whole of the Proposed Plan and are addressed in this report as they apply to the TREE chapter.
38. Further submissions on the plan wide submissions from RIDL discussed above, were received from Forest and Bird [FS78], Ohoka Residents Association [FS84], Ohoka Residents Association [FS137]<sup>1</sup>, Andrea Marsden [FS119], and Christopher Marsden [FS120]. These further submissions oppose the relief sought by RIDL.
39. Further submissions on original submissions to the TREE chapter were received from:
- The Ohoka Residents Association [FS137] who opposed the entirety of the RIDL [326] submission. Their further submission does not contain substantive commentary that is relevant to the TREE chapter.
  - Forest and Bird [FS78] who support the Canterbury Botanical Society [122.3] original submission on TREE-SCHED1.
40. My recommendations in relation to further submissions reflect the recommendations on the relevant primary submission(s).
41. There are two definitions that apply to the TREE chapter: 'Notable tree' and 'Root protection area'. Jez Partridge [126.1] submitted on TREE-R4 opposing the definition of 'Root protection area'. I have considered this submission alongside other submissions received on TREE-R4. As no submissions were received on the definition of 'Notable tree', I have considered this definition as notified in my assessment below.

### 3.1.1 Report Structure

42. Submissions on the TREE chapter raised a number of issues which have been assessed based on the provisions to which they relate. I have considered the commentary contained in the further submissions relevant to the original submissions addressed within this report, however the further submissions did not contain relevant substantive commentary.
43. In accordance with Clause 10(3) of the First Schedule of the RMA, I have undertaken the following evaluation on a provisions-based approach, as opposed to a submission by submission approach. I have organised the evaluation in accordance with the layout of the TREE chapter in the Proposed Plan as notified. Specific recommendations on each submission/ further submission point are contained in **Appendix B**.
44. The following evaluation should be read in conjunction with the summaries of submissions and the submissions themselves. Where I agree with the relief sought and the rationale for that relief, I have noted my agreement, and my recommendation is provided in the summary of

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<sup>1</sup> I advise that the Ohoka Residents Association submitted two further submissions; [FS84] and [FS137]. Further submission 137 was received after the close of further submissions and was accepted by the Hearings Panel Chair.

submissions table in **Appendix B**. Where I have undertaken further evaluation of the relief sought in a submission, the evaluation and recommendations are set out in the body of this report. I have provided a marked-up version of the chapter with recommended amendments in response to submissions as **Appendix A**.

### 3.1.2 *Format for Consideration of Submissions*

45. For each identified topic, I have considered the submissions that are seeking changes to the Proposed Plan in the following format:
  - Matters raised by submitters;
  - Assessment;
  - Summary of recommendations; and
  - Section 32AA evaluation.
46. The recommended amendments to the chapter are set out in **Appendix A** of this report where all text changes are shown in a consolidated manner.
47. I have undertaken a s32AA evaluation in respect to the recommended amendments in my assessment.
48. Recommendations in relation to further submissions reflect the recommendations on the relevant primary submission(s).

## 3.2 General Submissions

### 3.2.1 *Matters raised by submitters*

49. MainPower [249.182] *“seeks that all relevant notable tree provisions applicable to the activities of network utility operators be appropriately hyperlinked from the EI Chapter back to the notable trees chapter”*. MainPower consider this will *“ensure that plan users can navigate to the relevant parts of the notable trees chapter with ease.”*

### 3.2.2 *Assessment*

50. MainPower [249.182] seek hyperlinks between the Energy and Infrastructure (EI) chapter and relevant TREE provisions. As was signalled in the memo ‘Integration between EI Chapters and the rest of the Proposed Plan’ by Mr Andrew Maclennan, the Energy and Infrastructure s42A report will recommend that except where specified, rules in the TREE chapter will not apply to the EI chapter. The TREE rules that are recommended to continue to apply to the EI chapter are TREE-R6 and TREE-R7.
51. Mr Maclennan recommends cross-referencing between the EI and TREE chapters where necessary to ensure this approach is clearly stated within the relevant chapters.
52. I therefore consider the relief requested to the TREE chapter by MainPower [249.182] will be provided for through the recommendations in the EI s42A Report, as signalled in the memo by Mr Maclennan.
53. I recommend the submission by MainPower [249.182] on the TREE chapter be **rejected**. I note that their relief sought will be provided for through the recommended amendments in the EI s42A Report, and I do not recommend any changes to the chapter in response to their

submissions on the TREE chapter. However, if the Panel considers it necessary to add hyperlinks plan wide, I consider there would be no adverse implications of such a change on the TREE chapter.

### 3.2.3 Summary of recommendations

54. I recommend the submission from MainPower [249.182] be **rejected**.
55. I recommend that no change be made to the TREE chapter in the Proposed Plan in response to the submission.

## 3.3 Proposed New Policies

### 3.3.1 Matters raised by submitters

56. MainPower [249.185] submitted to insert the following new policy:

"TREE- P6

Provide for limited physical works to and around trees listed in TREE-SCHED1, for cultivation, maintenance, safety purposes, or infrastructure where those works are required due to locational, technical or operational requirements."

57. Michael de Hamel [261.3] seeks the following new policy to make the plan more enabling "with respect to the protection and enhancement of the privately-owned heritage, cultural and landscape values" in the District:

"TREE-P6 Recognise the social and landscape values of notable trees in the District and:

1. facilitate opportunities to provide information about these values
2. provide opportunities for these values to be recognised
3. manage earthworks involving disturbance of soils in the vicinity of Notable Trees so as to reduce threats to their wellbeing
4. assist with the maintenance, restoration or enhancement of Notable Trees
5. where an application is for an activity which will protect or enhance heritage, landscape or environmental values the Council will give consideration under Section 36AAB of the Act for a remission of any part of any charge that would otherwise be payable."

58. Note, I have added numbering to the proposed policy to assist interpretation.

### 3.3.2 Assessment

*MainPower [249.185] - proposed policy*

59. I consider MainPower's proposed policy is difficult to fully understand and it is not clear what MainPower intend as "limited works". The proposed policy seeks cultivation to be enabled which is currently not permitted in the chapter as detailed in Rule TREE-R2 that permits gardening or earthworks that do not involve:

1. *Gardening or earthworks shall not involve:*
  - a. *Mechanical cultivation;*
  - b. *planting of trees;*

- c. *planting of tree climbing vines;*
- d. *alteration or disturbance of the existing ground level of more than 75mm; or*
- e. *trenching for fence or wall foundations.*

60. TREE-R2 specifically identifies that mechanical cultivation and disturbance of the ground level by more than 75mm is not to occur as a permitted activity.
61. Maintenance and safety purposes are already provided for in the chapter as it relates to notable trees, including in TREE-P4 *Maintenance of notable trees*, TREE-P5 *Removal of notable trees*, and TREE-R3 *Overhead lines work or maintenance to any notable tree*.
62. Infrastructure purposes are already recognised in TREE-P4, TREE-P5, TREE-R6 *Removal of any Notable Tree listed in TREE-SCHED1 that is unsafe* and TREE-MD2 *Extent of benefit or need for the activity or works*.
63. The intention of the TREE chapter is to maintain the District's notable trees as is conveyed in TREE-O1 *Contribution of notable trees* that states: "*The contribution notable trees make to the character and amenity values of the District is recognised and maintained.*" I consider the policy proposed by MainPower seeks to provide for the operational needs of infrastructure within the TREE chapter policy framework. This is contrary to TREE-O1 and the National Planning Standards (NPS) that directs that provisions relevant to energy and infrastructure are to be located in the Energy and Infrastructure chapter<sup>2</sup> and similarly for notable trees<sup>3</sup>.
64. I consider the TREE chapter policy framework as notified, reasonably provides for other needs such as public safety and infrastructure, alongside the recognition and maintenance of the District's notable trees.
65. I recommend the submission by MainPower [249.185] be **rejected**.

*Michael de Hamel [261.3]*

66. Mr De Hamel's submission thoughtfully considers the importance of notable trees to the District's sense of identity. I agree with Mr de Hamel that owners of property with notable trees can experience a greater financial burden than other rate/ tax payers, as they also carry the cost of maintaining the notable trees. Mr de Hamel proposes a new policy for the TREE chapter to make the Proposed Plan more enabling with respect to "*privately-owned heritage, cultural and landscape values*". Mr de Hamel specifically identifies SASM-P4 as an enabling policy in the plan, and also identifies s36AAB(1) of the RMA as enabling Council to remit charges on resource consent applications.
67. I consider several of the clauses proposed in the policy are already provided for in the chapter, specifically:

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<sup>2</sup> National Planning Standards Section 7(5): "*provisions relating to energy, infrastructure and transport that are not specific to the Special purpose zones chapter or sections must be located in one or more chapters under the Energy, infrastructure and transport heading*".

<sup>3</sup> National Planning Standards Section 7(16): "*If the following matters are addressed, they must be located in the Notable trees chapter:*

a. *identification of individual trees or groups of trees*

b. *provisions to manage trees or groups of trees*

c. *a schedule(s) of individual trees and groups of trees. This schedule must include a description of the tree(s) including the species of the tree(s). This may cross-reference an appendix.*"

2. provide opportunities for these values to be recognised;
  3. manage earthworks involving disturbance of soils in the vicinity of Notable Trees so as to reduce threats to their wellbeing; and
  4. assist with the maintenance, restoration or enhancement of Notable Trees.
68. The values of notable trees are recognised by their inclusion on TREE-SCHED1 and the STEM reports for each tree are available to view and download from a link in TREE-SCHED1 in the Proposed Plan. Earthworks are managed in TREE-R2 *Gardening or earthworks within any root protection area of any Notable Tree* and EW-S4 *Setback from root protection area* as well as provisions in the EI chapter that manage activities within the root protection area of notable trees. Maintenance of notable trees is enabled in Policy TREE-P4 *Maintenance of notable trees*, and TREE-R1 enables maintenance pruning of scheduled trees.
69. Mr de Hamel identifies SASM-P4 *Ngā tūranga tūpuna* as a provision that is enabling rather than prescriptive and seeks a similar approach to be taken to the TREE chapter. There are specific requirements for Māori under the RMA that the Council must consider in the Proposed Plan. The Section 32 Evaluation Report for Sites and Areas of Significance to Māori details the national and regional direction for Māori.
70. Of specific importance is Section 6(e) of the RMA that requires Council to recognise and provide for *“the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga”*. This direction is specific and detailed.
71. In contrast, there is no specific RMA direction for notable trees that is equivalent to the direction for Māori. As identified in the Section 32 Evaluation Report for Notable Trees (s3.1.1 and s3.1.2), the relevant RMA s6 and s7 clauses that apply to notable trees are non-specific and apply generally, for example S7(c) *“the maintenance and enhancement of amenity values”*.
72. Additionally, the Canterbury Regional Policy Statement (RPS) does not provide any direction for the protection of notable trees. However, section 3.3 in the S32 Notable Trees Report does identify that the RPS Chapter 13 – *Historic Heritage* may be applicable where notable trees have historic associations.
73. Section 76(4A-4D) of the RMA is the only section in the RMA that specifically relates to notable trees and permits District Plans to protect scheduled trees and prohibits blanket tree protection in urban areas (see section 3.1 in the S32 Notable Trees Evaluation Report).
74. As a result of the numerous higher order directions for Māori and the lack of specific direction for notable trees, I do not consider a policy similar to SASM-P4 for the TREES chapter to be necessary.
75. Mr de Hamel identifies section 36AAB(1) of the RMA as permitting the Council to *“remit charges for applications which may have a positive effect on Heritage and Landscape values”*. Section 36AAB(1) of the RMA permits Council to remit charges payable in s36 of the RMA. Section 36(1)(b) of the RMA relates to any charges payable *“in relation to the receiving, processing, and granting of resource consents”*. It is at the discretion of Council to determine whether or not resource consent fees ought to be waived and the proposed policy could fetter the decision making functions of the Council, who already have the discretion to waive fees for any reason (including where a proposal enhances heritage, landscape or environmental outcomes).



76. For context however, my understanding from discussions with the consent team is that Council has historically applied either a fee remit or waiver of consent fees for maintenance or removal of notable trees in emergency situations to recognise a landowner's contribution to the protection of a public amenity resource.
77. I recommend that the submission by Michael de Hamel [261.3] be **rejected**.

### 3.3.3 Summary of recommendations

78. I recommend the submissions from MainPower [249.185] and Michael de Hamel [261.3] be **rejected**.
79. I recommend that no change be made to the TREE chapter in the Proposed Plan in response to these submissions.

## 3.4 Rules

### 3.4.1 TREE-R4 Activities within any root protection area of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R2 or TREE-R3

#### 3.4.1.1 Matters raised by submitters

*Chorus, Spark, and Vodafone [62.44]*

80. Chorus, Spark, and Vodafone consider the relationship between TREE-R4 and other rules in the EI and Earthworks (EW chapter) chapters are unclear. They seek TREE-R4 and rules in the EI chapter are amended "*such that any provisions relevant to infrastructure work within the root zone of notable trees are included within the EI rules in the Energy and Infrastructure Chapter*" and "*exemptions for infrastructure noted in TREE-R4*".
81. Chorus, Spark, and Vodafone state that "*the rules should be specific and practical for typical infrastructure work that may need to be undertaken within a notable tree rootzone.*" They also submitted similarly on EW-S4 which will be addressed in the Earthworks S42A Report.

*Jez Partridge [126.1]*

82. Jez Partridge submitted on TREE-R4 in opposition to the 'Root protection area' (RPA) definition and permitted works within the RPA of scheduled trees. The submitter seeks Council undertake a "*cost benefit analysis of international best practice methods to determine the area of roots which cannot be disturbed without consent*". Mr Partridge recommends Council adopt the AS4970 or BS5837 12 times stem diameter method and "*not allow various permitted works within the RPA of a Notable Tree*".
83. Mr Partridge believes the root protection area approach is reduced compared to the Operative Plan that used the dripline plus 3m approach and questions where this new methodology was derived from and what analysis was undertaken for this change. Mr Partridge states that roots outside of this area could be cut or damaged without consent which could be "*damaging or fatal for trees which do not conform to an idealised radical circle.*" Mr Partridge states the dripline/ half height method is derived from an older version of British Standard BS5837 which has been revised and improved and Council is therefore using an out of date and no longer recommended standard.

84. RIDL [326.239] support TREE-R4 as notified.

*Further submissions*

85. The Ohoka Residents Association [FS137] oppose the RIDL [326.239] submission point.

**3.4.1.2 Assessment**

*Chorus, Spark, and Vodafone [62.44]*

86. Chorus, Spark, and Vodafone seek the relationship between TREE-R4 and provisions in the EI chapter is clarified. As was signalled in the memo by Mr Maclennan, the Energy and Infrastructure s42A report will recommend that, except where specified, rules in the TREE chapter will not apply to the EI chapter. The rules in the TREE chapter that are recommended to continue to apply to the EI chapter are TREE-R6 and TREE-R7. The TREE chapter objective, polices, schedule and planning map layers will continue to apply to the EI chapter.
87. As a consequence, it is unnecessary to give effect to the relief sought by Chorus, Spark, and Vodafone [62.44] as TREE-R4 is recommended not to apply to the EI chapter. I therefore recommend the submission by Chorus, Spark, and Vodafone [62.44] be **rejected**.

*Jez Partridge [126.1]*

88. Jez Partridge opposes the root protection area approach and seeks Council select a best practice methodology for root protection and not allow permitted works within the RPA.
89. The definition of 'Root protection area' comes from the Christchurch District Plan definition of 'Dripline' which states: "*means the dripline of a tree, being a circular area, where the radius is equivalent to either the outer extent of the branch spread or half the height of the tree, whichever is the greater.*"
90. A version of the dripline approach has been used in the District Plans of seven of Canterbury's ten district Councils: Waimakariri Proposed District Plan, Selwyn Proposed District Plan, Christchurch District Plan, Kaikoura Operative District Plan, Ashburton Operative District Plan, Hurunui Operative District Plan, and Timaru Proposed District Plan. The remaining three District Plans, Waitaki, Waimate and Mackenzie, all use an approach that manages activities within 5m of the base of protected trees. I also note the RPA definition has been used in the Proposed New Plymouth District Plan and in its decisions has been retained without change.
91. Section 3.7 of the S32 Notable Trees Evaluation Report explains how regard was given to the plans and proposed plans of neighbouring territorial authorities as directed under s74(2)(c) of the RMA. The S32 Report identifies that overall, the TREE chapter is consistent with the notable tree provisions of adjacent territorial authorities.
92. The S32 Report states that the definition of 'Root protection area' is required by the National Planning Standards, however this was based on the draft National Planning Standards and the definition was not included in the 2019 operative version. Currently there is no New Zealand standard or recommended approach to determining the root protection area of notable trees.
93. Mr Partridge points out that the Operative Plan defined the root area as the canopy edge plus 3m and states that the Proposed Plan root protection area method is less effective. The Proposed Plan retains the 3m setback from the root protection area in the Earthworks provision EW-S4 which states:

*"EW-S4 Setback from root protection area*

*Earthworks shall not occur within 3m of the root protection area of a notable tree listed in TREE1 – Schedule of Notable Trees, except as provided for by EI-R46."*

94. The Proposed Plan TREE and EI chapters provide for various activities within the root protection area as permitted where the activities meet certain conditions and are restricted discretionary when compliance is not achieved. The Proposed Plan is more specific and provides greater certainty for activities involving notable trees than the Operative Plan.

*Expert opinion - Mr Greg Barnard*

95. I sought the expert opinion of Mr Greg Barnard, *Parks Community Assets Officer*, who has been working for the Waimakariri District Council managing the Streets, Reserves and Cemeteries Tree Maintenance Contract for over 10 years (see **Appendix F**). Mr Barnard informed me that, in his view, he favoured the dripline approach to root protection as it is easily understood and can be followed by those working on site. Mr Barnard states: *"The drip line of a tree is easily identifiable and is a clear visual reference to workers and site managers of areas on site that should be protected from damage or compaction during works. This simplicity provides a readily identifiable reference for all involved regardless of their expertise in arboriculture or tree maintenance"* (section 3(b)).
96. Mr Barnard identified there are disadvantages to the approach when applied to *"species with truncated limbs compared to its overall height, canopy volume or root spread such as conifers, fastigate (columnar) species or young still developing trees. It does not account for trees that are damaged or missing part of its canopy or may have been topped or pollarded at some time but are still considered significant or notable"* (section 4(b)).
97. Mr Barnard also identifies the advantages and disadvantages of the alternative approach proposed by Mr Partridge. Mr Barnard considers *"that Mr Partridge's approach may be the preferred option when used by a professional arborist to determine the extent of some or all a tree root plate that may need to be protected during works"* (section 5(a)).
98. However, the disadvantages of the approach proposed by Mr Partridge relate to the advantages of the dripline approach. Mr Barnard believes Mr Partridge's approach would be overly complicated for non-arborists and *"there is the possibility of considerable variation in the measurement of stem diameter by non-professionals especially when assessing multi stemmed trees"* (section 6(a)).

*Consideration of the advantages and disadvantages of each approach*

99. Mr Partridge highlights some of the issues associated with the RPA (dripline) definition and the advantages of the alternative approaches. Based on the advice received by Mr Barnard on Mr Partridge's submission, I consider there are advantages and disadvantages to both the current dripline RPA approach and the diameter multiplied by 12 approach favoured by Mr Partridge. Overall, I recognise that the alternative approach may protect a greater area of the roots than the dripline approach and this was noted in s8.1 of the S32 Evaluation Report Notable Trees.
100. However, the current dripline approach has advantages in that it is visually obvious and easily understood especially by non-arborists, and I therefore consider the approach may be more efficiently implemented as a result. This is particularly relevant to the permitted activities in TREE-R2 and TREE-R4 where landowners of notable trees do not need a resource consent to

undertake the activities. However, they do need to understand the extent of the root protection area.

101. Additionally, I consider it is reasonable to assume the alternative approach proposed by Mr Partridge may be more expensive to implement as Mr Barnard has advised that the approach may require an expert to accurately determine the root protection area. The cost to employ an expert arborist may be an undue financial cost to owners of notable trees, that may not always be justifiable.
102. The dripline approach is also consistent with neighbouring Territorial Authorities which is beneficial for the implementation of the approach, and I consider it is advantageous to retain this consistency.

#### *Permitted works within the root protection area*

103. Mr Partridge also seeks that Council does not allow permitted works within the RPA of notable trees. The TREE and EI and chapters contain provisions permitting certain activities within the root protection area. The TREE chapter policy framework establishes the protection and maintenance of scheduled notable trees whilst also considering benefits from other activities.
104. Rules such as TREE-R2 *Gardening or earthworks within any root protection area of any Notable Tree* provides certainty to owners of notable trees as to what activities are permitted within the RPA. Other rules such as EI-R4 *Customer connection between a building, other structure, site, and infrastructure* provide certainty to infrastructure provides that they can operate within the RPA in accordance with the conditions established in the rule. I consider the approach of permitting certain activities in specified conditions provides certainty and avoids the need for unnecessary resource consents, improving the efficiency of the Proposed Plan.

#### *Conclusion*

105. Whilst Mr Partridge's proposed approach may be more effective in protecting a greater area of a tree's root system than the dripline approach, due to the advantages of the dripline approach discussed above, I reply on Mr Barnard's expert opinion and favour the dripline RPA approach from an implementation, cost, and plan consistency approach. As a result, I consider the dripline approach may be more effectively implemented and therefore successful in protecting the roots of notable trees.
106. I recommend the submission by Jez Partridge [126.1] be **rejected**.

#### **3.4.1.3 Summary of recommendations**

107. I recommend that the submission from RIDL [326.239] be **accepted**.
108. I recommend that the submission from Chorus, Spark, and Vodafone [62.44] and Jez Partridge [126.1] be **rejected**.
109. I recommend the further submission by the Ohoka Residents Association [FS137] as it relates to the RIDL [326.239] submission be **rejected in part**.
110. I recommend that no change be made to TREE-R4 in the Proposed Plan in response to the submissions.

**3.4.2 TREE-R6 Removal of any Notable Tree listed in TREE-SCHED1 that is unsafe****3.4.2.1 Matters raised by submitters**

111. MainPower [249.188] support in part TREE-R6 particularly (2) which provides for the removal of a damaged tree that poses a significant risk to critical infrastructure. MainPower seek the term 'severe event' in (2) is clarified.
112. RIDL [326.241] support TREE-R6 as notified.

*Further submissions*

113. The Ohoka Residents Association [FS137] oppose the RIDL [326.241] submission point.

**3.4.2.2 Assessment**

114. I agree with MainPower [249.188] that the term 'severe event' in TREE-R6(2) is unclear without a definition to explain the intended meaning. TREE-R6(2) identifies both natural hazards (as defined in s2 of the RMA) and severe events as the catalyst for tree damage that would pose a "significant risk to life, critical infrastructure, or a site" as a circumstance where the removal of a scheduled tree is a permitted activity. 'Severe' event has been included in the rule to capture any damage to a scheduled tree not caused by a natural hazard, e.g., a vehicle crash or a fire in a building adjoining the tree.
115. I consider the defined term 'emergency' captures the intended meaning of both 'natural hazard' and 'severe event'. The Proposed Plan defines 'emergency' as:

*"means a situation that:*

- a. is the result of any happening, whether natural or otherwise, including any accident, explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or a lifeline utility, or actual or imminent attack or warlike act; and*
- b. causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand."*

116. I recommend TREE-R6(2) is amended to replace 'natural hazard' and 'severe event' with 'emergency'. The recommended amendment retains the intended meaning of TREE-R6 and supports the interpretation of the rule. I note that TREE-MD2 uses the defined term 'emergency', therefore the proposed amendment would enhance consistency within the chapter.

**3.4.2.3 Summary of recommendations**

117. I recommend that the submission from Mainpower [249.188] and RIDL [326.241] be **accepted in part**.
118. I recommend the further submission by the Ohoka Residents Association [FS137] as it relates to the RIDL [326.241] submission point be **rejected in part**.
119. I recommended an amendment to Rule TREE-R6 in the Proposed Plan as shown below (additions shown in underline and deletions in ~~striketrough~~) and in **Appendix A**:

2. "the tree is damaged and poses a significant risk to life, critical infrastructure, or a site as a consequence of an emergency natural hazard or severe event; and"

#### **3.4.2.4 Section 32AA evaluation**

120. In my opinion, the amendment to TREE-R6 is more appropriate in achieving the objectives of the Proposed Plan than the notified provisions. In particular, I consider that the amendment will improve interpretation of the provision leading to more effective and efficient plan administration. The recommended amendments will not have any greater environmental, economic, social, and cultural effects than the notified provisions.

### **3.5 Matters of Discretion**

#### **3.5.1 TREE-MD1 Pruning, root protection area, trunk and crown, removal; and TREE-MD2 Extent of benefit or need for the activity or works**

##### **3.5.1.1 Matters raised by submitters**

121. MainPower [249.189 and 249.190] seek to amend TREE-MD1 and TREE-MD2 to add the following new clause:

*"The need for the activity to undertake any maintenance, repair, upgrade of existing network utilities or the operational and functional need of network utilities."*

122. RIDL [326.243 and 326.244] support TREE-MD1 and TREE-MD2 as notified.

##### *Further submissions*

123. The Ohoka Residents Association [FS137] oppose the RIDL [326.243 and 326.244] submission points.

##### **3.5.1.2 Assessment**

124. TREE-MD1 and TREE-MD2 are relevant to rules TREE-R1, TREE-R2, TREE-R3, TREE-R4 and TREE-R5. As was identified in the memo by Mr Maclennan, these rules are recommended to not apply to the EI chapter. Rules TREE-R6 and TREE-R7 are recommended to continue to apply to the EI chapter provisions and these rules are not subject to TREE-MD1 or TREE-MD2.
125. If the recommendation by Mr Maclennan is accepted by the Panel, the requested amendment would serve no function within the TREE chapter, and I therefore recommend the MainPower [249.189 and 249.190] submission points be **rejected**.

##### **3.5.1.3 Summary of recommendations**

126. I recommend for the reasons given in the assessment, that the submissions from RIDL [326.243 and 326.244] be **accepted**.
127. I recommend for the reasons given in the assessment, that the submissions from MainPower [249.189 and 249.190] be **rejected**.
128. I recommend the further submission by the Ohoka Residents Association [FS137] as it relates to the RIDL [326.243 and 326.244] submission points be **rejected**.

129. I recommend that no change be made to TREE-MD1 and TREE-MD2 in the Proposed Plan in response to the submissions.

### 3.6 TREE-SCHED1 – Notable Trees

#### 3.6.1 *Matters raised by submitters*

130. Four submissions were received to amend TREE-SCHED1 – Notable Trees.

131. Canterbury Botanical Society [122.3] requests Council identify more indigenous trees for protection on the Notable Tree Schedule.

132. Rainer and Ursula Hack [201.10] support the scheduling of TREE001, TREE002 and TREE003 and related provisions in the TREE Chapter. They request the Cabbage tree at 110 Parsonage Road, Woodend (P004 in the Operative Plan) and the English Oak at 100 Parsonage Road, Woodend (P017 in the Operative Plan) are added to TREE-SCHED1.

133. Julia and Anthony Holcroft [356.1] seek the Lombardy Poplar shelterbelts on their property at 431 Tuahiwi Road, Tuahiwi are added to the schedule.

134. Waimakariri District Council [367.48] request TREE038 at 77 Hilton Street, Kaiapoi be deleted from the schedule.

#### *Further submissions*

135. Forest and Bird [FS78] support the Canterbury Botanical Society [122.3] submission point as it is *“in accordance with the requirements of the RMA”*.

#### 3.6.2 *Assessment*

136. All the trees listed on TREE-SCHED1 in the Proposed Plan were assessed by *Asplundh, Christchurch* in 2019 using the STEM criteria to determine whether the tree or group of trees were sufficiently notable to the Waimakariri District to recommend for scheduling. As set out in TREE-P1 *Identification of notable trees*, the STEM criteria are:

1. Condition - form, occurrence, vigour and vitality, function, age;
2. Community - stature, visibility, proximity, role, climate;
3. Stature - feature, form;
4. Historic - association, commemoration, remnant, relict, age (100+ years); and
5. Scientific - source, rarity, endangered.

137. All the trees on TREE-SCHED1 in the Proposed Plan reached the threshold of 130 points. I rely on the Arboricultural Report prepared by Ms Liz Warner, where in section 3.0 of her report in **Appendix D**, she explains the identification of the threshold. The threshold was derived from the median threshold of 131 points from the 25 Councils across the country who use the STEM method and have adopted a threshold. Of all the trees assessed in 2019 for the Proposed Plan, only nine trees scored less than 130 points. In Section 3.0 of her report, Ms Warner states that *“all of these trees score low on either the Form points or the Vigour and Vitality points, which shows that the trees may not have the potential longevity to be listed as scheduled trees.”* Ms Warner concludes that all the trees that scored over 130 points are therefore considered to be the most notable to the District.

*Canterbury Botanical Society [122.3] - Identify more indigenous trees*

138. Canterbury Botanical Society do not identify specific indigenous trees that ought to be considered for inclusion in TREE-SCHED1. For the preparation of the schedule, trees were identified across the district including through public nominations and assessed using the STEM method. To add new trees to the schedule through the submissions process, a tree or group of trees need to be nominated in order to be assessed and recommended or not recommended for scheduling.
139. I recommend the submission by Canterbury Botanical Society [122.3] and the further submission by Forest and Bird [FS78] as it relates to the Canterbury Botanical Society [122.3] submission, be **rejected**.

*Rainer and Ursula Hack [201.10] – reschedule two trees*

140. I agree with Rainer and Ursula Hack in their support of the TREE chapter including TREE001, TREE002 and TREE003. The English Oak at 100 Parsonage Road was previously scheduled in the Operative Plan (formerly P017) but was not reassessed as part of the District Plan Review as access to the property was not granted. Since then, the property has been on sold and the new owners permitted Ms Warner and myself access to the property and allowed Ms Warner to conduct a STEM assessment (**Appendix D**). The tree scored 198 points and is recommended for scheduling.
141. I have informed the owner of 100 Parsonage Road of the recommendation to schedule the English Oak tree on his property as a notable tree. The owner has confirmed he is aware of this.
142. The Cabbage Tree (formerly P004) at 110 Parsonage Road was assessed for the District Plan Review in late 2019 and was not recommended for scheduling (**Appendix C**). The tree scored 87 points which is considerably short of the 130 point threshold, and at the time it was noted the “tree is in significant decline, approx. 50% of crown is dead” (**Appendix C**). I consider this assessment is recent enough to still be considered relevant and as the 2019 assessment noted the poor state of the tree, I consider the likelihood of the tree improving in condition since 2019 to be very unlikely. Additionally, no new information was provided in the submission that would suggest the tree should be rescheduled.
143. I recommend the submission by Rainer and Ursula Hack [201.10] is accepted in regard to the scheduling of the English Oak Tree at 100 Parsonage Road, Woodend and rejected in regard to the scheduling of the Cabbage tree at 110 Parsonage Road, Woodend. The updated Notable Tree Form to be hyperlinked from TREE-SCHED1 is contained in Attachment 1.

*Julia and Anthony Holcroft [356.1] – schedule Lombardy Poplar shelterbelts*

144. The Lombardy Poplar shelterbelts on the property owned by Julia and Anthony Holcroft were assessed in 2014 using the STEM method and scored 96 points. At the time, trees scoring above 90 points were recommended for scheduling. However, this assessment was done for a previous Council Plan Change to the Operative Plan<sup>4</sup> which did not progress to public

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<sup>4</sup> Plan Change 25 *Notable Plants*



notification due to the Canterbury earthquake events, and therefore, the Lombardy Poplar shelterbelts were not scheduled.

145. The shelterbelts were not reassessed in 2019 during the preparation of the Proposed Plan, and as a result of the submission, I considered that the shelterbelts should be assessed in order to appropriately respond to the Holcroft's submission. Ms Warner assessed the shelterbelts using the STEM method in April 2023 (section 2.0 in the Report in **Appendix D** and the STEM assessment in **Appendix E**). The shelterbelts scored 138 points, meeting the 130 point threshold, and are therefore recommended for scheduling.
146. I recommend the submission by Julia and Anthony Holcroft [356.1] is **accepted** and the Lombardy Poplar shelterbelts are added to TREE-SCHED1 - Notable Trees. The updated Notable Tree Form to be hyperlinked from TREE-SCHED1 is contained in Attachment 2.

*Waimakariri District Council [367.48] – delete tree from schedule*

147. WDC request TREE038 at 77 Hilton Street, Kaiapoi is deleted from the schedule as the tree was removed in 2021 under s330 of the RMA as a result of the significant risk of branch failure onto a public footpath. I therefore recommend TREE038 is deleted from TREE-SCHED1.

### 3.6.3 Summary of recommendations

148. I recommend that the submissions from Julia and Anthony Holcroft [356.1] and Waimakariri District Council [367.48] be **accepted**.
149. I recommend that the submission from Rainer and Ursula Hack [201.10] be **accepted in part**.
150. I recommend that the submission from Canterbury Botanical Society [122.3] be **rejected**.
151. I recommend the further submission by Forest and Bird [FS78] as it relates to the Canterbury Botanical Society [122.3] submission point be **rejected**.
152. I recommended an amendment to TREE-SCHED1 in the Proposed Plan as shown below (additions shown in underline and deletions in ~~strikethrough~~) and in **Appendix A**:

TREE060. 100 Parsonage Road, Woodend. LOT 600 DP 545059. English Oak (*Quercus robur*). 1.

TREE061. 431 Tuahiwi Road, Tuahiwi. LOT 1 DP 20189. Lombardy Polar (*Populus nigra 'Italica'*). Group (2X shelterbelts).

~~TREE038. 77 Hilton Street, Kaiapoi. FLAT Unit 1 DP 423305. Black Beech (*Nothofagus solandri*). 1.~~

I recommend the Notable Tree Forms for TREE060 and TREE061, located in Attachment 1 and Attachment 2, are hyperlinked from TREE-SCHED1.

### 3.6.4 Section 32AA evaluation

153. In my opinion, the amendments to TREE-SCHED1 are more appropriate in achieving the objectives of the Proposed Plan than the notified provisions. In particular, I consider that:
- The recommended amendments update TREE-SCHED1 to recognise and protect more of the District's significant trees and deletes a tree that has been removed. Consequently, the amendments better give effect to the objectives and policies of the TREE chapter and

are more efficient and effective than the notified provisions in achieving the objectives of the Proposed Plan.

- The recommended amendments will not have any greater environmental, economic, social, and cultural effects than the notified provisions. However, there will be environmental, social and cultural benefits from the identification and protection of trees that are significant to the District.

### 3.7 Other Methods

#### 3.7.1 *Matters raised by submitters*

154. Clampett [284.1] and RIDL [326.1, 326.2, and 326.3] submitted to remove public and limited notification on all controlled and restricted discretionary activity rules, and to remove the terms avoid, remedy, and mitigate from the Proposed Plan provisions.

##### *Further submissions*

155. Forest and Bird [FS78], Ohoka Residents Association [FS84], Ohoka Residents Association [FS137], Andrea Marsden [FS119] and Christopher Marsden [FS120] oppose the RIDL [326.1] submission point.
156. Forest and Bird [FS78], Andrea Marsden [FS119], Christopher Marsden [FS120], and Ohoka Residents Association [FS137] oppose the RIDL [326.2] submission point.
157. Forest and Bird [FS78] and Ohoka Residents Association [FS137] oppose the RIDL [326.3] submission point.

#### 3.7.2 *Assessment*

158. I have reviewed the TREE chapter for all notification clauses and for the use of the terms avoid, remedy and mitigate in the provisions. The chapter precludes public and limited notification for restricted discretionary activities for TREE-R1, TREE-R2, TREE-R4, and TREE-R5. It is only in rule TREE-R3 where public or limited notified is permitted. I consider the submissions have not justified why TREE-R3 should include a non-notification clause and I do not consider there is sufficient evidence as to why notification of consents would not be appropriate, especially given the recognised contribution to character and amenity values to the wider district set out in TREE-O1.
159. I consider the use of the terms avoid and mitigate in the TREE chapter provisions are appropriate and their deletion from the plan is not justified. Remedy is not used in the chapter. The RIDL [326.1, 326.2 and 326.3] submission points were opposed by eight further submission points.

#### 3.7.3 *Summary of recommendations*

160. I recommend the submissions by Clampett [284.1] and RIDL [326.1, 326.2, and 326.3], as they relate to the TREE chapter be **rejected**.
161. I recommend the further submissions by Forest and Bird [FS78], Ohoka Residents Association [FS84], Ohoka Residents Association [FS137], Andrea Marsden [FS119] and Christopher Marsden [FS120] as they relate to the submission points by RIDL [326.1, 326.2, and 326.3] be **accepted**.

## 4 Conclusions


162. Submissions have been received mostly in support, and some opposing or seeking amendments to the Notable Tree chapter of the Proposed Plan.
163. Having considered all the submissions and reviewed all relevant statutory and non-statutory documents, I recommend that the Proposed Plan should be amended as set out in **Appendix A** of this report.
164. For the reasons set out in the Section 32AA evaluation included throughout this report, I consider that the proposed objectives and provisions, with the recommended amendments, will be the most appropriate means to:
- achieve the purpose of the Resource Management Act 1991 (RMA) where it is necessary to revert to Part 2 and otherwise give effect to higher order planning documents, in respect to the proposed objectives; and
  - achieve the relevant objectives of the Proposed Plan, in respect to the proposed provisions.

### Recommendations:

I recommend that:

1. The Hearing Commissioners accept, accept in part, or reject submissions (and associated further submissions) as outlined in **Appendix B** of this report; and
2. The Proposed Plan is amended in accordance with the changes recommended in **Appendix A** of this report.

Signed:

Name and Title		Signature
Report Author	Bryony Steven Graduate Planner	

## Appendix A. Recommended Amendments to Rākau hirahira - Notable Trees Chapter

Where I recommend changes in response to submissions, these are shown as follows:

- Text recommended to be added to the Proposed Plan is underlined.
- Text recommended to be deleted from the Proposed Plan is ~~struck through~~.

### Other notes

- The updated Notable Tree Forms for TREE060 and TREE061 are located in Attachment 1 and Attachment 2 and are to be hyperlinked from TREE-SCHED1.
- Sections in red text and highlighted in yellow are identifying markup that assists with understanding how the Proposed Plan gives effect to Variation 1: Housing Intensification

*THIS SECTION HAS RULES THAT HAVE LEGAL EFFECT. PLEASE CHECK THE EPLAN TO SEE WHAT THE LEGAL EFFECT IS OR SUBJECT TO APPEAL.*

## TREE - Rākau hirahira - Notable Trees

### Introduction

Notable trees make a positive contribution to the quality of an environment, including through their size, age and species values. The presence of a notable tree or group of trees can also play an important role in linking current and future communities with historical events.

The loss or modification of a notable tree can have a significant impact on an environment, particularly if the tree or trees are highly valued due to their significance. The use of significance criteria provides a basis for assessing the values of trees for protection and their contribution to the maintenance of District character and identity.

**The provisions in this chapter have been justified where required by a s77J qualifying matter assessment contained in the relevant section 32 evaluation report under the RMA.**

The provisions in this chapter are consistent with the matters in Part 2 - District Wide Matters - Strategic Directions and give effect to matters in Part 2 - District Wide Matters - Urban Form and Development.

### Other potentially relevant District Plan provisions

As well as the provisions in this chapter, other District Plan chapters that contain provisions that may also be relevant to notable trees include:

- Energy and Infrastructure: rules within the chapter are relevant regarding earthworks in the root protection area of notable trees, and the trimming or removal of trees and vegetation for the safe operation or maintenance of overhead lines or other infrastructure.
- Subdivision: contains provisions relevant for any notable tree, in particular SUB-R7 Subdivision of a site containing a historic heritage item or heritage setting, or notable tree.
- Earthworks: addresses earthworks in relation to any notable tree, in particular EW-R8 Earthworks for underground infrastructure.
- Any other District wide matter that may affect or relate to the site.
- Zones: the zone chapters contain provisions about what activities are anticipated to occur in the zones.

Objectives	
TREE-O1	<b>Contribution of notable trees</b> The contribution notable trees make to the character and amenity values of the District is recognised and maintained.
Policies	
TREE-P1	<b>Identification of notable trees</b>

	<p>Identify and assess potential notable trees, including any groups of notable trees, other than located in any road corridor or on public land administered by Council, and schedule based on significance and/or notable values, according to the following STEM criteria:</p> <ol style="list-style-type: none"> <li>1. Condition - form, occurrence, vigour and vitality, function, age;</li> <li>2. Community - stature, visibility, proximity, role, climate;</li> <li>3. Stature - feature, form;</li> <li>4. Historic - association, commemoration, remnant, relict, age (100+ years); and</li> <li>5. Scientific - source, rarity, endangered.</li> </ol>
<b>TREE-P2</b>	<p><b>Scheduling of notable trees</b> Schedule trees in TREE-SCHED1 where they are assessed as having significant and/or notable values and the tree or group of trees are structurally sound and healthy, unless:</p> <ol style="list-style-type: none"> <li>1. there is unacceptable risk, including likely future risk, serious threat to people, property or critical infrastructure taking into account potential mitigation measures and their costs; and</li> <li>2. the location of the tree or trees unreasonably restricts development potential of the site or the surrounds of the site.</li> </ol>
<b>TREE-P3</b>	<p><b>Retention and protection</b> Retain any notable tree listed in TREE-SCHED1 and protect the tree or group of trees from the adverse effects of inappropriate subdivision, land use and development, by considering:</p> <ol style="list-style-type: none"> <li>1. the specific significance and/or notable values of the tree or group of trees;</li> <li>2. the extent that the subdivision, land use or development provides for protection;</li> <li>3. the extent that the health or structural integrity of the tree or group of trees is affected by the necessity of the subdivision, land use or development;</li> <li>4. the likelihood of any serious threat to people or property from the tree or group of trees;</li> <li>5. the necessity to provide for activities within the road corridor, or where required for the safe operation or maintenance of overhead lines;</li> <li>6. the provision and implementation of a tree management plan in accordance with best arboriculture practice;</li> <li>7. the extent that the specific significance and/or notable values that would be lost can be mitigated, including alternative methods; and</li> <li>8. limited activities within the root protection area, gardening, and activities with the area of the trunk or crown.</li> </ol>
<b>TREE-P4</b>	<p><b>Maintenance of notable trees</b> Provide for the maintenance of any notable tree listed in TREE-SCHED1, for the purposes of:</p> <ol style="list-style-type: none"> <li>1. supporting the continuing health or structural integrity of the notable tree where undertaken in accordance with best arboricultural practice by a suitably qualified and experienced arborist;</li> <li>2. enabling the reasonable use of the root protection area, trunk or crown area where the adverse effects of maintenance on the tree are avoided or, if avoidance is not practicable, are minimised; and</li> <li>3. mitigating adverse effects of the tree on public safety, sunlight access, damage to property or critical infrastructure.</li> </ol>
<b>TREE-P5</b>	<p><b>Removal of notable trees</b></p>

	<p>Discourage the removal of any notable tree listed in TREE-SCHED1, unless:</p> <ol style="list-style-type: none"> <li>1. it is demonstrated to be necessary to prevent a serious threat to people or property;</li> <li>2. the notable tree is dead or certified to be in terminal decline by a suitably qualified and experienced arborist;</li> <li>3. the use and enjoyment of the site of the notable tree or surrounds is significantly compromised or diminished; or</li> <li>4. it is necessary to avoid adverse effects on the ongoing provision of infrastructure.</li> </ol>
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## Activity Rules

TREE-R1	Maintenance pruning of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R3	
Notable Trees Overlay	<p><b>Activity status: PER</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. pruning is limited to:               <ol style="list-style-type: none"> <li>a. branches and foliage that have a maximum diameter up to 50mm at the point of severance;</li> <li>b. branches between 50mm and 100mm in diameter at the point of severance, where the work is undertaken, or supervised by a suitably qualified and experienced arborist;</li> <li>c. branches directly impacting or touching buildings or structures, where the maintenance is undertaken, or supervised by a suitably qualified and experienced arborist;</li> <li>d. subject to (1)(a), (1)(b) and (1)(c), removal of foliage of a maximum of 10% of total foliage over any three year period, with the maximum amount of foliage removed in any one year limited to 5% of total foliage, where the work is undertaken, or supervised by a suitably qualified and experienced arborist; and</li> <li>e. removal of any dead, broken or diseased branches or foliage.</li> </ol> </li> </ol>	<p><b>Activity status when compliance not achieved: RDIS</b></p> <p><b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p> <p>TREE-MD2 - Extent of benefit or need for the activity or works</p> <p><b>Notification</b></p> <p>An application for a restricted discretionary activity under this rule is precluded from being publicly or limited notified.</p>

TREE-R2	Gardening or earthworks within any root protection area of any Notable Tree	
Notable Trees Overlay	<p><b>Activity status: PER</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. gardening or earthworks shall not involve:               <ol style="list-style-type: none"> <li>a. mechanical cultivation;</li> <li>b. planting of trees;</li> <li>c. planting of tree climbing vines;</li> <li>d. alteration or disturbance of the existing ground level of more than 75mm; or</li> <li>e. trenching for fence or wall foundations.</li> </ol> </li> </ol>	<p><b>Activity status when compliance not achieved: RDIS</b></p> <p><b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p> <p><b>Notification</b></p> <p>An application for a restricted discretionary activity under this rule is precluded from being publicly or limited notified.</p>
TREE-R3	Overhead lines work or maintenance to any Notable Tree	
Notable Trees Overlay	<p><b>Activity status: PER</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. the works or maintenance is required under, and carried out in accordance with, the Electricity (Hazards from Trees) Regulations 2003 or the Telecommunications Act 2001; and</li> <li>2. the works or maintenance is undertaken by, or supervised by, a suitably qualified and experienced arborist.</li> </ol>	<p><b>Activity status when compliance not achieved: RDIS</b></p> <p><b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p>
TREE-R4	Activities within any root protection area of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R2 or TREE-R3	
Notable Trees Overlay	<p><b>Activity status: PER</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. activities within any root protection area shall not involve:               <ol style="list-style-type: none"> <li>a. any impervious surface, sealing, soil compaction, storage of materials, plant or equipment or parking of vehicles greater than 20% of the area defined by the root protection area;</li> <li>b. alteration or disturbance of the existing ground level of more than 75mm;</li> <li>c. the release, injection or placement of toxic chemicals or toxic substances;</li> </ol> </li> </ol>	<p><b>Activity status when compliance not achieved: RDIS</b></p> <p><b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p> <p>TREE-MD2 - Extent of benefit or need for the activity or works</p> <p><b>Notification</b></p> <p>An application for a restricted discretionary activity under this rule is precluded from being publicly or limited notified.</p>



	<p>d. the cutting or pruning of roots more than 25mm in diameter except for purposes under (1)(a) and (1)(e);</p> <p>e. the construction, addition or replacement of any building or structure greater than 20% of the area defined by the root protection area, fixed or unfixd to the land; and</p> <p>f. the lighting of an open air fire.</p>	
<b>TREE-R5</b>	<b>Activities within the trunk or crown of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R1 and TREE-R3</b>	
<b>Notable Trees Overlay</b>	<p><b>Activity status: PER</b> Where:</p> <ol style="list-style-type: none"> <li>1. activities within the trunk or crown shall not involve: <ol style="list-style-type: none"> <li>a. the fixing of structures to the tree;</li> <li>b. the carving, cutting or stripping of bark; and</li> <li>c. the release, injection or placement of toxic chemicals or toxic substances.</li> </ol> </li> </ol>	<p><b>Activity status when compliance not achieved: RDIS</b> <b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p> <p>TREE-MD2 - Extent of benefit or need for the activity or works</p> <p><b>Notification</b> An application for a restricted discretionary activity under this rule is precluded from being publicly or limited notified.</p>
<b>TREE-R6</b>	<b>Removal of any Notable Tree listed in TREE-SCHED1 that is unsafe</b>	
<b>Notable Trees Overlay</b>	<p><b>Activity status: PER</b> Where:</p> <ol style="list-style-type: none"> <li>1. the tree is dead, in terminal decline, at risk of extreme failure or having a significant loss of structural integrity; or</li> <li>2. the tree is damaged and poses a significant risk to life, critical infrastructure, or a site as a consequence of an <u>natural hazard or severe emergency</u><sup>5</sup> event; and</li> <li>3. it is certified by a suitably qualified and experienced</li> </ol>	<p><b>Activity status when compliance not achieved: DIS</b></p>

<sup>5</sup> MainPower [249.188].

	arborist that the tree is unsafe and that certification is supplied to the District Council.	
<b>TREE-R7</b>	<b>Removal of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R6</b>	
<b>Notable Trees Overlay</b>	<p><b>Activity status: RDIS</b> Where:</p> <ol style="list-style-type: none"> <li>1. the structural integrity of the tree, certified by a suitably qualified and experienced arborist, cannot be improved by maintenance or other measures to mitigate safety to people or property or ongoing viability of the tree.</li> </ol> <p><b>Matters of discretion are restricted to:</b></p> <p>TREE-MD1 - Pruning, root protection area, trunk and crown, removal</p>	<b>Activity status when compliance not achieved: DIS</b>

### Advice Note

<b>TREE-AN1</b>	Only Notable Trees on private land are listed and subject to the rules in this Chapter. The management of all trees on District Council administered public land is subject to the policy guidance of the Street and Reserve Trees Policy. The removal of a notable tree on public land is also subject to the consideration of the relevant Community Board.
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### Matters of Discretion

<b>TREE-MD1</b>	<p><b>Pruning, root protection area, trunk and crown, removal</b></p> <ol style="list-style-type: none"> <li>1. The character and degree of modification, damage, or destruction of the values of the tree, including the cultural significance of taonga species.</li> <li>2. The extent to which the activity will or may adversely affect the health or structural integrity or visual appearance of the tree.</li> <li>3. The extent to which the activity will be undertaken in a manner consistent with accepted arboricultural standards, practices and procedures.</li> <li>4. The duration and frequency of the activity and the effect on the tree.</li> <li>5. The resilience of the tree, in relation to structural soundness and health and any irreversible effect on the tree.</li> <li>6. The scope for the tree to recover from, or compensate for, any effects from pruning, work in the root protection area or modification of the trunk and crown.</li> <li>7. In relation to a listed group of trees, the extent to which the activity will or may adversely affect the health or structural integrity of the wider group or undermine its unity, setting or other collective significance.</li> <li>8. The extent to which any proposed compensation for the removal of the tree mitigates the loss of the tree and its values.</li> </ol>
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<b>TREE-MD2</b>	<p><b>Extent of benefit or need for the activity or works</b></p> <ol style="list-style-type: none"> <li>1. The need for the activity to deal with an emergency situation, or to avoid significant risk of effects on human health and safety, or adverse effects on infrastructure, including critical infrastructure.</li> <li>2. The extent of benefits associated with the use and development of the site for activities anticipated by the zoning for the site.</li> <li>3. The extent of benefits associated with the infrastructure, whether there is a functional need or operational need for that location and whether there are any practical alternatives.</li> <li>4. The extent to which the activity will or will not enhance amenity values beyond that achievable by arboricultural or property management alternatives.</li> <li>5. The significance of the tree and extent of loss of notable tree values and amenity values within and beyond the site.</li> </ol>
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## Schedules

### TREE-SCHED1 - Notable Trees



Tree ID	Address	Legal Description	Common name (Botanical name)	Number of Trees (Single Group)
TREE001	110 Parsonage Road, Woodend	LOT 1 DP 3598	Ghost Gum ( <i>Eucalyptus sp.</i> )	1
TREE002	110 Parsonage Road, Woodend	LOT 1 DP 3598	Weeping Wych Elm ( <i>Ulmus glabra Pendula</i> )	1
TREE003	110 Parsonage Road, Woodend	LOT 1 DP 3598	Copper Beech ( <i>Fagus sylvatica Purpurea</i> )	1
TREE004	1 Gatehouse Lane, Woodend	LOT 1 DP 329116	Giant Redwood ( <i>Sequoiadendron giganteum</i> )	1
TREE005	6 Queens Avenue, Waikuku Beach	LOT 2 DP 367425	Lawson's Cypress ( <i>Chamaecyparis lawsoniana</i> )	1
TREE006	1461 Main North Road, Waikuku	LOT 4 DP 55678	English Walnut ( <i>Juglans regia</i> )	1
TREE007	1461 Main North Road, Waikuku	LOT 4 DP 55678	English Walnut ( <i>Juglans regia</i> )	1
TREE008	177 Heywards Road, Clarkville	LOT 1 DP 57139	English Oak ( <i>Quercus robur</i> )	1

TREE009	177 Heywards Road, Clarkville	LOT 1 DP 57139	English Oak ( <i>Quercus robur</i> )	1
TREE010	177 Heywards Road, Clarkville	LOT 1 DP 57139	English Oak ( <i>Quercus robur</i> )	1
TREE011	157 Waikuku Beach Road, Waikuku	Pt RS 5485	English Oak ( <i>Quercus robur</i> )	1
TREE012	431 Tuahiwi Road, Tuahiwi	LOT 1 DP 20189	Black Poplar ( <i>Populus nigra</i> )	1
TREE013	431 Tuahiwi Road, Tuahiwi	LOT 1 DP 20189	Black Poplar ( <i>Populus nigra</i> )	1
TREE014	431 Tuahiwi Road, Tuahiwi	LOT 1 DP 20189	Black Poplar ( <i>Populus nigra</i> )	1
TREE015	2 Poyntzs Road, Eyrewell Forest	LOT 12 DP 327552	Gum ( <i>Eucalyptus sp.</i> )	1
TREE016	2 Poyntzs Road, Eyrewell Forest	LOT 12 DP 327552	Gum ( <i>Eucalyptus sp.</i> )	1
TREE017	359 Oxford Road, Rangiora	LOT 2 DP 48800	Coast Redwood ( <i>Sequoia sempervirens</i> )	Group (2 +)
TREE018	359 Oxford Road, Rangiora	LOT 2 DP 48800	Coast Redwood ( <i>Sequoia sempervirens</i> )	Group (2 +)
TREE019	1320 Poyntzs Road, West Eyreton	LOT 5 DP 349021	English Oak ( <i>Quercus robur</i> )	Group (8 - 10)
TREE020	1945 North Eyre Road, West Eyreton	Pt LOT 1 DP 56025	English Oak English Ash Turkey Oak ( <i>Quercus robur Fraxinus excelsior Quercus</i> )	Group (Approx. 50 Oaks, 2 Ash)
TREE021	21 Jacksons Road, Ohoka	LOT 1 DP 81869	English Oak ( <i>Quercus robur</i> )	Group (Approx. 8)
TREE022	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Blue Atlantic Cedar ( <i>Cedrus atlantica Glauca</i> )	1
TREE023	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Californian Black Oak ( <i>Quercus kelloggii</i> )	1
TREE024	21 Jacksons Road, Ohoka	LOT 1 DP 81869	English Elm ( <i>Ulmus procera</i> )	Group (Approx. 10)

TREE025	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Fluttering Elm ( <i>Ulmus laevis</i> )	1
TREE026	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Weeping Elm ( <i>Ulmus glabra Horizontalis</i> )	1
TREE027	21 Jacksons Road, Ohoka	LOT 1 DP 81869	English Oak ( <i>Quercus robur</i> )	Group (Approx. 30)
TREE028	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Coast Redwood ( <i>Sequoia sempervirens</i> )	1
TREE029	21 Jacksons Road, Ohoka	LOT 1 DP 81869	Coast Redwood ( <i>Sequoia sempervirens</i> )	1
TREE030	1368 Poyntz Road, West Eyreton	LOT 2 DP 349021	Monterey Pine ( <i>Pinus radiata</i> )	1
TREE031	815 Ashley Gorge Road, Glentui	RS 36945	Matai ( <i>Prumnopitys taxifolia</i> )	1
TREE032	598 South Eyre Road, Swannanoa	RES 4995	English Oak ( <i>Quercus robur</i> )	1
TREE033	598 South Eyre Road, Swannanoa	RES 4995	English Oak ( <i>Quercus robur</i> )	1
TREE034	598 South Eyre Road, Swannanoa	RES 4995	English Oak ( <i>Quercus robur</i> )	1
TREE035	1 Hilton Street, Kaiapoi	Pt RS 321	London Plane ( <i>Platanus x acerifolia</i> )	1
TREE036	1 Rich Street, Kaiapoi	LOT 1 DP 16755	Kowhai ( <i>Sophora tetraptera</i> )	1
TREE037	23 Fuller Street, Kaiapoi	LOT 3 DP 26905	Giant Redwood ( <i>Sequoiadendron giganteum</i> )	1
<sup>6</sup> TREE038	77 Hilton Street, Kaiapoi	FLAT Unit 1 DP 423305	Black Beech ( <i>Nothofagus solandri</i> )	1
TREE039	23 Cass Street, Kaiapoi	LOT 3 DP 26905	English Oak ( <i>Quercus robur</i> )	1
TREE040	100 Oxford Road, Rangiora	LOT 1 DP 504565	English Elm ( <i>Ulmus procera</i> )	1

<sup>6</sup> Waimakariri District Council [367.48].

TREE041	4 Boundary Road, Sefton	Pt RS 2859	English Oak ( <i>Quercus robur</i> )	1
TREE042	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE043	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE044	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE045	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE046	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE047	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE048	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE049	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE050	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE051	175 Harleston Road, Sefton	Pt RS 5545	Tasmanian Blue Gum ( <i>Eucalyptus globulus</i> )	Group (Approx. 10)
TREE052	229 Tuahiwi Road, Tuahiwi	Maori Reserve 873 151 Kaiapoi	English Oak ( <i>Quercus robur</i> )	1
TREE053	76 Hodgsons Road, Loburn	LOT 1 DP 16405	English Oak ( <i>Quercus robur</i> )	1

TREE054	73 Hodgsons Road, Loburn	LOT 1 DP 16405	Weeping Elm ( <i>Ulmus glabra Horizontalis</i> )	1
TREE055	73 Hodgsons Road, Loburn	LOT 1 DP 16405	English Oak ( <i>Quercus robur</i> )	1
TREE056	73 Hodgsons Road, Loburn	LOT 1 DP 16405	Weeping Elm ( <i>Ulmus glabra Horizontalis</i> )	1
TREE057	76 Gatehouse Lane, Woodend	LOT 5 DP 396889	English Oak Monterey Cypress London Plane ( <i>Quercus robur, Cupressus macrocarpa, Latanus x acerifolia</i> )	Group (Approx. 43 Oaks, 1 x Cypress, 1 x Plane)
TREE058	16 Champions Road, Cust	RS 7746	English Oak ( <i>Quercus robur</i> )	1
TREE059	16 Champions Road, Cust	RS 7746	English Oak ( <i>Quercus robur</i> )	1
<sup>7</sup> TREE060	<u>100 Parsonage Road, Woodend</u>	<u>LOT 600 DP 545059</u>	<u>English Oak (<i>Quercus robur</i>)</u>	<u>1</u>
<sup>8</sup> TREE061	<u>431 Tuahiwi Road, Tuahiwi</u>	<u>LOT 1 DP 20189</u>	<u>Lombardy Polar (<i>Populus nigra 'Italica'</i>)</u>	<u>Group 2X shelterbelts</u>

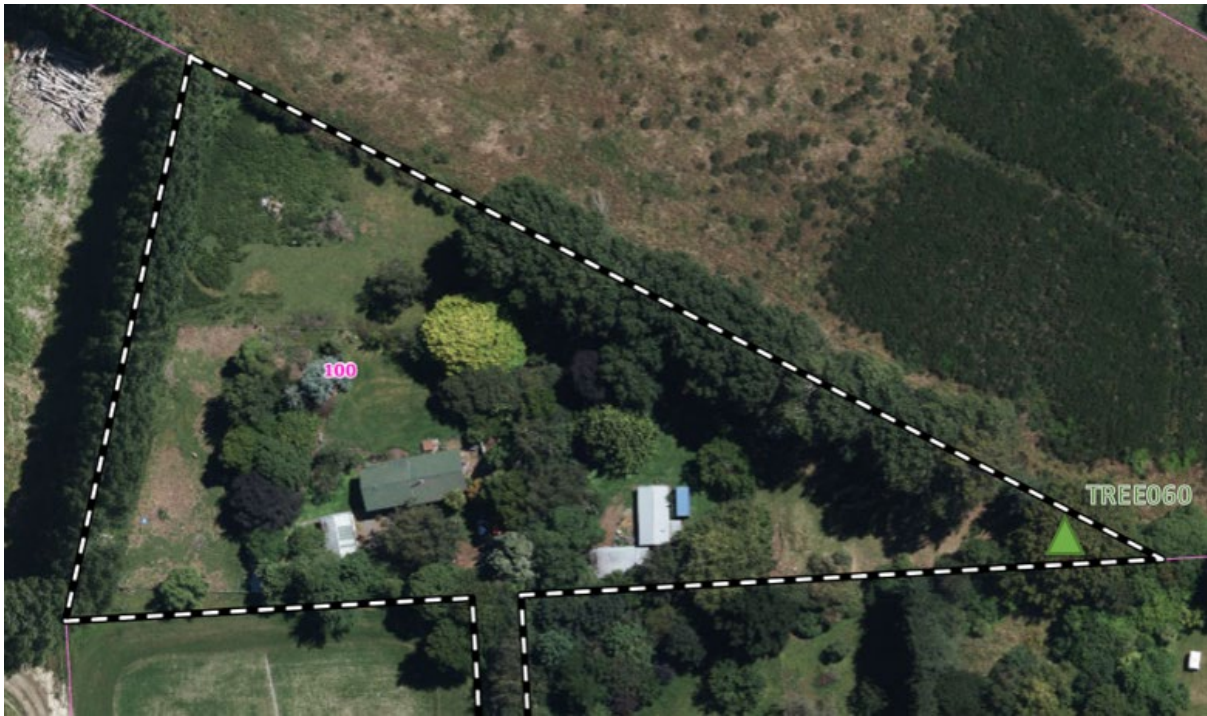
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7 Rainer and Ursula Hack [201.10].

8 Julia and Anthony Holcroft [356.1].



Planning map – Notable Tree overlay amendments to 100 Parsonage Road, Woodend.



Planning map – Notable Tree overlay amendments to 431 Tuahiwi Road, Tuahiwi.





## **Appendix B. Recommended Responses to Submissions and Further Submissions on the Rākau hirahira - Notable Trees Chapter**

The recommended responses to the submissions made on this topic are presented in Table B1 below.

Table B 1: Recommended responses to submissions and further submissions Rākau hirahira - Notable Trees Chapter

Sub. Ref.	Submitter / Further Submitter	Provision	Decision Requested	Section of this Report where Addressed	Officer's Recommendation	Officers' Reasons/Comments	Recommended Amendments to Proposed Plan?
<b>General</b>							
249.182	MainPower NZ Ltd	General	Insert appropriate hyperlinks from the EI chapter to the relevant notable tree rules contained in the notable trees chapter.	3.2.1	Reject	See body of the report for the assessment of this submission point.	No
<b>TREE-O1 Contribution of notable trees</b>							
326.230	Rolleston Industrial Developments Ltd	TREE-O1	Retain TREE-O1 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-P1 Identification of notable trees</b>							
326.231	Rolleston Industrial Developments Ltd	TREE-P1	Retain TREE-P1 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-P2 Scheduling of notable trees</b>							
326.232	Rolleston Industrial Developments Ltd	TREE-P2	Retain TREE-P2 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
373.52	KiwiRail Holdings Limited	TREE-P2	Retain TREE-P2 as notified.	N/A	Accept	I agree with the submitter.	No
<b>TREE-P3 Retention and protection</b>							
326.233	Rolleston Industrial Developments Ltd	TREE-P3	Retain TREE-P3 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-P4 Maintenance of notable trees</b>							
249.183	MainPower NZ Ltd	TREE-P4	Retain TREE-P4 as notified.	N/A	Accept	I agree with the submitter.	No
326.234	Rolleston Industrial Developments Ltd	TREE-P4	Retain TREE-P4 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
373.53	KiwiRail Holdings Limited	TREE-P4	Retain TREE-P4 as notified.	N/A	Accept	I agree with the submitter.	No
<b>TREE-P5 Removal of notable trees</b>							
249.184	MainPower NZ Ltd	TREE-P5	Retain TREE-P5 as notified.	N/A	Accept	I agree with the submitter.	No
326.235	Rolleston Industrial Developments Ltd	TREE-P5	Retain TREE-P5 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
373.54	KiwiRail Holdings Limited	TREE-P5	Retain TREE-P5 as notified.	N/A	Accept	I agree with the submitter.	No
<b>Proposed new policies</b>							

Sub. Ref.	Submitter / Further Submitter	Provision	Decision Requested	Section of this Report where Addressed	Officer's Recommendation	Officers' Reasons/Comments	Recommended Amendments to Proposed Plan?
249.185	MainPower NZ Ltd	Policies – General	Insert a new policy: "TREE- P6 Provide for limited physical works to and around trees listed in TREE-SCHED1, for cultivation, maintenance, safety purposes, or infrastructure where those works are required due to locational, technical or operational requirements."	3.3.1	Reject	See body of the report for the assessment of this submission point.	No
261.3	Michael Alexander de Hamel	Policies – General	Amend to refer to Section 36AAB(1) of the Resource Management Act 1991, noting that Council may remit charges for applications which may have a positive effect on heritage and landscape values. Insert new policy, similar to SASM-P4, into Notable Trees chapter, to maintain consistency and lead to best outcomes for the District by enabling Council to contribute financial assistance towards the maintenance and preservation of heritage and landscape values:  "TREE-P6 Recognise the social and landscape values of notable trees in the District and: facilitate opportunities to provide information about these values provide opportunities for these values to be recognised manage earthworks involving disturbance of soils in the vicinity of Notable Trees so as to reduce threats to their wellbeing assist with the maintenance, restoration or enhancement of Notable Trees where an application is for an activity which will protect or enhance heritage, landscape or environmental values the Council will give consideration under Section 36AAB of the Act for a remission of any part of any charge that would otherwise be payable."	3.3.1	Reject	See body of the report for the assessment of this submission point.	No
<b>TREE-R1 Maintenance pruning of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R3</b>							
326.236	Rolleston Industrial Developments Ltd	TREE-R1	Retain TREE-R1 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-R2 Gardening or earthworks within any root protection area of any Notable Tree</b>							
249.186	MainPower NZ Ltd	TREE-R2	Retain TREE-R2 as notified.	N/A	Accept	I agree with the submitter.	No
326.237	Rolleston Industrial Developments Ltd	TREE-R2	Retain TREE-R2 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-R3 Overhead lines work or maintenance to any Notable Tree</b>							
249.187	MainPower NZ Ltd	TREE-R3	Retain TREE-R3 as notified.	N/A	Accept	I agree with the submitter.	No
326.238	Rolleston Industrial Developments Ltd	TREE-R3	Retain TREE-R3 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-R4 Activities within any root protection area of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R2 or TREE-R3</b>							

Sub. Ref.	Submitter / Further Submitter	Provision	Decision Requested	Section of this Report where Addressed	Officer's Recommendation	Officers' Reasons/Comments	Recommended Amendments to Proposed Plan?
62.44	Chorus New Zealand, Spark New Zealand Trading Limited, Vodafone New Zealand Limited	TREE-R4	Amend TREE-R4 and rules in the Energy and Infrastructure Chapter (EI) as necessary such that any provisions relevant to infrastructure work within the root zone of notable trees are included within the EI rules.	3.4.1	Reject	See body of the report for the assessment of this submission point.	No
126.1	Jez Partridge	TREE-R4	Undertake a cost benefit analysis of international best practice methods used to determine the area of roots which cannot be disturbed without consent, and selects a best practice methodology, ideally being the British Standard 5837 - Trees in Relation to Construction (2012), or Australian Standard 4970 – Protection of Trees on Development Sites (2009). Do not allow various permitted works within the root protection area.	3.4.1	Reject	See body of the report for the assessment of this submission point.	No
326.239	Rolleston Industrial Developments Ltd	TREE-R4	Retain TREE-R4 as notified.	3.4.1	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-R5 Activities within the trunk or crown of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R1 and TREE-R3</b>							
326.240	Rolleston Industrial Developments Ltd	TREE-R5	Retain TREE-R5 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-R6 Removal of any Notable Tree listed in TREE-SCHED1 that is unsafe</b>							
249.188	MainPower NZ Ltd	TREE-R6	Amend to clarify the term 'severe event', but otherwise, retain TREE-R6 as notified.	3.4.2	Accept in part	See body of the report for the assessment of this submission point.	Yes
326.241	Rolleston Industrial Developments Ltd	TREE-R6	Retain TREE-R6 as notified.	3.4.2	Accept in part	I agree with the submitter, subject to the recommended amendment on TREE-R6.	No
FS137	Ohoka Residents Association		Reject the submission		Reject in part		No
<b>TREE-R7 Removal of any Notable Tree listed in TREE-SCHED1, other than provided for by TREE-R6</b>							
326.242	Rolleston Industrial Developments Ltd	TREE-R7	Retain TREE-R7 as notified.	N/A	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-MD1 Pruning, root protection area, trunk and crown, removal</b>							
249.189	MainPower NZ Ltd	TREE-MD1	Amend TREE-MD1: ".... 9. <u>The need for the activity to undertake any maintenance, repair, upgrade of existing network utilities or the operational and functional need of network utilities.</u> "	3.5.1	Reject	See body of the report for the assessment of this submission point.	No
326.243	Rolleston Industrial Developments Ltd	TREE-MD1	Retain TREE-MD1 as notified.	3.5.1	Accept	I agree with the submitter.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-MD2 Extent of benefit or need for the activity or works</b>							

Sub. Ref.	Submitter / Further Submitter	Provision	Decision Requested	Section of this Report where Addressed	Officer's Recommendation	Officers' Reasons/Comments	Recommended Amendments to Proposed Plan?
249.190	MainPower NZ Ltd	TREE-MD2	Amend TREE-MD2: ".... 6. <u>The need for the activity to undertake any maintenance, repair, upgrade of existing network utilities or the operational and functional need of network utilities.</u> "	3.5.1	Reject	See body of the report for the assessment of this submission point.	No
326.244	Rolleston Industrial Developments Ltd	TREE-MD2	Retain TREE-MD2 as notified.	3.5.1	Accept	See body of the report for the assessment of this submission point.	No
FS137	Ohoka Residents Association		Reject the submission		Reject		No
<b>TREE-SCHED1 - Notable Trees</b>							
122.3	Canterbury Botanical Society	TREE-SCHED1 - Notable Trees	Amend TREE-SCHED1 to identify more indigenous trees for protection.	3.6	Reject	See body of the report for the assessment of this submission point.	No
FS78	Royal Forest and Bird Protection Society of New Zealand		Support the submission		Reject		No
201.10	Rainer and Ursula Hack	TREE-SCHED1 - Notable Trees	Support and retain TREE001, TREE002, and TREE003 at 110 Parsonage Road and related provisions in the Notable Trees Chapter. Seek inclusion of the cabbage tree (P004, 110 Parsonage Road) and English Oak (P017, 100 Parsonage Road) as listed in the Operative District Plan.	3.6	Accept in part	See body of the report for the assessment of this submission point.	Yes
356.1	Julia and Anthony Holcroft	TREE-SCHED1 - Notable Trees	Consider protection of the Lombardy Poplar shelter belts at 431 Tuahiwi Road. Information the submitter has regarding Notable Criteria may be of use to achieve this.	3.6	Accept	See body of the report for the assessment of this submission point.	Yes
367.48	Waimakariri District Council	TREE-SCHED1 - Notable Trees	Delete TREE038 from TREE-SCHED1 – Notable Trees.	3.6	Accept	See body of the report for the assessment of this submission point.	Yes
<b>General / Plan wide submissions</b>							
284.1	Clampett Investments Limited	General	Amend all controlled and restricted discretionary activity rules:  " <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u> "	3.7	Reject	See body of the report for the assessment of this submission point.	No
326.1	Rolleston Industrial Developments Limited	General	Amend the Proposed District Plan to delete the use of absolutes such as 'avoid', 'maximise' and 'minimise'.	3.7	Reject	See body of the report for the assessment of this submission point.	No
FS78	Royal Forest and Bird protection Society of New Zealand Inc		Reject the submission		Accept		No
FS84	Ohoka Residents Association		Reject the submission		Accept		No
FS119	Andrea Marsden		Reject the submission		Accept		No
FS120	Christopher Marsden		Reject the submission		Accept		No
FS137	Ohoka Residents Association		Reject the submission		Accept		No

Sub. Ref.	Submitter / Further Submitter	Provision	Decision Requested	Section of this Report where Addressed	Officer's Recommendation	Officers' Reasons/Comments	Recommended Amendments to Proposed Plan?
326.2	Rolleston Industrial Developments Limited	General	Amend so that all controlled and restricted discretionary activity rules include the following wording, or words to like effect:  " <u>Applications shall not be limited or publicly notified, on the basis of effects associated specifically with this rule and the associated matters of control or discretion.</u> "	3.7	Reject	See body of the report for the assessment of this submission point.	No
FS78	Royal Forest and Bird protection Society of New Zealand Inc		Reject the submission		Accept		No
FS119	Andrea Marsden		Reject the submission		Accept		No
FS120	Christopher Marsden		Reject the submission		Accept		No
FS137	Ohoka Residents Association		Reject the submission		Accept		No
326.3	Rolleston Industrial Developments Limited	General	Amend controlled and restricted discretionary activity rules to provide direction regarding non-notification.	3.7	Reject	See body of the report for the assessment of this submission point.	No
FS137	Ohoka Residents Association		Reject the submission		Accept		No
FS78	Royal Forest and Bird protection Society of New Zealand Inc		Reject the submission		Accept		No

## Appendix C. 2019 STEM Assessment of the Cabbage Tree at 110 Parsonage Road, Woodend.

Assessment of the Cabbage Tree at 110 Parsonage Road, Woodend, extracted from the 'WDC Notable Tree Report – STEM Assessment', conducted in 2019 by Liz Warner, Consultant Arborist to Asplundh, to inform the Notable Tree chapter in the Proposed Plan.

**Table A 1: 2019 STEM Assessment of the Cabbage Tree at 110 Parsonage Road, Woodend.**

Tree Location Address	110 Parsonage Road Woodend Canterbury 7610 NZ
Tree ID	P004
Latitude	-43.319191011
Longitude	172.677569054
Assessment Date	2019-11-04
Assessed By	Liz Warner
Tree Common Name	Cabbage Tree
Tree Species	<i>Cordyline australis</i>
Tree Height	7
Crown Spread (m)	3.5
DBH (m)	0.6
Additional Comments	Tree is in significant decline, approx. 50% of crown is dead.
Form	Poor
Form Points	3
Occurrence	Common
Occurrence Points	9
Vigour & Vitality	Some
Vigour & Vitality Points	9
Function	Useful
Function Points	9
Age	40+
Age Points	15
Stature (m)	3 to 8
Stature Points	3
Visibility (km)	0.
visibility Points	3
Proximity	Group 10 +
Proximity Points	15
Role	Moderate
Role Points	9
Climate	Moderate
Climate Points	9
Stature	
Stature Points	
Historic	Association
Historic Points	3
Scientific	
Scientific Points	
<b>Total Points</b>	<b>87</b>

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Original Tree Age	50
New Tree Age	5
Age Difference	45
Tree Cost (\$)	\$80.00
<b>Unit Tree Cost (\$)</b>	<b>\$6,960.00</b>
<b>Planting Cost (\$)</b>	<b>\$470.00</b>
Maintenance per Yr (\$)	\$45.00
<b>Maintenance Cost (\$)</b>	<b>\$2,025.00</b>
Sub-Total (\$)	\$9,455.00
GST (\$)	\$1,418.25
<b>Total Wholesale Cost (\$)</b>	<b>\$10,873.25</b>



**Appendix D. Waimakariri District Council Notable Tree Report  
STEM Tree Assessment – Update 2023. Report Author – Ms Liz  
Warner, Consultant Arborist, Asplundh, Christchurch**

(Associated Stem Assessments in **Appendix E**)

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## Arboricultural Report

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3<sup>rd</sup> May 2023

Waimakariri District Council Notable Tree Report  
STEM Tree Assessment – Update 2023

Report Author – Liz Warner

**ASPLUNDH®**

**ANYTIME. ANYWHERE.**

## 1.0 Executive Summary

This report was commissioned by Bryony Steven, Graduate Planner at Waimakariri District Council.

### Overview

*Waimakariri District Council is in the process of updating the District Plan and is at the stage of preparing s42A reports to respond to the submissions received on the Proposed District Plan (PDP). The s42A report assesses submissions made on the PDP and provides recommendations to the independent hearings panel on how to resolve the submissions. Two submissions were received on the proposed Notable Trees Chapter requesting Council to include identified trees in the notable tree schedule.*

### Qualifications and experience

Liz Warner is a Consultant Arborist and a Director of Warner Tree Care Limited, with over 25 years' experience in the Arboriculture industry.

Ms Warner graduated from Lancashire University (UK), in 2004 with a Bachelor of Science (Honours), in Arboriculture. This followed on from achieving both a National Certificate and a National Diploma in Horticulture with the specialism in Arboriculture from De Montfort University in 1998/1999.

Ms Warner has been both self-employed and employed in the arboricultural contracting industry in both NZ and the UK and has worked for local government as a Tree Officer in the UK. She has significant experience working as a Consultant Arborist in both the private and the local government sector in Canterbury for the last 15 years.

Experience includes:

- Tree assessments and surveys of both individual and multiple trees.
- District Plan review tree assessments for WDC and CCC.
- Tree Protection Management Plans for both small and large scale civil works and new housing developments around trees.
- Assessment of young trees planted in new sub-divisions.
- Written tree management plans for large reserves and campgrounds.

### Report Brief

Complete STEM assessments on the two trees/ groups of trees identified by submitters to potentially be included in the notable tree schedule.

Provide further information as to why the threshold of 130 points was recommended to determine which trees would be scheduled in the PDP compared with the previous 90-point threshold.

A threshold of 130 points was recommended and the reason for this was explained as:

*After looking at the thresholds of several other councils throughout New Zealand I believe a threshold of 130 points would be suitable to include all significant trees within the district.*

The tree assessments were carried out in April 2023. All trees were surveyed from ground level only, with a visual tree assessment (VTA) and STEM evaluation carried out, including a valuation for each tree or group of trees. Photographs of each tree or group of trees were taken. No soil samples or tree samples were collected.

The full tree assessment results have been collated in an Excel spreadsheet.

All historical information relating to the notable trees, supplied by WDC on the previous survey has been included in this survey and has not been verified in any way. All tree ages have been either estimated by the assessor or taken from the previous survey.

All additional trees that did not already have a Tree ID number have been given a new Tree ID number starting at P100.

## **2.0 Tree Assessments**

Tree assessments were carried out on two trees/ groups of trees, as requested during submissions.

1. Tree P017 an English Oak located at 100 Parsonage Road, Woodend.
2. Item P122 two large shelterbelts of Lombardy Poplars located at 431 Tuahiwi Road, Tuahiwi.

Both trees/ groups of trees were assessed using visual tree assessment methods and a STEM evaluation was completed. Both trees/ groups of trees scored higher than the recommended 130 point STEM threshold, therefore it is recommended that they be added to the Notable Tree schedule within the Waimakariri Proposed District Plan.

## **3.0 STEM Threshold**

It has been requested that an explanation be given as to why the STEM threshold of 130 points was recommended.

In 2019 a list of other Local Authorities which use the STEM method to evaluate their Notable Trees was obtained from the New Zealand Notable Trees Trust (who own the rights to the STEM method). This list comprised 41 Councils across the country that use the STEM method, but only 25 had a score threshold listed.

Of the Local Authorities that had a score threshold listed the median score came out at 131. Most score thresholds however were over 120 points with only two below 100 points and only four below 120 points. If you remove the two lowest scores from the list, this pushes the median score up to 134.

It is a complex task to assign a STEM score threshold as it will differ from region to region, where there are diverse numbers and types of notable tree stock.

In 2019 the survey data was analysed and only one tree was scored less than 100 points and 8 trees scored less than 130 points. All of these trees score low on either the Form points or the Vigour and Vitality points, which shows that the trees may not have the potential longevity to be listed as scheduled trees. Therefore, the remaining trees which scored over 130 points are considered to be the most significant trees within the district and should be included in the Waimakariri District Plan Notable tree schedule.



**Liz Warner** - *BSc (Hons) Arboriculture*

**Consultant Arborist**

## Appendix E. Waimakariri District Council Notable Tree STEM Assessment – April 2023. Ms Liz Warner, Consultant Arborist, Asplundh, Christchurch

Stem Assessments of the English Oak Tree at 100 Parsonage Road, Woodend and the Lombardy Poplar Shelterbelts at 431 Tuahiwi Road, Tuahiwi.

STEM assessments undertaken in April 2023 to respond to submissions by Rainer and Ursula Hack [201.10] and Julia and Anthony Holcroft [356.1] on the Proposed Plan.

Tree Location Address	431 Tuahiwi Road Tuahiwi Canterbury 7691 NZ	100 Parsonage Rd Woodend Canterbury 7610 NZ
Tree ID	P122	P017
Latitude	-43.31694574	-43.31888364
Longitude	172.6321142	172.6771345
Assessment Date	2023-04-18	2023-04-18
Assessed By	Liz Warner	Liz Warner
Tree Common Name	Lombardy Poplar	English Oak
Tree Species	<i>Populus nigra 'Italica'</i>	<i>Quercus robur</i>
Tree Height (m)	35	17
Crown Spread (m)	3.5	24
DBH (m)	0.5	1.2
Additional Comments	Lombardy Poplar shelter belts planted by owner approx. 55yrs ago along two separate boundary lines the Northern and Southern boundaries. Northern boundary shelter belt length - approximately 365m. Southern boundary shelter belt length - approximately 312m. Trees have minor deadwood within the crowns, which is typical for the species. Trees appear to be in good health and are useful for blocking the Nor' West winds. Ditch for water drainage at base of trees on the Northern boundary.	Tree has two large snapped branches on the Northern side of the canopy. Tree has ivy growing up throughout the crown. Tree has been left mostly un-touched. Tree has some deadwood throughout the crown which is typical for the age and species.
Form	Good	Good
Form Points	15	15
Occurrence	Common	Common
Occurrence Points	9	9
Vigour & Vitality	Very Good	Very Good
Vigour & Vitality Points	21	21
Function	Useful	Significant
Function Points	9	21
Age	40+	100+

Age Points	15	27
Stature (m)	over 27	21 to 26
Stature Points	27	21
Visibility (km)	1	0.5
Visibility Points	9	3
Proximity	Group 10+	Group 10+
Proximity Points	15	15
Role	Moderate	Important
Role Points	9	15
Climate	Moderate	Important
Climate Points	9	15
Stature		
Stature Points	0	0
Historic		Age 100+,Association
Historic Points	0	36
Scientific		
Scientific Points	0	0
<b>Total Points</b>	<b>138</b>	<b>198</b>
Original Tree Age	55	140
New Tree Age	5	5
Age Difference	50	135
Tree Cost (\$)	\$80.00	\$80.00
<b>Unit Tree Cost (\$)</b>	<b>\$11,040.00</b>	<b>\$15,840.00</b>
<b>Planting Cost (\$)</b>	<b>\$470.00</b>	<b>\$470.00</b>
Maintenance per Yr (\$)	\$45.00	\$45.00
<b>Maintenance Cost (\$)</b>	<b>\$2,250.00</b>	<b>\$6,075.00</b>
Sub-Total (\$)	\$13,760.00	\$22,385.00
GST (\$)	\$2,064.00	\$3,357.75
<b>Total Wholesale Cost (\$)</b>	<b>\$15,824.00</b>	<b>\$25,742.75</b>

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**Appendix F. Mr Greg Barnard, Waimakariri District Council,  
Expert Opinion on the Dripline Approach to Root Protection****WAIMAKARIRI DISTRICT COUNCIL****MEMO**

**FILE NO AND TRIM NO:** DDS-06-10-02-05-16 / 230623093473

**DATE:** 22/06/2023

**MEMO TO:** Bryony Steven, Graduate Planner, Development Planning Unit

**FROM:** Greg Barnard, Parks Community Assets Officer, Community and Recreation

**SUBJECT:** Approaches to managing activities in the root area of notable trees

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1. This memo formalises the discussion had between myself, Greg Barnard, and Bryony Steven, reporting officer on the Notable Trees chapter in the Proposed Waimakariri District Plan. Ms Steven sought my advice on the effectiveness of the 'root protection area' definition used in the Proposed Plan in order to respond to the submission by Jez Partridge. Mr Partridge opposed the 'root protection area' definition that uses the 'dripline approach' and seeks the Council adopt a best practice standard for tree root protection. Mr Partridge favours a standard that identifies the root protection area by calculating the stem diameter multiplied by 12.
2. I have been managing the Waimakariri District Council Streets, Reserves and Cemeteries Tree Maintenance Contract for over 10 years. I also have a background specialising in small to medium civil earthworks and construction, an area that I worked in for several years. By combining the various skill sets acquired I have garnered considerable experience and knowledge of the need to protect tree roots on construction sites and the various reasons thereof. I understand that ill planned or careless construction practices can have a detrimental effect on trees in or near locations where civil or other works may be occurring.
3. In my opinion, the advantages of the dripline approach to determining the root protection area are:
  - a. The aim of this District Plan rule is to provide the best protection possible for Notable trees within the district. In order to make this effective and attractive it is important that any criteria and requirements are easily understood and able to be followed by as many of the people involved on site as possible not only to avoid misunderstandings but also to make the requirements easy to remember.
  - b. The drip line of a tree is easily identifiable and is a clear visual reference to workers and site managers of areas on site that should be protected from damage or



- compaction during works. This simplicity provides a readily identifiable reference for all involved regardless of their expertise in arboriculture or tree maintenance.
- c. Designers can easily identify areas that may require specific designs or treatments to protect the health and form of trees as needed.
4. I consider the disadvantages of the approach are:
    - a. That persons who are unskilled or unfamiliar with trees may not readily identify the true drip line of a tree, particularly trees that have been pruned or shaped or are a species with a naturally small canopy that may have extensive or fragile root systems.
    - b. The dripline approach does not take into account species with truncated limbs compared to its overall height, canopy volume or root spread such as conifers, fastigate (columnar) species or young still developing trees. It does not account for trees that are damaged or missing part of its canopy or may have been topped or pollarded at some time but are still considered significant or notable.
  5. I consider the advantages of the approach favoured by Mr Partridge are:
    - a. I consider that Mr Partridge's approach may be the preferred option when used by a professional arborist to determine the extent of some or all a tree root plate that may need to be protected during works. It gives a demonstrable methodology for calculating the extent of a tree's roots that can be recorded and documented should the need for justification of the work area be required. Both Standards quoted by Mr Partridge would give an approximation of the extent of the root protection area and could be viewed off site if needed but may not equate to the actual onsite conditions.
  6. I consider the disadvantages of the approach are:
    - a. I believe that the use of the Standards as proposed by Mr Partridge would be overly complicated for onsite use particularly by non-arborists. There is the possibility of considerable variation in the measurement of stem diameter by non-professionals especially when assessing multi stemmed trees. The resultant compounding error would either exaggerate or reduce the root protection area to what could be a significant factor accordingly. Considerable training would be required by on site staff to ensure they understand and abide by the methodology required to meet the Standards.
    - b. While professional arborists would undoubtedly feel comfortable using either the dripline method or the 12 times the stem method and have suitable tools available to make accurate measurements such calculations would still only provide a theoretical area for root protection.
    - c. The standards proposed by Mr Partridge does not take into account factors such as variations species growth rates both in stem diameter or root growth and therefore only provides a theoretical area for root protection.
  7. Overall, I favour the dripline approach and consider the 'root protection area' definition, as notified in the Proposed Plan, should be retained.

## Appendix G. Report Author's Qualifications and Experience

I hold the following qualifications:

Master of Environmental Policy and Management from Lincoln University and a Bachelor of Arts from Victoria University of Wellington. I have one year experience working as a Graduate Planner.

My work experience includes:

- Duty Planner providing planning advice to the public;
- Public engagement – providing planning advice at community 'drop-in sessions';
- Summarising submissions to the Proposed District Plan, Variation 1 and 2, and Private Plan Change RCP031;
- Preparation of policy research paper – qualifying matters proposed across New Zealand;
- Preparation of public notices, letters, website content and summary documents;
- Preparation of reports to Council; and
- Preparation of s42A reports for the District Plan review.

I have been employed by the Waimakariri District Council since March 2022 as a Graduate Planner within the Development Planning Unit Team.