



Resource Management Act 1991

Selwyn District Plan Township & Rural Volumes

Report on Submissions Relating to Plan Change 26:

Rakaia Huts Wāhi Taonga Management Areas & Sites

**A Proposed Plan Change to improve the design and form of development in
the Business 1 zones**

To:	<u>Hearing Commissioner</u>
From:	Andrew Mactier
Hearing Dates:	28 November 2011

Contents

- 1 Introduction
- 2 Background
- 3 Overview of Plan Change
- 4 Statutory Analysis
- 5 Submissions
- 6 Recommendations

Appendices

- 1 Schedule of Summary of Submissions & Officers Recommendations
- 2 Plan Change 26 – Maps and Figures
- 3 FITEC Best Planting Guidelines For Tree Planting
- 4 Dan Witter (Archaeologist – Witter Archaeology)
- 5 Recommended Changes to PC26 (as amended through submissions)

This report analyses submissions made on Plan Change 26 to the District Plan. The report is prepared under Section 42A of the Resource Management Act 1991. The purpose of the report is to assist the Hearing Commissioner in evaluating and deciding on submissions made on PC26 and to assist submitters in understanding how their submission affects the planning process. The report may include recommendations to accept or reject points made in submissions and to make amendments to the SDP. These recommendations are the opinions of the Reporting Officer only. The Hearing Commissioner will decide on each submission after hearing and considering all relevant submissions, the Officer's Report(s) and the Council's functions and duties under RMA.

PART 1: INTRODUCTION

- 1.1 This report has been prepared by the Selwyn District Council in accordance Section 42A of the Resource Management Act 1991 ('the Act') to consider Plan Change 26 – Rakaia Huts Wāhi Taonga Management Areas and Sites (PC26).
- 1.2 The purpose of this report is to bring to the attention of the Commissioner the relevant information and issues regarding PC26. It must be emphasised that the conclusions and recommendations made in this report are those of the author and are not binding upon the Commissioner. It should not therefore be assumed that the Commissioner will reach the same conclusion following consideration of all the evidence to be presented at the hearing.
- 1.3 This report:
- Outlines the statutory provisions relevant to the Plan Change process;
 - Discusses general issues;
 - Discusses the submissions and further submissions received following the public notification of PC26;
 - Provides a statutory review; and
 - Concludes with an overall recommendation based on the preceding discussion in the report.
- 1.4 This report has been prepared by Andrew Mactier. I am a Planner with the Selwyn District Council. I hold a Bachelor of Environmental Management from Lincoln University, and I have 5 years experience working in local government.

PART 2: BACKGROUND

- 2.1 The background to PC26 is given in the Section 32 report and is reproduced in part below:

The area in and around the Rakaia Huts settlement at the Rakaia River mouth is of considerable cultural significance to Te Taumutu Runanga, and is recognised as one of the most important complexes of archaeological sites in the South Island, containing significant early moa hunting and processing activity. The Rakaia Huts Moa Hunter Site ("the Site") was first identified in the late 1860s, and was investigated by Julius von Haast between 1869 and 1871. His findings from the site were later used to identify and define a Moa Hunter culture in New Zealand. Subsequent work by other archaeologists has further identified the extent of the archaeological material located on the middle and upper terraces at the Rakaia River mouth.

Work carried out in the 20th century appears to correlate with the plan of the extent of the archaeological site compiled by von Haast during his original work. The site appears to contain clearly differentiated use areas, with evidence of habitation focused on the middle terrace and the upper terrace used for the butchering and cooking of moa as well as some possible tool manufacture.

Although the evidence of archaeological material at the Rakaia Huts is extensive, there remains only one recorded archaeological site, New Zealand

*Archaeological Association (NZAA) site L37/4 (Figure 7 & Table 7, page 21 of **Attachment 3** of the Attached Section 32 Evaluation). Site L37/4 correlates with Wāhi Taonga Site C39 in the Appendix 5 of the Selwyn District Plan (Rural Volume). All archaeological work that has been carried out at Rakaia Huts over the last thirty years has related all information to this one site.*

A Conservation Management Plan (RHCMP) of the Rakaia Huts Moa Hunter Site was completed in 2009 to ensure that the meaning and importance of the site is conserved and able to be appreciated and interpreted for present and future generations.

The RHCMP identified a range of issues and threats to the archaeological and cultural values of the area, and proposed a range of regulatory and non-regulatory tools to manage those threats. One such tool included a range of recommended changes to the Selwyn District Plan to be initiated through a Council promoted Plan Change.

PART 3: OVERVIEW OF THE PROPOSED PLAN CHANGE

Reasons for Plan Change 26

- 3.1 Proposed Plan Change 26 is intended to give effect to regulatory methods to manage threats identified in the RHCMP. The Plan Change is specifically concerned with the culture and heritage provisions of the District Plan which relate specifically to wāhi taonga management areas and sites in and around Rakaia Huts Township, specifically Wāhi Taonga Management Site C39, Wāhi Taonga Management Area C103 and Silent File Area C48.
- 3.2 The current District Plan provisions do not adequately identify and protect the archaeological and cultural values associated with the existing wāhi taonga management areas in and around Rakaia Huts Township.
- 3.3 The RHCMP adopted by Council has further clarified the spatial extent of the Site (NZAA site L37/4). As noted above, the Rakaia River Moa Hunter Site was first identified in the late 1860s, and was investigated by Julius von Haast between 1869 and 1871. Subsequent work by other archaeologists has further identified the extent of the archaeological material located on the middle and upper terraces at the Rakaia River mouth. Work carried out in the 20th century appears to correlate with the plan of the extent of the archaeological site compiled by von Haast during his original work. The result is an archaeological site boundary currently identified in the District Plan on Planning Map 133 (Map 2, **Appendix 2**).
- 3.4 Archaeological work conducted by Witter in 2007 as part of the development of the RHCMP has indicated that the extent of the moa hunter site is slightly greater than currently identified on planning Map 133. The CMP states that while the area subject to Witter's 2007 investigations has been ploughed regularly over the last 100 years, there remains a degree of spatial integrity to the archaeological information in the soils, and that there is likely to be intact archaeological material remaining below the plough zone.
- 3.5 Existing Wāhi Taonga Management Site C39 (which was derived from NZAA site L37/4) will be removed from Appendix 5 of the District Plan (and Planning Map 133) because the CMP has

redefined the precise location of this site to the area subject to the CMP and PC26. It will be replaced with Wāhi Taonga Management Areas C39(a) and C39(b).

- 3.6 The RHCMP goes on to identify a range of threats to the archaeological and cultural values in the area subject to the CMP. Those threats can be broadly categorised as development pressure/changing land-use, and excavation/disturbance of soil. Current District Plan rules as they relate to management of archaeological and cultural values in the area subject to the CMP are what can be described as reactive to disturbance of these values, in that an activity requires resource consent only after it disturbs damages, removes or destroys any object, artefacts or other symbol of pre-European settlement. Given the archaeological and cultural significance of the site, allied to the status of the protection of historic heritage as a matter of national importance in accordance with Section 6(f) the Act, it is considered more appropriate to provide provisions which are more proactive and precautionary in the management of such a site.
- 3.7 The Proposed Plan Change also provides the opportunity to rectify historical inaccuracies relating to Wāhi Taonga Management Area C48, which is erroneously listed in Appendix 5 of the Rural Volume of the Plan as Silent File Area C48.
- 3.8 Amending the District Plan to reflect that site C48 is a Wāhi Taonga Management Area rather than a Silent File Area is consistent with Recommendation 29.15 made on Variation 20 to the Proposed District Plan (PDP) (Amendment to the PDP – Point 12). The correct amendments were made to then Planning Map 53 (now Map 133), but the schedule of Sites Of Significance To Tāngata Whenua contained in Appendix 5 of the District Plan (Rural Volume) was not amended.
- 3.9 Finally, PC26 affords an opportunity to ensure consistency between the historic heritage provisions in the two volumes of the Plan. This process will assist in the interpretation of rules for the public and in the clear and consistent administration of the Plan by Council staff.

Overview of PC26

- 3.10 The Plan Change is specifically concerned with the culture and heritage provisions of the District Plan which relate specifically to wāhi taonga management areas and sites in and around Rakaia Huts Township, specifically Wāhi Taonga Management Site C39, Wāhi Taonga Management Area C103 and Silent File Area C48. The key changes made by PC26 are:
- 3.11 As described in the Plan Change documents, PC26 proposes amendments to the following sections of the District Plan:

Township Volume:

- Part B, 3 People's Health, Safety and Values, B3.3 CULTURE AND HERITAGE (text changes)
- Part C, 2 Living Zone Rules – Earthworks (text changes)
- Part C, 4 Living Zone Rules – Buildings (text changes)
- Part C, 10 Living Zone Rules – Activities (text changes)
- Part C, 12 Living Zone Rules – Subdivision (text changes)
- Part C, 24 Business Zone Rules – Subdivision (text changes)

- Part D, Definitions (text changes)
- Part E, Appendix 5 – Schedule of Cultural Sites (text changes)

Rural Volume:

- Part B, 3 People’s Health, Safety and Values, B3.3 CULTURE AND HERITAGE (text changes)
- Part C, 1 Rural Rules – Earthworks (text changes)
- Part C, 2 Rural Rules – Tree Planting and Removal of Protected Trees (text changes)
- Part C, 3 Rural Rules – Buildings (text changes)
- Part C, 4 Rural Rules – Roading (text changes)
- Part C, 5 Rural Rules – Utilities (text changes)
- Part C, 6 Rural Rules – Outdoor Signs and Noticeboards (text changes)
- Part C, 10 Rural Rules – Subdivision (text changes)
- Part D, Definitions (text changes)
- Part E, Appendix 5 – Schedule of Cultural Sites (text changes)

Planning Maps

- Updated as appropriate

PART 4: STATUTORY CONSIDERATIONS

- 4.1 Section 73 of the Act enables a territorial authority to change its District Plan. The process for this change is set out in Schedule 1 of the Act. Part 1 of Schedule 1 sets out the requirements for a Council initiated Plan Change.
- 4.2 Section 74 of the Resource Management Act sets out the matters that must be considered in preparing a change to the District Plan. Amongst other things, section 74 requires a local authority to comply with its functions under section 31, its duties under section 32, contents of district plans under section 75 and the overall purpose of the Act under Part 2. This includes the matters of national importance (section 6), other matters that require particular regard in achieving the purpose of the Act (section 7) and the Treaty of Waitangi (section 8).
- 4.3 It is also relevant to consider the overall fit of the proposed policies to the existing District Plan framework. These matters are considered below.

Section 31

- 4.4 Proposed Plan Change 26 is consistent with Council’s function under section 31 which includes:

“(a) the establishment, implementation, and review of objectives, policies and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district.”

- 4.5 The Plan Change amends the policy and methods framework to achieve the integrated management and development of the Rakaia Huts Township and surrounding environs in respect to archaeological and cultural values associated with the Rakaia River Moa Hunter Site. The discussion of submissions in this report is intended to assist the commissioner’s considerations as to how Plan Change 26 achieves integrated management.

Section 32

- 4.6 In accordance with Section 32 of the Act, the Council has a duty to consider alternatives, benefits and costs of the proposed change. I note that Section 32 is a process whereby initial investigations, followed by the consideration of submissions at a hearing, all contribute to Council’s analysis of costs and benefits at its final decision-making. Accordingly, the Section 32 report prepared for Plan Change 26, is supplemented by the submissions received and will further benefit from the information to be presented at the hearing. As Plan Change 26 is amending controls to the District Plan it is necessary that the final decision-making carefully considers the costs and benefits of the new or amended provisions.

Sections 74 and 75

- 4.7 Section 75(3)(c) requires Council to give effect to any regional policy statement. Section 74 (2)(a)(i) requires a Council to have regard to any proposed regional policy statement while section 74(2A)(a) requires Council to take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on resource management issues of the district.

Regional Policy Documents

- 4.8 The relevant regional planning documents are the Regional Policy Statement and the recently notified Proposed Regional Policy Statement, which was notified on the 18th of June 2011.
- 4.9 The Canterbury Regional Policy Statement (“RPS”) has been operative since 26 June 1998. The RPS provides an overview of the resource management issues of the region and is a general guide as to how natural and physical resources are to be managed in an integrated way to promote sustainable management.
- 4.10 Chapter 8 of the RPS sets out the relevant objectives and policies relating to managing the effects on historical heritage sites, including wāhi taonga management areas and sites. Objective 4 seeks “the protection or enhancement of the historical and cultural heritage sites, buildings, places and areas, including their cultural, recreational and amenity values that contribute to Canterbury’s distinctive character and sense of identity”.
- 4.11 Objective 4 is to be implemented through Policy 5 which seeks that Historic sites, buildings, places or areas that meet relevant criteria (for Regional significance) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their conservation should be promoted.

- 4.12 The Proposed Regional Policy Statement (PRPS) was publicly notified on Saturday the 18th of June 2011. The PRPS gives an overview of the significant resource management issues facing the region, including issues of resource management significance to Ngāi Tahu. The purpose of the PRPS is to set out objectives, policies and methods to resolve those resource management issues and to achieve the integrated management of the natural and physical resources of Canterbury. Chapter 13 of the PRPS sets out the relevant objectives and policies relating to managing the effects on historical heritage sites, including wāhi taonga management areas and sites.
- 4.13 Objective 13.2.1 seeks the “Identification and protection of significant historic heritage items, places and areas, and their particular values that contribute to Canterbury’s distinctive character and sense of identity”. Objective 13.2.1 is to be implemented through Policy 13.3.2 which states “Recognise and provide for the protection of significant historic heritage items, places and areas”.
- 4.14 Objective 13.2.2 seeks to protect historic heritage landscapes from inappropriate subdivision, use and development. Objective 13.2.2 is to be implemented through Policy 13.3.3 and Policy 12.3.3. Policy 13.3.3 states that historic heritage landscapes are to be protected from inappropriate subdivision, use and development. Determination of the significance of historic cultural or historic heritage landscapes is subject to a number of matters. In addition, the management and determination of appropriate scale form and location of development is subject to a number of matters.
- 4.15 Policy 12.3.3 provides for the protection and management of other important landscapes, including for historic cultural and historic heritage purposes.
- 4.16 In summary, the proposed plan change is considered to be consistent with and gives effect to the relevant objectives and policies of the RPS and the PRPS.

Te Taumutu Rūnanga Natural Resource Management Plan

- 4.17 Section 74(2A)(a) requires Council to take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on resource management issues of the district.
- 4.18 Part 3 Section 5 (Nō Takaroa (Coastal and marine environments)) of Te Taumutu Rūnanga Natural Resource Management Plan, the Rakaia Huts area is described and the issues and policies for the area are outlined. Policies of relevance to PC26 include:

KAUPAPA – POLICY

- 1. Any earthworks, including building, in the area of Rakaia Huts requires consent from Te Taumutu Rūnanga.*
- 2. Accidental find protocols will be attached to any consent application.*
- 3. An archaeologist is to be on site when any excavations occur, as recommended by the Rūnanga.*
- 4. If any artefacts of significance are found during any excavation activities, these will be returned to Te Taumutu Rūnanga.*
- 5. If any Kōiwi tangata (human remains) are uncovered, Te Taumutu Rūnanga is to be notified immediately. The Rūnanga will give urgent priority to any such notification so that the resulting disruption to the excavation activity is kept to a minimum.*

6. *Consistent with the wider Ngāi Tahu Policy, Te Taumutu Rūnanga will take full responsibility for seeing that any remains are reinterred appropriately and in full consultation with the police.*

- 4.19 Part 4 of Te Taumutu Natural Resource Management Plan outlines the procedures and protocols associated with the implementation of the Plan. Part 4 Section 4.4 deals the protocols and procedures territorial authorities shall follow when undertaking consultation with the Rūnanga. Matters including whom to consult with, the extent of consultation, early consultation and sufficient time for consultation processes are addressed. In addition, Policy 4.4.12 sets out that Te Taumutu Runanga is to be an approved party (affected party) to all notified and non notified resource consent applications.
- 4.20 Part 4 Section 4.9 Ngā Wāhi Taonga; Ngā Wāhi Tapu outlines guidelines for the management of sites and places of significance. Guidelines of relevance to PC26 include:

4.9.1 Management guidelines:

- *Any activity that has the potential to affect a wāhi tapu, wāhi taonga or other site of significance shall involve consultation with Te Taumutu Rūnanga.*
- *Te Taumutu Rūnanga is the only one to assess the degree of cultural significance of any given site in the Taumutu takiwā.*
- *That the process for identifying and protecting significant sites recognises and respects that current lists (e.g. silent files) of significant sites are non-comprehensive. These lists are a guide only.*
- *Any archaeological finds remain the cultural property of Ngāi Te Ruahikihiki ki Taumutu and Te Taumutu Rūnanga (The Rūnanga is licensed to hold artefacts). This information is not to be made public, unless provided for by the hapū or Rūnanga.*
- *Tikanga Māori shall be observed on wāhi tapu/ wāhi taonga sites as these sites shall be protected from inappropriate activities that may denigrate the wāhi tapu status.*
- *Any persons proposing activities, in which earth moving or similar work will occur in an area of known or possible culturally significant sites, are required to enter into an Accidental Find Protocol. In some areas, such as Rakaia Huts, Te Taumutu Rūnanga requires that an archaeologist be on site when any excavations are undertaken. Te Taumutu Rūnanga has a Cultural site/Accidental Discovery Protocol, based on Te Rūnanga o Ngāi Tahu policy. The protocol is between the Rūnanga and the applicant, and will be implemented as a condition on the consent.*

- 4.21 In summary, the proposed plan change is considered to take into account the relevant provisions of the Te Taumutu Natural Resource Management Plan.

Part II RMA

- 4.22 Part II of the RMA includes the purpose of the Act, which is to promote the sustainable management of natural and physical resources. Sustainable management is defined in section 5(2) as:

...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems;

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

4.23 Sections 6 through 8 of the Act provide further guidance as to what sustainable management is concerned with. Section 6 of the Act contains seven matters that a territorial authority must recognise and provide for as “Matters of National Importance”. Of these, the following are considered to be of relevance to this plan change:

- *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (6(e));*
- *The protection of historic heritage from inappropriate subdivision, use and development (6(f)).*

4.24 Section 7 outlines a number of "Other Matters" to which a territorial authority shall have particular regard to. None of these matters are affected by the present proposal.

4.25 Section 8 requires that a territorial authority shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) when exercising its functions under the RMA. The principles of the Treaty of Waitangi have been taken into account where appropriate in the proposed plan change.

4.26 In summary, it is considered that the proposal is consistent with Part II of the RMA.

Section 86B

4.27 Recent amendments to the Act as a result of the 2009 Resource Management (Simplifying and Streamlining) Amendment Act resulted in a new section (S.86B) being inserted into the Act.

4.28 Section 86B addresses when rules in proposed plan and changes have legal effect. Section 86B(1) sets out that a rule in a proposed plan have legal effect only once a decision on submissions relating to the rule is made and publicly notified, except if subsection 3 applies (S.86B(1)(a)), or the local authority concerned resolves that the rule has legal effect only once the proposed plan becomes operative in accordance with Clause 20 of Schedule 1 of the Act (S.86B(1)(c)).

4.29 Section 86B(3) states that a rule in a proposed plan has immediate effect if the rule protects historic heritage (S.86B(3)(d)). At its meeting to adopt PC26 on the 22nd of June 2011, Council resolved that in accordance with s.86B(1)(a), s.86B(3)(d) and s.86B(5), rules included as part

of PC26 shall have immediate effect from the date plan change 26 is publicly notified (28th of June 2011).

Management Plans and Strategies Prepared under Other Acts

- 4.30 Section 74(2)(b) requires that a local authority give regard to management plans and strategies prepared under other Acts to the extent that their content has a bearing on resource management issues in the District. The Rakaia Huts Conservation Management Plan is one such relevant plan. Relevant plans include:
- 4.31 The Rakaia Huts Conservation Management Plan (RHCMP) was completed in 2009 to ensure that the meaning and importance of the site is conserved and able to be appreciated and interpreted for present and future generations.
- 4.32 The CMP identified a range of issues and threats to the archaeological and cultural values of the area, and proposed a range of regulatory and non-regulatory tools to manage those threats. Management recommendations made in the CMP, as they relate to regulatory methods requiring amendments to the District Plan include:
- Areas identified in the CMP as “Sites of Significance to Tangata Whenua” to be included in Appendix 5 of the District Plan;
 - Amend the boundary of the existing “Archaeological Site” identified on Planning Map 133 so that it reflects the extent of the archaeological site identified in the CMP;
 - Provide certainty to people by making activities Controlled Activities;
 - Archaeological Authority (from the New Zealand Historic Places Trust Pouhere Taonga (HPT)) to be required for works on the middle and upper terraces;
 - Cross reference the District Plan’s “Accidental Discovery Protocol in rules relating to Heritage and Sites Of Significance To Tangata Whenua;
 - Review Part B3.3 of the District Plan (Culture and Heritage section), to reflect protection of historic heritage as a matter of national importance under Section 6 of the Act;
 - Give consideration to a Plan Change to ensure that resource consent for ground disturbance greater than 20cm depth is required in areas at Rakaia Huts identified as having high archaeological significance.
- 4.33 In addition, a range of regulatory and non regulatory methods were identified which do not require formal amendment to the District Plan and which will not be considered as part of PC26. Proposed Plan Change 26 is intended to give effect to regulatory methods to manage threats identified in the CMP.

PART 5: SUBMISSIONS

- 5.1 The Plan Change was publicly notified on Tuesday the 28th of June with submissions closing at 5pm on Tuesday the 26th of July 2011. A total of seven submissions were received within that time period. Further submissions closed at 5pm on Tuesday the 23rd of August 2011, with no further submissions being received.
- 5.2 During the notification period of the summary of submissions and call for further submission, Mr Clarke Wilkes (submitter 04) contacted Council and sought clarification as to why the submission on behalf of the Rakaia Huts Advisory Committee, which had also been signed by a number of the residents of the Rakia Huts township, was not included in the notified summary of submissions.
- 5.3 Investigations have been unable to locate any such submission, although a 'duplicate' submission from PL Williamson and EC Wilkes (submission 04) was received by Council on the 26th of July 2011. No signatures of residents was received with this submission, and as the submission was an exact facsimile of the first submission 04, it was assumed the 'duplicate' was an administrative error of some description and no further thought given to it. Copies of the 'missing' parts of the submission, along with an explanatory letter, have subsequently been provided by Ms Pam Wilkinson and Mr. Wilkes. These, along with the 'duplicate' submission have already been circulated to the Hearing Commissioner and other parties present at the Hearing. In addition, a summary of submissions, including the Officer's recommendations on each submission is provided in *Appendix 1* of this report.
- 5.4 As the submission content and relief sought is an exact facsimile of submission 04, I do not believe there is any disadvantage to any potential further submitters, and that the public participation intent to the RMA will be served by providing an opportunity for the submitter (and by extension, any of the signatories to that submission) to present their case by speaking at the hearing if they wish. As such, for the purposes of this hearing, I recommend to the Commissioner that it be accepted and treated as a late submission (submission 8.1).
- 5.5 The assessment of submissions is set out as follows:
- 1) Submissions not on PC26;
 - 2) Submissions Opposed to PC26 in its Entirety
 - 3) Submissions supporting or supporting in part PC 26
 - 4) Submissions opposing PC26 in whole or in part, and seeking minor text amendments or additions
 - 5) Submissions which oppose or oppose in part particular provisions and seek amendments which are more significant.

- 5.6 Recommended changes to PC26 as a result of amendments through submissions on PC26 are included as *Appendix 5*

Submissions Not ‘On’ PC26

- 5.7 There are a number of submissions which are in my view not on the Proposed Plan Change. Submission 1.1 (Graham Sherman) was not in favour of PC26, and noted that if the changes promoted in the Plan Change are implemented, that any Land Information Memorandum (LIM) Note should include documentation of any official archaeological investigations carried out on any specific property. Submission 3 (RGS and SM Nee) opposed PC26 in whole. This report addresses 3 separate submission points from submission 3, with submission 3.3 stating that “it” be withdrawn from all LIM reports on the devaluation basis *[sic]*.
- 5.8 I believe there is sound reason to agree with submitter 1.1 that some additional detail as requested may be appropriate to place on LIM notes and it may be something Council elects to pursue. However, LIM notes and information contained in them fall outside of the influence of an RMA hearing process and is not within the scope of the PC26 Hearing process to make decisions on. As such, this matter is best resolved in an alternative forum. As such, my recommendation is that submission 1.1 is accepted in part.
- 5.9` With regard to submission 3.3, I assume “it” as referenced in the submission, refers to a LIM note regarding the property being in an archaeological area. On the matter of whether PC26 or a LIM note advising that properties are in an archaeological site will de-value a property at Rakaia Huts, I discuss this in more detail below. But in short, I do not believe this will be the case, and is no justification for removing a LIM note which advises of a factual situation (the existence of a recorded archaeological site). As noted above, LIM notes and information contained in them fall outside of the influence of an RMA hearing process and is not within the scope of the PC26 Hearing process to make decisions on. It is my recommendation that submission 3.3 is rejected.
- 5.9 Submission 6 (Te Runanga o Ngai Tahu and Te Taumutu Runanga) had several submission points which I believe are not on PC26. Submission 6.1 supports in part PC26, and requests that the Rakaia Huts Conservation Management Plan be reviewed. Submission 6.3 also supported in part PC26 and requested that a place be set up to store any artefacts discovered in the course of development in the area. Submission 6.4 also supported in part PC26, with the education of the local community and the wider public the relief sought in this case.
- 5.10 All the submission points from submitter 6 are worthy in their own right, having been identified in the RHCMP as non-statutory management tools to implement the RHCMP. Section 1.12 of the RHCMP discusses reviewing that Plan, and recommends that it be reviewed every 5 years. The RHCMP was adopted by Council in October 2009, so any review would only be in 2014, unless the relevant parties agreed to an earlier review date.
- 5.11 No such decision has been made by Council to initiate an earlier than expected review date, and any decisions to implement other aspects of the RHCMP (such as educating the

community and establishing a facility to store artefacts) is subject to Council's Long Term and Annual Plan processes and falls outside of the statutory RMA process. As such, my recommendation is that submission points 6.1, 6.3 and 6.4 be accepted in part.

- 5.12 Submission 6.32 (Te Rūnanga o Ngai Tahu & Te Taumutu Rūnanga) opposes in part PC26 on the basis that Te Waihora and Coopers Lagoon (sic) are missing from the list of "Statutory Acknowledgement and Nohoanga Sites" in Part B3.3 Culture & Historic Heritage of the Rural Volume of the District Plan.
- 5.13 A Statutory Acknowledgement is an acknowledgement by the Crown of Ngāi Tahu's special relationship with identified areas, namely Ngāi Tahu's particular cultural, spiritual, historical and traditional association with those areas. Schedules 14 to 77 (inclusive) of the Ngāi Tahu Claims Settlement Act 1998 identify specific Statutory Acknowledgement Areas in the takiwa of Te Rūnanga o Ngai Tahu. Neither Te Waihora/Lake Ellesmere nor Coopers Lagoon is identified in these Schedules. As such, there is no basis on which the requested relief could be granted and my recommendation is that submission 6.32 is rejected.
- 5.14 Submission 7.1 from the New Zealand Historic Places Trust Pouhere Taonga (HPT) opposes in part the definition and terminology used for "historic heritage". The HPT suggests that the Council undertakes a separate planning exercise to address the terminology for historic heritage matters, with special focus is on addressing the terminology of the heritage chapters of Volumes 1 and 2 of the District Plan.
- 5.15 Submission 7.10 states that HPT has wider concerns regarding the lack of clarity around the identification of (and provision of rules for) other recorded archaeological sites, sites of significance to Maori and historic heritage in the Selwyn District Plan, and that they regard PC26 as an interim measure to address issues regarding one specific site (the Rakaia River Moa Hunter Site). The requested relief is that the Council undertake a specific review of the heritage chapters to ensure that matters of national importance under section 6(e) and 6(f) of the Act are provided for.
- 5.16 The proposed relief for submission 7.1 and 7.10 is outside the scope of the Proposed Plan Change. However, Council is committed to a 'rolling review' of various sections of the District Plan, including the relevant Culture and Heritage sections. At this stage the review of those sections has not been identified for inclusion into the Planning Teams work programme. Adding impetus to any review of the District Plan framework for managing culture and heritage provisions will be the requirement for the Council to give effect to Proposed Regional Policy Statement provisions on historic heritage. As such, my recommendation is that submission 7.1 and 7.10 be accepted in part.

RECOMMENDATION 1

That for the reasons outlined in the discussion above;

Submissions 1.1, 6.1, 6.3, 6.4, 7.1 and 7.10 are **Accepted In**; and

Submission 3.3, 6.32 are **Rejected Part**.

CHANGES TO PROPOSED PLAN CHANGE 26

Nil

Submissions Opposed to PC26 in its Entirety

- 5.17 Assuming submission 08 is accepted by the Commissioner as a late submission, four submissions were received which were opposed to PC26 in its entirety.
- 5.18 Submitter 2 (RA & PJ Perkins) opposed PC26 on the basis that no archaeological material has ever been found on the south western side of Pacific Drive. The submitters state that there were extensive earthworks done when the house was built and no archaeological material was found. While not stated as any specific relief as such, I assume the submitter would prefer the archaeological site boundary to revert to its location prior to PC26 being notified. I shall refer to this as submission point 2.1.
- 5.19 Submitter 2 is also of the view that PC26 will devalue their properties by 25% and are requesting compensation to that effect from the Council. In addition, the submitters request that any costs incurred by an archaeological finding be paid by the Selwyn District Council. I shall refer to each of these as submission point 2.2 and 2.3 respectively
- 5.20 Submitter 3 (RGS & SM Nee) state that the south west side of Pacific Drive should be excluded from the proposed Maori site (sic) on the basis that no artefacts have ever been found on that side of the road. I shall refer to this as submission point 3.1. In addition, submitter 3 notes that they purchased their property off the Selwyn District Council for fair market value as freehold (Fee Simple) with no encumbrances and in good faith. The submitter then states that “*the Council has negotiated with the tribes to have their sections placed inside the protected area*”. The submitters also state that PC26 will detract from the value of their properties, to a value of at least \$20,000.00 per section. The submitters are of the view that Council should reimburse that amount to each and every section to the owner as compensation. I shall refer to this as submission point 3.2.
- 5.21 Submitters 4.1 (PL Williamson & EC Wilkes) and 8.1 (PL Williamson & EC Wilkes and Rakaia Huts residents) opposed PC26 on similar grounds to submitters 2.1 and 3.1; namely that as no artefacts had been discovered in the course of developing properties on the south west side of Pacific Drive, there was no justification for moving the archaeological boundary from its pre PC26 location. In both submissions, mention is made of a resident’s memorandum in response to the Draft Plan and dated 25/02/09. On that matter I note that this memorandum was submitted on the Draft RHCMP in 2009 and not on any Draft of Plan Change 26 or on PC26 as notified.
- 5.22 As with submitter 3, submitters 4 and 8 note that residents purchased their sections in good faith with clear title from Council. For various reasons, the submitters are of the view that had they or their representatives been aware of PC26 before negotiations for the purchase of their

properties from Council, there would have been a discount available due to planning restrictions on the land the plan change would have imposed, and that Council had failed in its duty to advise landowners of an impending Plan Change 26 at the time of land purchase negotiations.

Discussion

- 5.23 On the issue of whether the boundary of the Archaeological Site is correctly relocated to that shown in PC26 (submissions 2.1, 3.1, 4.1, and if accepted as a late submission, 8.1). A report prepared by consultant archaeologist is attached at **Appendix 4** which discusses the issue of the realignment of the Archaeological Site Boundary on Planning Map 133.
- 5.24 That report states that the western boundary for the proposed plan change is not arbitrary, but is based on several criteria or factors which indicate that there may be archaeological and cultural values up to the edge of the terrace (the western extent of the current Living 1 Zone). Those factors include:
- Earlier archaeological evidence resulting from the von Haast discovery of 1869 – 1871 which shows archaeological material up to the western edge of the terrace (Figure 2, *Appendix 5 of Rakaia Huts Conservation Management Plan*);
 - Recent archaeological work carried out by Dr Witter at Pegasus Township showing isolated burials on the peripheries of settlements is a real possibility ; and
 - The configuration of the landscape whereby the terrace edge is a landscape feature suitable for particular satellite activities, including burials.
- 5.25 Dr Witters report also discusses the lack of archaeological material having been discovered during the course of earlier activities carried out by residents, such as building houses and other similar earth disturbance activities. In summary, Dr Witter notes in paragraph 5.2 of his report that:
- There has been no historical monitoring of ground disturbance activities for the purpose of identifying archaeological material;
 - If landowners or other members of the public had taken responsibility for such monitoring, it is not likely they would have recognised most of any archaeological evidence exposed (due to the difficulty for people without archaeological qualifications to correctly identify such material); and
 - While some material might be easily identified (such as adzes and other ground stone artefacts such as greenstone) there is doubt that these would have been reported or made known locally.
- 5.26 Council has a duty under section 6(f) of the Act to protect historic heritage (which includes archaeological sites and sites of significance to Maori, including wāhi tapu) from inappropriate subdivision, use and development. It is my belief there is sufficient evidence to show that the area along the western edge of the terrace is both an archaeological site and a site of significance to Maori, and that there is a sound basis for the realignment of the archaeological site as promoted by PC26. For the reason summarised above and expressed in more detail in

the attached Archaeological Report on Rakaia Huts Submissions in Appendix 5, I recommend that submissions 2.1, 3.1, 4.1 and 8.1 be rejected.

5.27 On the issue of a devaluation of property values as a result of PC26 (submissions 2.2, & 3.2). I do not agree with the submitters. Planning restrictions with regard to historic heritage have been in force at the Rakaia Huts Township and environs since the current Selwyn District Plan was first notified in 2000 (Township Volume) and 2001 (Rural Volume), well before negotiations for the purchase of freehold title by residents was finalised. Those negotiations have a long and tortuous history and were commenced, as far as I understand it, initially in 1978. It is my understanding that negotiations for the purchase of freehold title were finalised sometime in mid to late 2007, well before the development of the RHCMP (2009).

5.28 The nature of those planning restrictions includes:

- All properties adjacent to Pacific Drive, in addition to Rural (Outer Plains) land around Rakaia Huts Township included in Wāhi Taonga Management Area C48 (see Map 2 in **Appendix 2**). Development proposals requiring resource consent assessed as a Restricted Discretionary Activity;
- The Council campground, the cultivated paddock to the east of the Council campground and properties adjacent to Ocean View Place included in Wāhi Taonga Management Area C103 (see Map 2 in **Appendix 2**) Development proposals requiring resource consent assessed as a Restricted Discretionary Activity;
- Wāhi Taonga Management Area C103 is identified on Planning Map 133 as an 'Archaeological Site'. Section 10 of the Historic Places Act 1993 states that an Archaeological Authority is required from the New Zealand HPT if there is reasonable cause to suspect an archaeological site (recorded or unrecorded) may be modified, damaged or destroyed in the course of an activity. This requirement is regardless of whether any activity requires a resource consent or not, and has been in place since at least 2000, if not earlier.
- From the perspective of the New Zealand Historic Places Trust Pouhere Taonga, all properties identified within the RHCMP Management Areas Map (see Map 1 **Appendix 2**) have been treated as an archaeological site (and thus subject to Section 10 of the Historic Place Act 1993 (works requiring an Archaeological Authority)) since that Act commenced on the 1st of February 1981 (personal communication – Frank van der Heijden, Canterbury Archaeological Officer, NZ HPT). PC26 is merely providing additional certainty to those property owners that indeed they are located in what is deemed an archaeological site, as defined by Section 2 of the Historic Places Act 1993¹.

¹ An archaeological site is defined in Section 2 of the HP Act 1993 as: "Archaeological site" means any place in New Zealand that – (a) Either – (i) was associated with human activity that occurred before 1900; or (ii) is the site of the wreck of any vessel

5.29 The planning situation with regard to historic heritage at Rakaia Huts has changed in three significant aspects, none of which I would consider are either unreasonable or would devalue any properties subject to those provisions:

- In the Living 1 zone, any activity requiring consent is now assessed as a Controlled Activity, provided applicants obtain the written approval of the local runanga and the NZ HPT. At worse, an activity will still be assessed as a Restricted Discretionary Activity if written approval from relevant parties is not forthcoming. For properties zoned Rural (Outer Plains), activities requiring consent are still assessed as a Restricted Discretionary Activity;
- PC26 requires resource consent for any relevant activity to be obtained prior to the activity occurring, as opposed to the current situation, where consent is only required once historic heritage values are discovered, damaged or destroyed in the course of an activity.
- The extent of the Archaeological site which makes up the Rakaia River Moa Hunter site, first identified and studied by Julius von Haast between 1869 and 1871, has been more clearly defined, providing more certainty to landowners affected.

5.30 On the matter of Council meeting the costs of any archaeological investigations, monitoring or other such conditions resulting from a land use consent (submission point 2.3). In general, the Council is of the view that the costs for any such conditions should fall to the property owner/developer undertaking such works. Any benefits (or risks) which accrue to a property owner or developer as a result of land or dwelling improvements (i.e. an increase in a particular properties value) are rightly attributable to that property owner and are not generally attributable to Council (other than in increased rates if there is a capital value increase).

5.31 However, Council recognises that the protection of historic heritage does result in costs which should not be borne solely by a property owner but should be shared by the community as a whole (due to the benefits of protecting historic heritage to the wider community). For this reason, the District Plan has a policy which assists property owners with costs associated with resource consent costs imposed by provisions to protect historic heritage sites or buildings (Township Volume - Policy 3.3.10, Rural Volume – 3.3.9 (3.3.10 as a result of recommendations on PC26)). Generally these policies apply to resource consent fees, but where funds are available; it seems the intent of the policy is to assist with other fees associated with a resource consent, such as to assist with monitoring costs and the like. For this reason my recommendation is that submission point 2.3 be accepted in part.

RECOMMENDATION 2

That for the reasons outlined in the discussion above;

where that wreck occurred before 1900; and (b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand”.

Submission 2.3 shall be **Accepted In Part**; and

Submissions 2.1, 2.2, 3.1, 4.1 and 8.1 are **Rejected**.

CHANGES TO PROPOSED PLAN CHANGE 26

Nil

Submissions Supporting or Supporting in Part PC 26

- 5.32 Submission 5.1 (Selwyn District Council) supports PC26 but identifies a minor drafting error with Note 1 in the Rural Volume of the Plan Change. Note 1 in Rule 1 – Earthworks, of the Rural Volume of the District Plan (page 54 of PC 26) identifies a number of activities which are exempt from the Earthworks Rules. The submission states that the intent of the Plan Change for this particular Plan provision was to duplicate the **format** the note was written so that both volumes of the District Plan provided for a consistent and easy to read format. The intent was **not** to duplicate the activities which are to be exempt from the Earthworks Rules. The submission states that in the course of finalising the Proposed Plan Change for public notification, Note 1 in the Rural Volume of the Plan was amended such that it inadvertently duplicated the corresponding Note 1 as found in the Township Volume of the District Plan.
- 5.33 The Draft Plan Change 26 which was notified for public comment correctly identifies the list of activities intended to be exempt from the Earthworks Rules, other than ‘Burying Pets’ and ‘Trenching Compost’. These two activities are to be retained in the amended Note 1 (Rural Volume). The Rakaia Huts Conservation Management Plan specifically identified these two activities as requiring exemption from any “monitoring of major works under 20cm” (Proposed Mangement Tool (i), page 34 Rakaia Huts Conservation Management Plan). As such, my recommendation is that submission 5.1 be accepted.
- 5.34 Submission point 6.2 (Te Rūnanga o Ngai Tahu and Te Taumutu Rūnanga) supports in part PC26, and requests that the archaeological area at Rakaia Huts be re-named with a traditional Ngai Tahu name. As the area subject to PC26 was a significant historical place of habitation for Ngai Tahu in the past, and continues to have significant cultural importance to this day, I see no reason why this submission point should not be supported. As such, my recommendation is that submission point 6.2 be accepted.
- 5.35 No name for the site was provided in the submission, and one may not be forthcoming by the time this matter is heard at a hearing as I believe a comprehensive consultation process within the Runanga may be required before an appropriate name is agreed. I believe this matter need not be resolved as a matter of urgency as part of these proceedings, unless a name is forthcoming from the submitters when this matter is heard. If this is the case, my recommendation is that submission 6.2 is accepted, and the name provided by the submitters be attached to the archaeological site in question.

- 5.36 If no traditional Ngai Tahu name is forthcoming when PC26 is heard, I believe the District Plan can be changed to accommodate submission 6.2 by application of Clause 16(2) of the 1st Schedule of the Act. It is my view that amending or adding a traditional Ngai Tahu name to the sites subject to PC26 falls within the ambit of Clause 16(2) should this be required.
- 5.37 Submission 6.28 supports the proposed process of a written consent from the local rūnanga as a requirement for a controlled activity. To ensure this is carried through without it becoming a capacity issue for the runanga, Ngai Tahu would like to discuss how such a process would be implemented with Council. I have no issues or concerns with the relief requested and my recommendation is that this submission be accepted.

RECOMMENDATION 3

That for the reasons outlined in the discussion above;

Submissions 5.1, 6.2, 6.28 are **Accepted**.

CHANGES TO PROPOSED PLAN CHANGE 26

See *Appendix 5*

Submissions Opposing PC26 in Whole or In Part, and Seeking Minor Text Amendments or Additions

- 5.38 Overall submission 6 (Te Runanga o Ngai Tahu and Te Taumutu Runanga) supports PC26, noting that the proposed plan change effectively provides better protection of the wāhi tapu and wāhi taonga values of the area and adequately recognises the cultural significance of the wāhi tapu values of the Wāhi Taonga Management Areas.
- 5.39 However there are some areas of PC26 that the submitters consider need amending to reflect tangata whenua values, and to provide a more direct reference to cultural values (submissions 6.5 – 6.22, 6.24 and 6.25). The submissions state that PC26 discusses heritage values in a manner which effectively excludes any specific reference to tangata whenua cultural values. The submission also states that given PC26 is about providing greater protection of a significant wāhi tapu area of significant value to tangata whenua then there needs to be specific mention of tangata whenua cultural values in relevant sections and the avoidance of assumptions that exclude tangata whenua values. Furthermore, tangata whenua values should not read as an ‘add-on’ or ‘tagged on at the end’ to the general text reflecting an interest group status rather than a treaty partner.
- 5.40 On these matters I have no significant issues or concerns regarding the relief requested by the submitters, and my recommendation is to accept submissions 6.5 – 6.22 (inclusive), 6.24 and 6.25.

- 5.41 Submission 6.23 is in reference to the Methods to implement Policy B3.3.4 on page 20 of PC26 as notified. The submission notes that the proposed heading changes ('Cultural Historic Heritage Sites') are inconsistent with the headings used in the rules section, which are noted as 'Sites of Significance to Tangata Whenua'. The submitters note that the existing heading descriptions noted in the 'Methods' to implement Policy B3.3.4 (Sites of Significance to Tangata Whenua) should be retained so as to be consistent with the various headings in the Rules section of the District Plan. On this matter my recommendation is to accept submission 6.23.
- 5.42 Submission 6.26 refers to several references rules and policies in PC26 makes to 'local rūnanga'. The submission states that for consistency the words 'local rūnanga' should replace 'Māori'. On this matter my recommendation is to accept submission 6.26.
- 5.43 Submission 6.27 is in reference to a new definition for 'Landscaping' PC26 introduces to both Volumes of the District Plan. The Landscaping definition introduced by PC26 states:
- Landscaping: means the visual improvement of an area through designed live planting of trees, shrubs and ground cover for amenity purposes and may include provision of physical features such as paving, walls, art and seating. For the purposes of this definition, landscaping does not include the re-contouring of land by removing or displacement of earth or soil.*
- 5.44 Note 1 in the Earthworks rules in both Volumes of the Plan exempts Landscaping from the Earthworks Rules, meaning that such an activity could occur as of right within the area subject to PC26 and without the need to apply for a resource consent. The submitters note that providing for walls most likely will involve digging the ground a considerable depth more than 20cm. As such, 'wall' needs to be removed from the definition to be replaced by 'post holes'. Alternatively, the submitters ask that the current definition of 'Landscape' be replaced with two new definitions; one for 'soft landscaping' and one for 'hard landscaping'.
- 5.45 The intent of introducing a definition for Landscaping was to make it clear that landscaping in the Rakaia Huts Township that was of a low impact and which might be considered "normal" or "day to day" (such as re-designing a domestic garden through new or additional plantings, but not re-contouring the land) was not needlessly caught up with requiring a resource consent each time they wanted to undertake such activities.
- 5.46 To my mind, submission 6.27 should be accepted in part. I do not see the need to replace walls with 'post holes, as there already exists an exemption in Note 1 for the digging of post holes. Also, from my limited experience, I can think of no scenario where a post hole would be needed when building a wall. As such, the addition of post holes in place of walls in the definition is not appropriate.
- 5.47 As the submitter states , when building a wall it is likely that digging a footing would most likely go considerably deeper than 20cm, the depth below which experts have stated there is a greater risk of causing damage or destruction to cultural and archaeological artefacts. As such, submission 6.27 should be accepted in part, with the word "wall" deleted from the existing

definition, and an additional sentence clarifying that providing walls is not part of the definition.

- 5.48 Submission 6.37 concerns the identification of a section on the western boundary of the Living 1 zone which has been included in Wāhi Taonga Management Area C39(b). The submitters state that this should be identified as Wāhi Taonga Management Area C39(a) as it is zoned Rural (Outer Plains), and will have a higher level of protection afforded it. The submitters' state that this is particularly important given there is a high possibility that an urupa is sited there.
- 5.49 The section identified in submission 6.37 is located in the area identified in the RHCMP as the "Middle Terrace (Residential)". According to the RHCMP, the heritage values of this section, along with all other residential sections in this part of the Rakaia Huts Township, are assessed as being considerable ("the element or place is of considerable importance to the overall heritage significance of place").
- 5.50 In spite of this I am not sure I agree that amending the Planning Map to show the section in question as part of WTMA C39(a) will provide a higher level of protection as suggested by the submitters. It is my view that the management framework PC26 imposes on the section in question provides as high a level of protection as is afforded by 're-zoning' the section as part of WTMA C39(a).
- 5.51 By way of explanation, any activity requiring resource consent in WTMA C39(b) is assessed as a Controlled Activity, provided affected party approval from the local rūnanga and the NZHPT is forthcoming. If no approval from either party is provided, the activity is assessed as a Restricted Discretionary Activity; with the matters discretion is restricted to being any damage, destruction, or removal of any object, remnant or artefact as advised by local rūnanga and the New Zealand Historic Places Trust Pouhere Taonga.
- 5.52 At either the Controlled Activity stage, or if no affected party approval is forthcoming, at the Restricted Discretionary stage, the local rūnanga have an opportunity to identify any adverse effects a proposal may have on cultural values, and make appropriate recommendations in terms of avoiding remedying or mitigating those effects, including identifying appropriate conditions to be attached to any resource consents. As such, I consider the requested relief is not appropriate and I recommend that submission 6.37 is rejected.
- 5.53 Submissions 7.2 and 7.7 concerns the incorrect reference to sections 6(e) and 6(f) of the Act made by PC26 in the explanation and reasons for Objective B3.3.2 (Township Volume) and Objective B3.3.3 (Rural Volume) and the manner in which the passages confuse and intermingle terminology.
- 5.54 From my understanding of submission 7.7 and the relevant provisions of the District Plan, it is my belief that this submission is more correctly concerned with the text associated with explanation and reasons for Objective 3.3.1 in the Rural Volume of the Plan. The relief requested is to amend Objective B3.3.2 to make reference to Section 6(e) of the Act

(submission 7.2), while submission 7.7 requests that Objective B3.3.1 (Rural Volume) make reference to Section 6(f) of the Act.

- 5.55 Objective B3.3.2 states: “*Sites of wāhi tapu and other importance to tāngata whenua are protected*” while Objective B3.3.1 in the Rural Volume of the Plan states: “*Sites of wāhi tapu, wāhi taonga, mahinga kai and other importance to tangata whenua are protected in partnership with local runanga and landholders*”.
- 5.56 On the one hand I do not agree with submissions 7.2 and 7.7 that the relevant explanations and reasons confuse and intermingle section 6(e) and Section 6(f) of the Act. In my view, the duty of Council under Section 6(e) is not primarily about the protection of specific elements of significance to Maori listed in section 6(e). Instead section 6(e) requires Council to recognise and provide for the relationship of Maori to those elements listed in section 6(e) when drafting RMA planning instruments and considering development proposals under those instruments.
- 5.57 This may or may not include protection, but I see section 6(e) and 6(f) as working in tandem, with any proposal (such as proposed by PC26) required to first consider the various elements identified in 6(e), followed by a requirement to provide protection under 6(f) if such protection is appropriate. The key aspect inherent in section 6(e) is whether Council has considered those elements identified in section 6(e) prior to making a decision.
- 5.58 In my view, section 6(f) is the provision of the Act of most relevance to Objective B3.3.2 and B3.3.1, as the focus of 6(f) is on the protection of historic heritage, which includes archaeological sites and sites of significance to Maori, including wāhi tapu.
- 5.59 In spite of my reservations as to whether submissions 7.2 and 7.7 are correct, I accept that the relationship between s6(e) and s6(f) is a close one and that a more holistic view of how they inter-relate might be worth considering. My recommendation is to accept in part submission 7.2 and 7.7, but that there be no amendments to the relevant District Plan text.
- 5.60 Submission 7.3 notes that correct reference should be made to the Policy which addresses ‘resource consent fee waivers’, in the paragraph beginning “Where a landowner requires consent to undertake an activity ...” (Explanation and Reasons under Policy B3.3.4 - Township section of PC26). The submitters state that advising applicants of resource consent fee waivers is an important part of non regulatory service that Selwyn District Council provides and that correct reference to the policy needs to be provided to ensure accuracy and certainty for applicants.
- 5.61 The numbering of policies was incorrectly listed as Policy B3.3.11 and not B3.3.10 in the drafting of PC26. When decisions on PC26 are confirmed, the correct numbering will be applied. As such, my recommendation is that submission 7.3 is accepted.
- 5.62 Submissions 7.4, 7.8 and 7.9 note that incorrect reference has been made to Wāhi Taonga Management Area C39(c) in the Township Volume of PC26 (submission 7.4) and Wāhi Taonga Management Area C39(b) (submission 7.8 and 7.9) in the Rural Volume of PC26. The correct references should be C39(b) and C39(a) respectively. The references noted by the

submissions are drafting errors and my recommendation is that submissions 7.4, 7.8 and 7.9 be accepted.

- 5.63 Submission 7.5 relates to reference to HPT as a party resource consent applicants are required to obtain for a resource consent application to be assessed as a Controlled Activity. The submitters state that the phrase ‘written consent’ construes Resource Management Act consent, a matter that HPT do not want to be contacted on in this area. The HPT do wish to be consulted under the provisions of the Historic Places Act 1993, as Wāhi Taonga Management Area C39(b) (and C39(a)) constitutes an archaeological site. The HPT supply alternative wording as their requested relief, which is to be applied to Rule 2.1.2 and other consequential rules in both the Township and Rural Volumes of PC26. My recommendation is that submission 7.5 be accepted.
- 5.64 Submission 7.6 relates to the provision of ‘Advice Notes’ throughout the Plan to ensure Plan users have a clear expectation about their consultation requirements with the HPT. In particular, the submitters request that an ‘Advice Note’ be included in Rule 2.1.2 and consequential amendments are made in other sections of both Volumes of PC26.
- 5.65 To my mind this submission is merely duplicating the relief sought in submission 7.5. In addition, PC26 has included advice notes in various other sections of the Plan, including ‘Note 4’ at the beginning of 2 Living Zone Rules _ Earthworks (Township Volume) and ‘Note 4’ at the beginning of 1 Rural Rules 0 Earthworks (Rural Volume). As such I believe there is sufficient notice to plan users about the requirements to consult with the HPT and submission 7.6 should be rejected.

RECOMMENDATION 4

That for the reasons outlined in the discussion above;

Submissions 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11, 6.12, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19, 6.20, 6.21, 6.22, 6.23, 6.24, 6.25, 6.26, 6.27, 7.3, 7.4, 7.5, 7.7, 7.8, and 7.9 are **Accepted**;

Submissions 6.27, 7.2, 7.3, 7.7 are **Accepted In Part**; and

Submissions 6.37 and 7.6 are **Rejected**.

CHANGES TO PROPOSED PLAN CHANGE 26

See *Appendix 5*

Submissions Which Oppose Or Oppose In Part Particular Provisions And Seek Amendments Which Are Significant.

- 5.66 There are several submissions from submitter 6 (Te Rūnanga o Ngai Tahu and Te Taumutu Rūnanga) which are seeking amendments to PC26 which are of a more significant nature.

Submission 6.29 is primarily concerned with the appropriateness of large scale tree planting in the area subject to PC26. The submission makes a number of assertions in relation to Note 1 in specific (which lists a number of activities which are exempt from the Earthworks Rules in each Volume) and large scale tree planting in general:

- Note 1 does not prevent the possibility of large scale plantings of trees e.g. plantations or forests;
- That it is possible to plant trees in a hole dug 20cm deep or less which can be planted on a large scale and that this would be exempt from the Earthworks Rules. This effectively does not protect the areas (Wāhi Taonga Management Areas (WTMA) C39(a) and C39(b)) from significant land use change;
- The deep root structure of a large scale number of trees may have a significant impact on WTMA C39(a) and C39(b) than a smaller amount of trees planted randomly;
- That although this is really an issue for the Rural Zone, it is appropriate to include the Township Zone to be consistent and cover any possibilities.

- 5.67 The requested relief is to amend Note 1 in both Volumes of the Plan to state that planting of trees of a scale yet to be determined by the submitters shall be exempt from the Earthworks Rules and that planting of trees greater than a scale yet to be determined be exempt, except in WTMA C39(a) and C39(b).
- 5.68 Submission 6.30 relates to Rule 2 Rural Rules – Tree Planting and Removal of Protected Trees. Specifically Rule 2.1 (Shelterbelts and Amenity Planting) and rule 2.2 (Plantations). The submission states that it is possible to plant trees in a hole dug 20cm deep or less which can be planted on a large scale (as does submission 6.29). The submission states this is permitted according to the rules as it could be planted in areas that were ‘*previously disturbed by cultivation, planting (trees, pasture or crops, building or earthworks*’’. Therefore, this effectively does not protect the WTMA C39(a) from significant land use change from tilled land (and other) to plantations. The requested relief is that Rules 2.1 and 2.2 be amended so that plantations above a yet to be determined scale be subject to a resource consent, otherwise large scale land use activities which have the potential to significantly adversely affect the wāhi tapu area could occur uncontrolled.
- 5.69 Submission 6.31 relates to the Rural Volume and matters Council’s discretion is restricted to under Restricted Discretionary Activities for Rule 1 (Earthworks), Rule 2.1 (Shelterbelts and Amenity Planting) and Rule 2.2 (Plantations). The submitters assert that there is a need to specifically include in the matters to consider the scale of the activity and its adverse effects on the WTMA so as to provide protection from inappropriate use and that the rules must retain sufficient discretion to decline an application that may have adverse effects on wāhi tapu values.
- 5.70 Submission 6.33 relates to both Volumes of the Plan and as with submission 6.31, relates to matters Council’s discretion is restricted to (for reasons similar to submission 6.31), in addition to consideration to a potential urupa on the western boundary of WTMA C39(b). The submission also states that there needs to be a specific consent condition that recognises the potential urupa site, along with a range of other conditions which deal with monitoring, accidental discovery protocols, contractor briefings prior to works commencing and an agreement with local runanga regarding

what happens to any artefacts found during the course of any works. Submission 6.34 also states that there needs to be a standard list of conditions for consents to provide clear guidance.

- 5.71 Submission 6.35 deals with permitted activities for ‘Utility Structures and Sites of Significance to Tangata Whenua’ in the Rural Volume of the Plan. The submitters assert that the Rural Rules for Utilities has the potential to have some significant adverse effects on wāhi tapu values and that there needs to be some additional levels of control. The relief requested is that permitted activities in relation to ‘Utility Structures and Sites of Significance to Tangata Whenua’ is limited to repairing existing utilities provided they are replaced in the same trench or hole and that if the utilities are “new” then they default to a Restricted Discretionary Activity, with specific conditions.
- 5.72 Submission 6.36 deals with both Volumes of the Plan and matters that Council has restricted discretion to for a number of Rules. The submitters note that one of the matters Council has restricted its discretion to is “costs of the owner to not undertake that activity”. The submitters assert this clause effectively means that the Council can override the local rūnanga’s concerns for protecting their wāhi tapu values. The requested relief is the removal of this clause from all relevant rules.

Discussion

- 5.73 On the matter of Note 1 not preventing large scale planting of trees; it is important to bear in mind that Note 1 only exempts **earthworks associated with planting trees**, and not the planting of trees as part of establishing shelterbelts, amenity planting or plantations. Tree planting such as these are controlled under Rule 2 – Tree Planting and Removal of Protected Trees. Earthworks associated with harvesting forests or tracks into areas to harvest forests are expected to comply with the Earthworks Rules. Earthworks in general (other than those associated with planting trees) in areas which contain wāhi tapu and wāhi taonga are managed by Rule 1.2 Earthworks & Sites of Significance to Tangata Whenua.
- 5.74 While not agreeing with the submitters on the need to manage tree planting under the Earthworks Rule through Note 1 (or any other amendment to Rule 1 – Earthworks), as the requested relief asks, I do concede that Note 1 may create confusion and may give the appearance that tree planting is not subject to any control through the Plan. To address this, my recommendation is that additional guidance be inserted to clarify that tree planting is subject District Plan provisions. To that end I recommend that an additional note be inserted below Note 1 (Rule 1 – Earthworks) of the Rural Volume, stating: “*Planting of Shelterbelts, Amenity Plantings and Plantations is subject to Rule 2 – Tree Planting and Removal of Protected Trees*”.
- 5.75 Submissions 6.29 and 6.30 raise concerns regarding the management framework for the establishment of large scale tree planting. Those issues include:
- That it is possible to plant trees in a hole dug 20cm or less on a large scale; this would be exempt from the rules and effectively does not protect WTMA C39(a) and C39(b) from significant land use change;
 - The deep root structure of a large scale number of trees may have a more significant impact on WTMA C39(a) and C39(b)
 - It is possible to plant trees in areas previously disturbed by cultivation, planting (trees, pasture or crops, buildings or earthworks). This effectively does not protect WTMA

C39(a) from significant land use change 9changing from tilled land or pasture (and others) to plantations.

- 5.76 As PC26 stands at present, planting trees in WTMA C39(a) is a permitted activity, provided it is carried out in areas where the soil has been previously disturbed by a range of activities and any disturbance is to be limited to a maximum depth of 20cm. Any activity which breaches either one of those two conditions shall require a resource consent which shall be assessed as a Restricted Discretionary Activity.
- 5.77 I agree in part that Rule 2 Tree Planting and Removal of Protected Trees, could be amended to provide additional protection to WTMA C39(a) from large scale tree planting, although not to the extent promoted by the submitters.
- 5.78 *Appendix 3* of this report provides the 2005 Forest Industries Training Council (FITEC) “Best Practice Guidelines for Tree Planting”. It is my understanding from reading this document that it is typical for such activities to include significant ground preparation which would include ‘ripping’ of the soil to prepare the ground prior to planting, followed by individual tree hole preparation. Ripping is typically to a depth of 500mm to 600mm. If this is the case, such an activity would be in breach of Rule 2.2.1.3, which provides for the establishment of plantations in WTMA C39(a) in areas where the soil has been previously disturbed by cultivation, planting (trees, pasture or crops), buildings or earthworks. **Any disturbance is to be limited to a maximum depth of 20cm.**
- 5.79 Where no ripping occurs (such as where the soil is of a friable nature that ripping is not required), individual tree holes would typically be prepared to at least the depth of a spades blade (300mm – see pages 12 & 15 of *Appendix 3*), also breaching Rule 2.2.1.3 and requiring a resource consent.
- 5.80 However, I also believe that Rules 2.1.1.9 and 2.2.1.3 could be amended to provide enhanced protection to WTMA C39(a) from large scale tree planting activities. WTMA C39(a) and C39(b) is of considerable cultural significance to Te Taumutu Runanga and is recognised as one of the most important complexes of archaeological sites in the South Island. As noted in the attached archaeological report on submissions to PC26 (paragraph 5.7 - *Appendix 4*), tree roots can be extremely disruptive and destructive of archaeological features as the roots are able to penetrate and consume bone, and as the roots grow they push and displace the archaeological deposits. Subsequent logging, stump pulling and replanting furthers the impact.
- 5.81 As currently worded, Rules 2.1.1.9 and 2.2.1.3 state that tree planting is permitted in areas where the soil has been previously disturbed by cultivation, planting (trees, pasture or crops), buildings or earthworks. If by chance it was possible to establish a large number of trees without digging holes deeper than 20cm, there is a possibility for those trees to be established in an area of WTMA C39(a) which had only previously been affected by relatively shallow ground disturbance such as occurs from cultivation for the purposes of pasture or crops.
- 5.82 In cases such as this, (where trees are established in areas which had previously only been subject to light cultivation and/or pasture) I agree with the submitters that there is a possibility for trees to have a significant impact on wāhi tapu, wāhi taonga and archaeological values. However, where trees have been planted in the past it seems reasonable to assume that the roots are likely to have already disturbed any wāhi tapu, wāhi taonga and archaeological values, such that further tree

planting will have no further adverse effects. For this reason I recommend that Rule 2.1.1.9 be amended to state:

“In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a) , any disturbance of soil or earth by the tree planting(s) is limited to the disturbance of soil over areas where that soil has been previously disturbed by tree planting. Any disturbance within those areas shall be limited to a maximum depth of 20cm”.

And that Rule 2.2.1.3 is amended to state:

“In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a) , any disturbance of soil or earth by the plantation is limited to the disturbance of soil over areas where that soil has been previously disturbed by tree planting. Any disturbance within those areas shall be limited to a maximum depth of 20cm.

5.83 On the matter of whether the requested relief should be included in the Township Volume as well as the Rural Volume (submission 6.29), I do not agree. As stated by the submitters, this is primarily an issue for the Rural Zone, and as such that is the Volume of the Plan where it is best placed. I see little value in placing any additional Notes or Rules (as the requested relief is) managing large scale tree planting for the sake of consistency or to cover any possibilities.

5.84 If this approach were adopted carte blanche, then any Plan would quickly become unwieldy and difficult to manage as the various land use possibilities for properties in various Zones are many and varied. In any case, I believe the establishment of large scale tree planting in the Living 1 Zone of Rakaia Huts is highly unlikely given that the majority of sections in the township have been developed; any such plantation development would in my view be prohibitively uneconomic. As such, I believe that this aspect of submission 6.29 should be rejected.

5.85 With regard to submission 6.31, I do not agree that there is a need to specifically include consideration of the scale of an activity in the matters to which Council shall restrict its discretion. The matters Council shall restrict its discretion to for tree planting in WTMA C39(a) (as noted in PC26) state:

“In the area listed in Appendix 5 and shown on the Planning Maps as Wāhi Taonga Management Area C39(a), any inappropriate disturbance or other potential adverse effects on any site of significance, object, remnant or artefact, as advised by local rūnanga and the New Zealand Historic Places Trust Pouhere Taonga”.

An additional matter discretion is restricted to for each rule is “any monitoring or review conditions”.

5.86 I am of the view that the matters Council shall restrict its discretion to (as promoted by PC26) already provide sufficient discretion to decline an application if there are demonstrable adverse effects on wāhi tapu values within WTMA C39(a). The current wording ‘any inappropriate disturbance or other potential adverse effects’ provides in my opinion, wide scope for Council to consider the scale of an activity. As such, I consider the provisions proposed by PC26 provide the necessary scope to refuse consent on the matters the submitters raise as an issue, if evidence that such an activity (or the scale of such an activity) will have adverse effects on a wāhi tapu site. My recommendation is that submission 6.31 be rejected.

- 5.87 With regard to submission 6.33 and 6.34, I am in partial agreement, although not to the extent promoted by the submitters. On the matter of additional matters Council shall restrict its discretion to, I have addressed that above, and in spite of the possible presence of an urupa on the western boundary of WTMA C39(b) I see no reason to change that stance. My recommendation is to reject that particular aspect of submission 6.33.
- 5.88 On the matter of the need for a standard list of consent conditions and that they are included in the District Plan, I agree only to the extent that there would be some benefit in such a list being developed, but which does not form part of the rules of the Plan. It is my belief that if conditions formed a part of the Rules in the Plan that this defeats the purpose of the Act, which is primarily concerned with the adverse effects of an activity on the environment. In my view it is more appropriate for an activity to be assessed on its merits and on a case by case basis, with appropriate conditions imposed at the time consent is granted.
- 5.89 The imposition of consent conditions in a carte blanche manner as proposed by the submitters is likely to result in conditions of consent being imposed where there may be no reason (as there are no adverse effects that a condition is managing) and is in my view neither efficient nor effective. Instead discussions between the Council and the submitters can continue to develop a ‘menu’ of conditions which should sit outside of the Plan. For these reasons my recommendation is that submissions 6.33 and 6.34 be accepted in part, but that there are no amendments to the District Plan.
- 5.90 With regard to submission 6.35, the submitters state that the *“Rural Rules for Utilities has the potential to have some significant adverse effects on wāhi tapu values”*, but does not provide any further evidence to substantiate this claim. I do not agree with the submitters as I fail to see how earthworks associated with Utility Buildings will have any more significant adverse effects on wāhi tapu values as opposed to earthworks associated with any other activity, regardless of whether they are new or existing.
- 5.91 The RHCMP identified a depth of 20cm as being the depth below which archaeological values are likely to be compromised if earthworks occurred. Plan Change 26 provides for any earthworks associated with a utility structure within WTMA C39(a) and C39(b) as a permitted activity provided:
- i. The works are in an area where the ground has been previously disturbed by cultivation, buildings, earthworks or planting of trees, pasture or crops, **and**
 - ii. The works do not go below 20cm.
- 5.92 These are standard performance measures for all earthworks associated with all activities in WTMA C39(a) and C39(b). If any earthworks fail either of these tests, the activity is assessed as a Restricted Discretionary Activity in the Rural Zone, and a Controlled Activity in the Living 1 Zone. To my mind it seems unreasonable to place additional restrictions on activities involving utilities when it has been determined that there is little risk to the archaeological values if the earthworks, whether for existing or new utility buildings, do not breach the 20cm threshold. In addition, an existing Accidental Discovery Protocol in Appendix 6 of the Plan (both Township & Rural Volumes) is applicable in the case of any artefacts being discovered during the course of any

activity which does not require a consent. As such my recommendation is that submission 6.35 is rejected.

- 5.93 On the matter of submission 6.36, I agree with the submitters. The area subject to PC26 is acknowledged as a one of the most significant archaeological sites in the Canterbury region, if not the South Island. For Ngai Tahu and Te Taumutu Rūnanga it is also highly significant. Under the RMA, the protection of such values is considered a matter of national importance. As such, it seems incongruous that the highly significant values present, and potentially the views of the local runanga could be jeopardised or undermined because of potential costs to the landowner or occupier of not being able to undertake an activity.
- 5.94 However I believe there is an issue of scope, as PC 26 is limited to sites of significance to tangata whenua at Rakaia Huts and those sites in its immediate vicinity, more specifically, C103 and C48. It is accepted that the area covered by PC26 is a site of high significance for its cultural and archaeological values, for the reasons set out in the section 32 evaluation attached to PC26. However, the requested relief will have implications which go beyond what PC26 anticipated, in that it would apply to all sites of significance to tangata whenua in the District.
- 5.95 While I can see that there may be some justification for such an approach, I do not believe PC26 is the correct forum to give effect to the requested relief, and that any subsequent Plan Change Council undertakes would be more appropriate to provide fully for the requested relief. In the interim, the requested relief should be applied to Wāhi Taonga Management Areas C39(a) and C39(b). For this reason my recommendation is that submission 6.36 is accepted in part.

RECOMMENDATION 5

That for the reasons outlined in the discussion above;

Submissions 6.29, 6.30, 6.33, 6.34 and 6.36 are **Accepted In Part**; and

Submissions 6.31, 6.35, and 7.6 are **Rejected**.

CHANGES TO PROPOSED PLAN CHANGE 26

See *Appendix 5*

PART 6: RECOMMENDATIONS

- 6.1 My recommendations on submissions are set out in *Appendix 1*.
- 6.2 On the basis of the discussion in this report, it is my recommendation that proposed PC26 is accepted, subject to the modifications to the original schedule of amendments that are set out in *Appendix 5*.

Appendix 1 –
Schedule of Summary of Submissions & Officers Recommendations

Sub No.	Name, Submission Point & Subject Area		Submission Type	Relief sought	Officers Recommendation
01	Graham Shearman	1.1 Whole of Plan Change	Oppose	1.1 If changes are implemented, then the proposed attachment to the LIM notes should include documentation of any official archaeological investigations carried out on a specific property.	Recommendation 1 Accept in Part
02	RA & PJ Perkins	2.1 Whole of Plan Change	Oppose	2.1 The fact that no archaeological material has ever been found on the south-western side of Pacific Drive. Our property is a split level house, the earthworks already done when the house was built were extensive, at least a metre deep and nothing found	Recommendation 2 Reject
				2.2 We believe our property will loose value of 25% and we would want compensation to that effect from the Council.	Recommendation 2 Reject
				2.3 Any costs incurred by a finding if reported (which is highly unlikely) be paid by Selwyn District Council.	Recommendation 2 Accept in Part
03	RGS & SM Nee	3.1 Placement of a report on my LIM Report regarding importance of Historic Places Trust interest in my freehold property.	Oppose	3.1 That the south-west side of Pacific Drive be excluded from the proposed Maori site. On the basis that no artefacts have ever been found on our side of the Pacific Drive, therefore the whole procedure is crap.	Recommendation 2 Reject
				3.2 We believe it will have a devaluation value of at least \$20,000.00 per section and I believe the Council should reimburse the said amount to each and every section to the owner as compensation	Recommendation 2 Reject

				3.3 That it be withdrawn from all LIM reports on the devaluation basis	Recommendation 1 Reject
04	PL Williamson & EC Wilkes	4.1 Whole Plan Change	Oppose	4.1 The settlement of this situation once and for all. Stop this continuing pandering to certain groups of people at the expense of those who pay rates. We on the south side of Pacific Drive were not originally included in the Draft Plan and we wish this situation to remain.	Recommendation 2 Reject
05	Selwyn District Council	5.1 Note 1 in Part C – 1 Rural Rules – Earthworks	Support, but with amendments to errors	5.1 Delete Note 1 from Part C – 1 Rural Rules – Earthworks of the Rural Volume of the Rural Volume subject to Plan Change 26. Replace with the amended Note 1, as outlined in the submission, which shows the correct list of activities which are exempt from the Earthworks Rules in Rural Zones.	Recommendation 3 Accept
06	Te Runanga o Ngai Tahu and Te Taumutu Runanga	6.1 Whole of Plan Change	Support in part	Review the Rakaia Huts Conservation Management Plan.	Recommendation 1 Accept in Part
	6.2 Whole of Plan Change	Support in part	Re-name the Moa Hunter Site with a traditional Ngai Tahu name	Recommendation 3 Accept	
	6.3 Whole of Plan Change	Support in part	Set up a place to store artefacts	Recommendation 1 Accept in Part	
	6.4 Whole of Plan Change	Support in part	Educate the local community and the wider public.	Recommendation 1 Accept in Part	
	6.5 Volumes 1 & 2: Heading B3.3 Historic Heritage - Issue	Oppose in part	AMEND the headings in both Township and Rural Volumes to read: “ B3.3 Culture and Historic Heritage -Issue ”.	Recommendation 4 Accept	
	6.6 Volume 1 & 2: Statement under heading: Damage to,	Oppose in part	AMEND the statement in both Township and Rural Volumes to read: “ <i>Damage to, destruction of or inappropriate alteration of sites, places, trees and vegetation, buildings or other structures which have historic heritage and cultural values</i> ”.	Recommendation 4 Accept	
	6.7 Volume 1 and 2:	Oppose in Part	AMEND the sub-heading to in both Township and Rural Volumes to read: “ Culture and Historic Heritage in Selwyn District ”.	Recommendation 4	

	Sub Heading: Historic Heritage in Selwyn District			Accept
	6.8 Page 7 Volume 1 and Page 38 Volume 2: Third paragraph beginning “Sites, areas or buildings may have heritage values	Oppose in part	AMEND the paragraphs in both Township and Rural Volumes to read: “ <i>Sites , areas or buildings may have heritage and cultural values if they are places or objects which people associate with their identity, history, events, customs or practices. Usually these values are shared by more than one person and in the case of tangata whenua they are shared by the local runanga and Ngai Tahu. In particular, wahi tapu, wahi taonga and mahinga kai are sites and/or areas that tangata whenua value as a critical part of their cultural identity. Heritage and cultural values may be associated with, but not limited to, old buildings, ruins, significant trees and vegetation, trees planted to commemorate special events, modern buildings that are part of a community’s identity, the plants used in customary practices, land forms, routes, traditional trails and traditional activities</i> ”.	Recommendation 4 Accept
	6.9 Page 8 Volume 1 and page 39 Volume 2: First paragraph	Oppose in part	AMEND the paragraph in both Township and Rural Volumes to read: “ Cultural and historic heritage values are not only part of our inheritance from the past; it is also a part of our contemporary identity and sense of place. Cultural and historic heritage values , including cultural connections and associations with places, make an important contribution to the physical environment. In particular, cultural and historic heritage values are a vital part of what makes a place unique or important for the people who live there”.	Recommendation 4 Accept
	6.10 Page 8 in Volume 1 and Page 39 in Volume 2: Second paragraph	Oppose in part	AMEND the paragraph in both Township and Rural Volumes to read: “ Cultural and historic heritage values are important because it provides a tangible insight into our past and can be an important source of knowledge. Cultural and heritage features can. <i>The accidental or inadvertent destruction or damage of cultural and heritage features can cause the loss of this knowledge as well as a social/cultural link to the past</i> ”.	Recommendation 4 Accept
	6.11 Page 10 in Volume 1 and page 41 in Volume 2: First Heading – ‘Damage to Sites with Historic Heritage’	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: “ <i>Damage To Sites With Cultural and Historic Heritage Values</i> ”	Recommendation 4 Accept
	6.12 Page 10 in Volume 1 and page 41 in Volume 2: First paragraph after first heading ‘Sites and	Oppose in part	AMEND the sentence in both Township and Rural Volumes to read: “ <i>Sites and buildings with cultural and historic heritage values</i> ”.	Recommendation 4 Accept

	buildings with historic heritage values’			
6.13	Page 10 in Volume 1 and page 41 in Volume 2: Second Heading – ‘Protecting Historic Heritage Values’	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: <i>“Protecting Cultural and Historic Heritage Values”.</i>	Recommendation 4 Accept
6.14	Page 10 in Volume 1 and page 41 in Volume 2: First sentence after second heading – As well as the specific duties under section 6 of the Act, maintaining’	Oppose in part	AMEND the sentence in both Township and Rural Volumes to read: <i>“As well as the specific duties under section 6 of the Act, maintaining sites and buildings with cultural and historic heritage values in Selwyn District can:....”</i>	Recommendation 4 Accept
6.15	Page 10 of Volume 1 - Second sentence under second heading, and page 42 of Volume 2 – First sentence ‘Protecting sites and structures with historic heritage values involve costs’	Oppose in part	AMEND the sentence in both Township and Rural Volumes to read: <i>“Protecting sites and structures with cultural and historic heritage values involves costs:....”</i>	Recommendation 4 Accept
6.16	Page 10 in Volume 1 – Second sentence under second heading, and page 42 in Volume 2 – First sentence first bullet point.	Oppose in part	RETAIN the sentence in both Township and Rural Volumes and AMEND the so that the bullet point reads: <i>- “Many sites and structures are privately owned or on private land. For example, some wahi taonga and wahi tapu sites are on land not owned by tangata whenua for whom they have value. Protecting sites and structures may sometimes prevent the landholder from using them for other purposes, although adapting heritage buildings for new uses is common”.</i>	Recommendation 4 Accept
6.17	Page 10 in Volume 1 – Third sentence under second heading, and page 42 in Volume 2 – second sentence.	Oppose in part	AMEND the sentence in both Township and Rural Volumes to read:: <i>“Any measures in the District Plan to protect the cultural and historic heritage values of sites must....”:</i>	Recommendation 4 Accept
6.18	Page 16 in Volume 1 and page 48 in Volume 2 – First Heading ‘Historic Heritage – Strategy’	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: <i>“Culture and Historic Heritage – Strategy”.</i>	Recommendation 4 Accept
6.19	Page 16 Volume 1 Second statement – ‘Foster a	Oppose in part	AMEND Second statement in the Township Volume to read: <i>“Foster a partnership for protecting sites and buildings with cultural and historic</i>	Recommendation 4

	partnership for protecting sites and buildings with historic heritage ...’		<i>heritage....”</i>	Accept
	6.20 Page 16 in Volume 1 – Second Heading and page 48 in Volume 2 – Second Heading – ‘Historic Heritage – Objectives’	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: ‘Culture and Historic Heritage – Objectives’	Recommendation 4 Accept
	6.21 Page 16 in Volume 1 – Explanation and Reasons – Second paragraph – ‘Objective B3.3.1 develops a partnership’	Oppose in part	AMEND: Second paragraph in the Township Volume to read: <i>“Objective B3.3.1 develops a partnership approach to culture and heritage protection..... that have cultural and historic heritage values in the Selwyn District..”.</i>	Recommendation 4 Accept
	6.22 Page 17 in Volume 1 AND Volume 2: First Heading <i>“Historic Heritage –Policies and Methods”</i>	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: “Culture and Historic Heritage - Policies and Methods”	Recommendation 4 Accept
	6.23 Page 20 in Volume 1 – Method – District Plan Rules – Cultural Historic Heritage Sites	Oppose	RETAIN: heading in TownshipVolume so as to be consistent with Rules. “Sites of Significance to Tangata Whenua”	Recommendation 4 Accept
	6.24 Page 20 in Volume 1 and page 54 in Volume 2 – First Heading – Historic Heritage – Anticipated Environmental Results	Oppose in Part	AMEND the heading in both Township and Rural Volumes to read: “Culture and Historic Heritage- Anticipated Environmental Results”.	Recommendation 4 Accept
	6.25 Page 20 in Volume 1 and Volume 2 – Second Heading Historic Heritage – Monitoring.	Oppose in part	AMEND the heading in both Township and Rural Volumes to read: “Culture and Historic Heritage – Monitoring”.	Recommendation 4 Accept
	6.26 Page 16 in Volume 1 (Township) – Objective B3.3.2 – Explanation and Reasons , 4 th paragraph under second heading	Oppose in part	REPLACE : The word “Maori” with “local runanga”.	Recommendation 4 Accept
	6.27 Page 21 in Volume 1 Part C , 2 Living Zone Rules –Earthworks	Oppose in part	DELETE the word “walls” from the definition of “Landscaping” in both Attachment 1: Changes to the District Plan (Township Volume) and Attachment 2: Changes to the District Plan (Rural Volume).	Recommendation 4 Accept in part

	Notes 1 and page 54 in Volume 2 Part C, 1 Rural Rules - Earthworks Notes 1. Page 35 in Volume 1 – Definitions And page 73 in Volume 2 - Definitions		And ADD the word “ <i>post holes</i> ” instead which is already exempt from the earthworks rules. Or REPLACE: the current proposed definition of “Landscaping” with new definitions of “soft landscaping” and “hard landscaping” which will respectively allow for activities that are permitted and those that are not.	
	6.28 Page 23, 25 and 27 in Volume 1 - Part C, Rules – Earthworks, Buildings and Activities – Rules 2.1.2 2.1.3, 2.1.6 2.1.7, 4.14.2, 1.14.3, 4.14.4, 4.14.3 (5?), 10.4.2, 10.4.3, 10.4.4 and 10.4.5)	Support	DISCUSS: the methods or tools to implement this written approval process with Council.	Recommendation 3 Accept
	6.29 Page 23 in Volume 1 - Part C, 2 Living Zone Rules – Earthworks Notes <i>1 - Rule 2 does not apply to any of the following activities:.....</i> and page 54 in Volume 2 Part C, 1 Rural Rules- Earthworks Notes <i>1 Rule 1 –Earthworks, does not apply to any of the following activities.....</i>	Oppose in Part	ADD: Part C, 2 Living Zone Rules – Earthworks Notes 1 <i>Rule 2 does not apply to any of the following activities:...</i> <i>-Sowing, tending or cultivating crops, grazing, or planting trees of a scale less than ...(an appropriate measure yet to be calculated)</i> <i>- Planting of trees greater than a scale of ...(an appropriate measure yet to be calculated) except in Wahi Taonga Management Area C39(b).....</i> Part C, 1 Rural Rules- Earthworks Notes <i>Rule 1 –Earthworks, does not apply to any of the following activities....</i> <i>-Sowing, tending or cultivating crops, grazing, or planting trees of a scale less than (an appropriate measure yet to be calculated)</i> <i>-Planting of trees greater than a scale of (an appropriate measure to be calculated) except in Wahi Taonga Management Area C39(a).</i>	Recommendation 5 Accept in Part.
	6.30 Pages 58 and 59 of Volume 2 (Rural) - 2 Rural Rules – Tree Planting and Removal of Protected Trees – Rules 2.1, 2.1.1, 2.2 and 2.2.1	Oppose in part	ADD: to <i>Permitted Activities - Shelterbelts and Amenity Planting</i> <i>2.1.1 The planting of any trees for amenity planting, shelterbelts shall be a permitted activity if all of the following conditions are met:.....</i> <i>2.1.1.9 .In the area listed in Appendix 5 and shown on the Planning Maps as WTMA C39(a), any Any disturbance within those areas shall be limited to a maximum depth of 20cm and less than a scale of (an appropriate measure yet to be calculated)</i> ADD: to <i>2.2.1 Permitted Activities – Plantations</i> <i>2.2.1.3</i> <i>In the area listed in Appendix 5 and shown on the Planning Maps as WTMA C39(a), any</i>	Recommendation 5 Accept in Part.

		 Any disturbance within those areas shall be limited to a maximum depth of 20cm and less than a scale of (an appropriate measure yet to be calculated)	
	6.31 Matters discretion is restricted to under Restricted Discretionary Activities and Earthworks, Shelterbelts and Amenity Planting and plantations (Pages 56, 58 and 60 of Volume 2 (Rural)).	Oppose in part	ADD: to Restricted Discretionary Activities- for Earthworks, Shelterbelt, Amenity Planting and Plantations <i>The Council shall include in its discretion to consideration of: the scale of the activity and the degree of change of land use and these effects on wahi tapu and wahi taonga and certain conditions to address this.</i>	Recommendation 5 Reject
	6.32 Page 39 in Volume 2 – Statutory Acknowledgement and Nohoanga Sites	Oppose in part	ADD: to list under heading <i>Statutory Acknowledgment and Nohoanga Sites, in Attachment 2: Changes to the District Plan (Rural Volume), p.39.</i> -Te Waihora -Coopers Lagoon	Recommendation 1 Reject
	6.33 Volume 1 and 2 All rules for Restricted Discretionary Activities for both Township and Rural Volumes – Matters that Council shall restrict its discretion to consideration of.	Oppose in part	ADD: to “ <i>matters to be considered</i> ” by Council for all Restricted Discretionary Activities for all activities for both Township and Rural areas. - <i>Special consideration of the risk of activities in the boundaries of the WTMA areas, especially in the western boundary of the Living Zone, to adversely disturb potential urupa in these locations.</i> -Consent conditions requiring specific requirements for: • <i>cultural monitoring;</i> • <i>a local runanga representative on site during the works;</i> • <i>ensuring that a Accident Discovery Protocol is followed;</i> • <i>An agreement with local runanga as to for what happens to any found artefacts; and</i> • <i>a briefing on detection of archaeological artefacts for contractors and sub-contractors on site.</i>	Recommendation 5 Accept in Part
	6.34 All rules in proposed plan change regardless of whether controlled or restricted discretionary.	Neither support nor oppose	ADD to all rules: -Consent and written approval conditions requiring specific requirements for: • <i>cultural monitoring;</i> • <i>a local runanga representative on site during the works;</i> • <i>ensuring that a Accident Discovery Protocol is followed;</i> • <i>An agreement with local runanga as to what happens to any found artefacts; and</i> • <i>a briefing on detection of archaeological artefacts for contractors and sub- contractors on site.</i>	Recommendation 5 Accept in Part
	6.35 Page 65 in Volume 2 (Rural) Part C Rural Rules –	Oppose in part	ADD: to “Permitted Activities - <i>Utility Structures and Sites of Significance to Tangata Whenua</i>	Recommendation 5

	Utilities 5.10 Utility Structures and Sites of Significance to Tangata Whenua Permitted Activities - Utility Structures and Sites of Significance to Tangata Whenua 5.10.1.2			5.10.1.2 -In the area listed in Appendix 5 and shown on the Planning Maps as WTMA C39(a) , any earthworks associated with any utility structure is limited to... repairing existing utilities provided that they are replaced in the same trench/hole ADD: If the utilities are “new” then they default to a Restricted Discretionary Activity with specific conditions (yet to be developed) that are required to be met.	Reject
	6.36 Pages 20 – 29 in Volume 1 – Matter Council has Restricted its Discretion too in Restricted Discretionary Activities clause for Earthworks (Rule 2.1), Buildings (Rule 4.14) and Activities (Rule 10.4) and Pages 54-72 in Volume 2 - Matter Council has Restricted its Discretion too in Restricted Discretionary Activities clause for Earthworks (Rule 1.2), Shelterbelts and Amenity Planting (2.1), Buildings (3), Roding (4.3), Utilities (5.10), Utility Buildings (5.11), and Outdoor Signs and Noticeboards (6.6).			Oppose 7 REMOVAL: in Restricted Discretionary Activities 1.2 Earthworks, 2.1 Shelterbelts and Amenity Planting; 3 Buildings; 4.3 Roding; 5.10 Utilities; 5.11 Utility Buildings ; B6.6 Outdoor Signs and Noticeboards Of Matters that Council shall restrict its consideration of: Any potential costs to the landowner/occupier of not being able to undertake the proposed activity on that site.	Recommendation 5 Accept in Part
	6.37 Map 133 Sheet 2			Not stated AMEND: Map 133 to indicate that the empty paddock on the western boundary of C39 (b) is identified as C39 (a).	Recommendation 4 Reject
07	New Zealand Historic Places Trust Pouhere Taonga	7.0	Whole of Plan Change 26	Oppose in part See various specific relief sought below.	
	7.1 Volumes 1 and 2: Definition and Terminology for historic heritage			Oppose in part At the time of the District Plan review, special focus is made on addressing the terminology of the heritage chapters of Volumes 1 and 2.	Recommendation 1 Accept in part
	7.2 Volume 1: Objective B3.3.2 Explanation and			Oppose in part That the ‘Explanation and Reasons’ paragraphs are amended to correctly reference sections 6(e) and 6(f) of the RMA and those amendments are consequential through Volume 1 and	Recommendation 4

	Reasons		<p>2.</p> <ul style="list-style-type: none"> Objective B3.3.2 reflects the duty under section 6(e) 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. Objective B3.3.3 reflects the duty under section 6(f) of the act to recognise and provide for the protection of historical heritage from inappropriate subdivision, use, and development. 	Accept in part
	7.3 Volume 1: Policy B3.3.4 Explanation and Reasons	Oppose in part	Amend the paragraph to give accurate reference to the policy which provides for reducing or waiving fees.	<p>Recommendation 4</p> <p>Accept</p>
	7.4 Volume 1: Earthworks 2.1, Reason for Rules	Oppose in part	Amend to Wahi Taonga Management Area C39(b) in Reasons for Rules for Volume 1: Earthworks 2.1, Reason for Rules.	<p>Recommendation 4</p> <p>Accept</p>
	7.5 Volume 1: Controlled Activity 2.1.2	Oppose in part	<p>Amend Rule 2.1.2 to reflect the following: Any earthworks which do not comply with Rule 2.1.1. 9 or 2.1.1.10 shall be a controlled activity if the written consent of the local runanga has been obtained. In the case of Wahi Taonga Management Area C39(b), which is an archaeological site, the written authorisation of the New Zealand Historic Places Trust has been obtained.</p> <p>And that consequential amendments are made through the appropriate sections of Volumes 1 and 2 of the District Plan.</p>	<p>Recommendation 4</p> <p>Accept</p>
	7.6 Volume 1: Controlled Activity 2.1.2	Oppose in part	<p>That an 'Advice Note' is included in the section as detailed below: Activities affecting any archaeological site including Wahi Taonga Management Area C39(b) may require an Archaeological Authority from the New Zealand Historic Places Trust Pouhere Taonga.</p> <p>And that consequential amendments are made through the appropriate sections of Volumes 1 and 2 of the District Plan.</p>	<p>Recommendation 4</p> <p>Reject</p>
	7.7 Volume 2: Historic Heritage – Objective B3.3.3 Explanations and Reasons.	Oppose in Part	<p>That the 'Explanations and Reasons' paragraphs are amended to correctly reference section 6(e) of the RMA and are amended as follows: Objective 3.3.1 reflects the duty under section 6(e) of the Act to recognise the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu,</p>	<p>Recommendation 4</p> <p>Accept in Part</p>

			and other taonga.	
	7.8 Volume 2: Policy B3.3.4 Explanation and Reasons	Oppose in part	That amendment is made to reference Wahi Taonga Management Area C39(a) in the Explanation and Reasons section of Policy B3.3.4.	Recommendation 4 Accept
	7.9 Volume 2: Part C. Rural Rules – Earthworks. Note 1	Oppose in part	That amendment is made to reference Wahi Taonga Management Area C39(a) in the ‘Notes’ section of Part C. Rural Rules – Earthworks.	Recommendation 4 Accept
	7.10 Volume 1 and 2 General Submission		That the Selwyn District Council undertakes a specific review of the heritage chapters to ensure that matters of national importance under sections 6(e) and 6(f) of the RMA are provided for.	Recommendation 1 Accept in part
08	PL Williamson & EC Wilkes 8.1 Whole Plan Change	Oppose	8.1 The settlement of this situation once and for all. Stop this continuing pandering to certain groups of people at the expense of those who pay rates. We on the south side of Pacific Drive were not originally included in the Draft Plan and we wish this situation to remain.	Recommendation 2 Reject

Appendix 2

Plan Change 26 – Maps and Figures

FIGURE 1 –MAP SHOWING LOCATION OF ALL ARCHAEOLOGICAL SITES IN RAKAIA HUTS AREA, INCLUDING SITE L37/4 – RAKAIA RIVER MOA HUNTER SITE.



Figure 7: Map showing location of all recorded archaeological sites in general Rakaia area. Site 4, indicated to the right of Pacific Drive represents the Rakaia Moa Hunter site

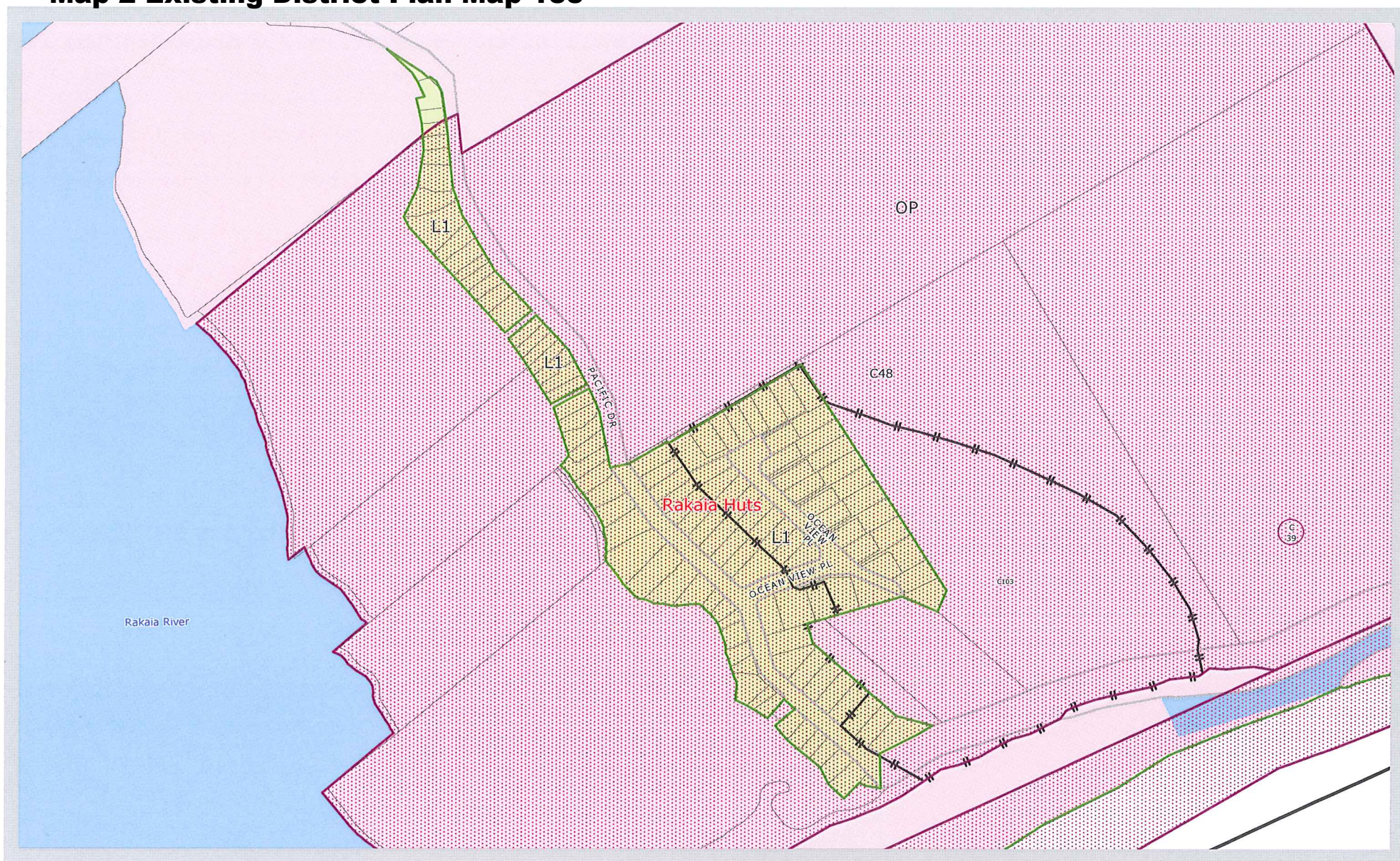
Table 1: Summary details of recorded sites from NZAA site record forms

NZAA Site Number	Site Description
L37/1	Occupation site
L37/2	Occupation site
L37/3	Oven
L37/4	Moa hunter site
L37/5	Artefact find spot
L37/18	Midden / ovens



Figure 4 Map showing location of management areas Rakaia Huts

Map 2 Existing District Plan Map 133



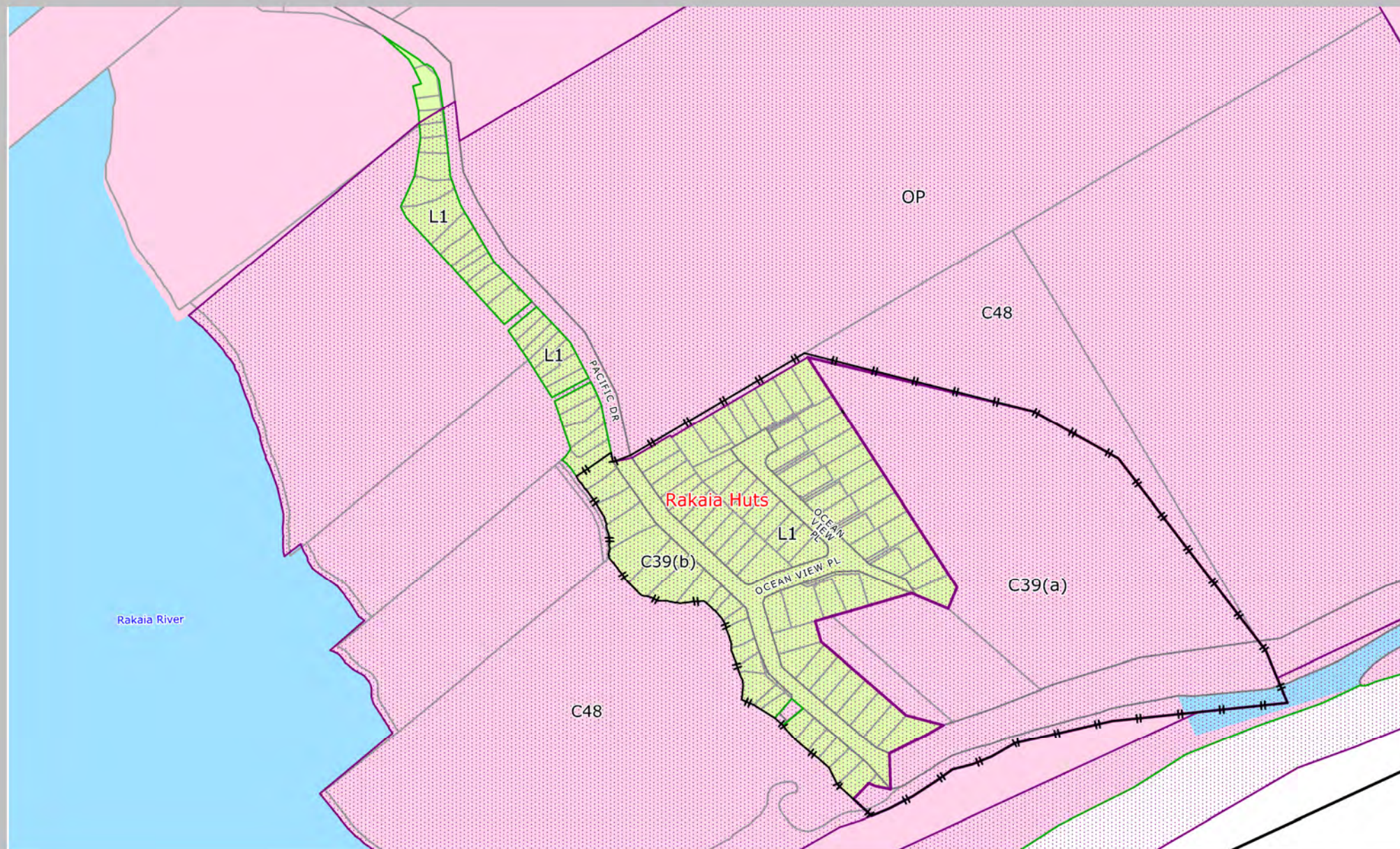
KEY

Heritage Building	Heritage Tree	Scheduled Site	Statutory Acknowledgement Site	State Highways	Railway	Road Parcel	Land Parcel	Water Body
Cultural Site	Waahi Taonga Area	Contours Above Sea level	Zones	Living 1	Business 1	Inner Plains	Archaeological Site	
Silent File Area		160m	High Country	Living 2	Business 2	Outer Plains		
		274m	Port Hills Existing Development Area	Living X	Business 3	Malvern Hills		
			Deferred Living					



MAP
133
SHEET 2
Printed on
5 June 2009

Map 3 Amended District Plan Map 133



KEY

Heritage Building	Heritage Tree	Scheduled Site	Statutory Acknowledgement Site	State Highways	Railway	Road Parcel	Land Parcel	Water Body	Archaeological Site
Historic Heritage Site	Wāhi Taonga Area	Contours Above Sea Level	Zones	Living 1	Business 1	Inner Plains			
Silent File Area		160m	High Country	Living 2	Business 2	Outer Plains			
		2.74m	Port Hills	Living X	Business 3	Malvern Hills			
			Existing Development Area	Deferred Living					



MAP
133

SHEET 2

Printed on
21 February 2011

PC 26
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Appendix 3

FITEC Best planting Guidelines for Tree Planting



Best practice guidelines for Tree Planting

Vision, knowledge, performance



FOTECH
FOREST TECHNOLOGY



He Mihi

Nga pakiaka ki te Rawhiti.

Nga pakiaka ki te Raki.

Nga pakiaka ki te Uru.

Nga pakiaka ki te Tonga.

Roots to the East.

Roots to the North.

Roots to the West.

Roots to the South.

Nau mai, Haere mai

ki te Wāonui o Tane

Whaia te huarahi,

o te Aka Matua,

i runga, i te poutama

o te mātauranga.

Kia rongo ai koe

te mahana o te rangimārie.

Ka kaha ai koe,

ki te tū whakaiti,

ki te tū whakahī.

Kia Kaha, kia manawānui

Tena koutou katoa.

We greet you and welcome you.

To the forest world of Tane.

Pursue the path,

of the climbing vine,

on the stairway,

of learning.

So that you will feel,

the inner warmth of peace.

Then you will be able,

to stand humbler,

Yet stand proud.

Be strong, be steadfast.

First edition October 2000

Revised edition January 2005

These Best Practice Guidelines are to be used as a guide to certain tree planting procedures and techniques. They do not supersede legislation in any jurisdiction or the recommendations of equipment manufacturers.

FITEC believes that the information in the guideline is accurate and reliable; however, FITEC notes that conditions vary greatly from one geographical area to another; that a greater variety of equipment and techniques are currently in use; and other (or additional) measures may be appropriate in a given situation.

Other Best Practice Guidelines included in the series:

- Cable Logging
- Chainsaw Use
- Fire Fighting and Controlled Burnoffs
- Ground-based Logging
- Land Preparation
- Loading
- Maintenance Inspections of Yarder Towers
- Manual Log-making
- Mechanised Harvesting and Processing
- Mobile Plant
- Personal Protective Equipment
- Road and Landing Construction
- Silvicultural Pruning
- Transport
- Tree Felling
- Working with Helicopters

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Best Practice Guidelines for Tree Planting

Contents

Introduction	1
Purpose of these guidelines	1
How to use these guidelines	1
Acknowledgements	1
About Best Practice Training material	1
Tree planting	2
Planting objectives	2
Effects of land preparation	2
Types of land preparation operations	3
<i>Agrichemical application</i>	3
<i>Manual land clearing</i>	3
<i>Motor-manual land clearing</i>	3
<i>Tractor crushing</i>	4
<i>Roller crushing</i>	4
<i>Windrowing</i>	4
<i>Burning</i>	4
<i>Line blading and line raking</i>	4
<i>Mulching</i>	4
<i>Continuous ripping (and mounding)</i>	4
<i>Spot ripping-mounding (and mounding)</i>	4
<i>V-blading</i>	5
Tree stocks	5
Planting	5
<i>Selection of planting spots</i>	5
<i>Soil cultivation</i>	7
<i>Tree planting</i>	7
Job prescriptions	7
Planting quality	7
Training and supervision	8
Knowledge of hazards	8
Health hazards	8
Operational hazards	10
Personal protective equipment	12
Establishment tools	12
<i>Planting spade</i>	12
<i>Carrying frame</i>	13
Planting stock quality	13
Planting procedures	14
Handling, storage, and transport	14
Handling of boxes	14
<i>Unacceptable practices</i>	14
Selecting the planting spot	15
Cultivating the soil	15
<i>Method for cultivated (loose) soils</i>	15
<i>Method for firm soils</i>	15
<i>Method for grass-covered sites</i>	16

Opening a planting hole (on a mechanically cultivated spot)	16
Planting the tree	17
Quality control	17
Applying fertiliser	18
 Environmental management	 18
 Glossary of terms	 19
 Index to unit standards	 21

Introduction

Purpose of these guidelines

The Best Practice Guidelines for Tree Planting have been designed by FITEC in conjunction with the forest industry to improve worker safety and performance. They combine industry training standards and best practice information to provide a valuable reference manual for people involved in tree planting.

These guidelines should be read in conjunction with the Approved Code of Practice Safety and Health in Forest Operations. In particular, these guidelines provide direct support for Part 3 - Section 12 (Land Preparation and Establishment) of the code.

They are a valuable reference document for the following Unit Standards registered on the NZQA framework:

Unit 1221 – Demonstrate knowledge of job prescriptions for forest operations

Unit 1234 – Plant plantation trees

Unit 1235 – Plant plantation trees in a production situation

Unit 1241 – Demonstrate knowledge of plantation forest establishment and silviculture

Unit 6923 – Demonstrate knowledge of planting plantation trees

How to use these guidelines

These guidelines have been arranged in two main sections:

- **Tree Planting Basics** - provides an overview of planting and land preparation operations, and hazard management.
- **Tree Planting Procedures** - details the step-by-step procedures for tree handling and planting, and fertiliser application.

The **Glossary of Terms** gives the meaning of terms used throughout these guidelines.

The **Index to Unit Standards** allows the reader to locate information specific to each of the Unit Standards listed above.

Acknowledgements

FITEC acknowledges the assistance of the Occupational Safety and Health and Service, Liro Forestry Solutions, and numerous forest industry trainers, forestry contractors, and forest company staff in the development of these Best Practice Guidelines.

About best practice training material

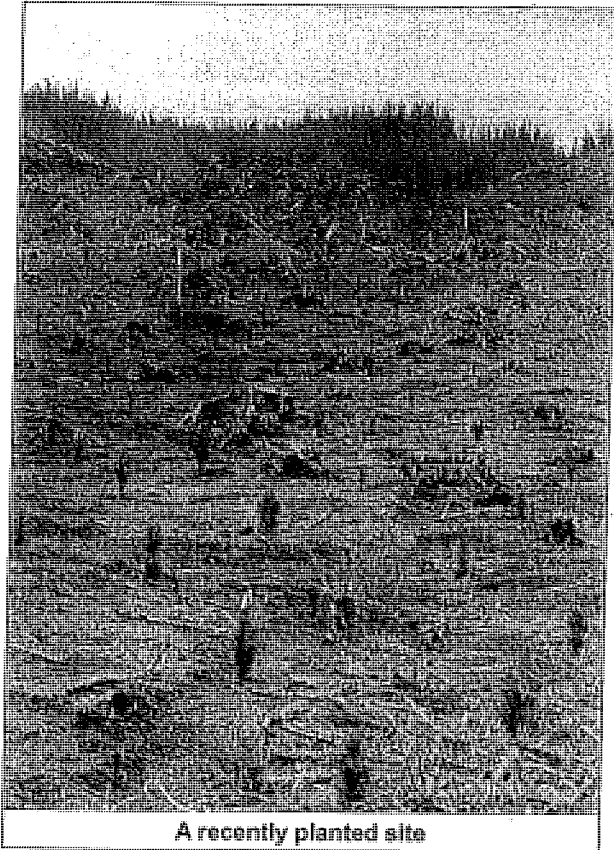
FITEC has developed the material in this publication. It has been reviewed by representatives of the forest industry. At the time of publication, FITEC considers the practices and approaches in this publication to exceed accepted industry standards with regard to production and business management. In addition, the practices recommended in the publication exceed all the New Zealand regulatory standards, in particular those related to health and safety, environmental management, and human resources / employment.

This material is reviewed and reprinted regularly by FITEC.

Tree planting basics

Planting objectives

The objective of tree planting is to (successfully) establish a uniform and healthy tree crop.



A recently planted site

Tree crops are generally planted to provide timber production and financial returns to the forest owner.

They may also provide environmental benefits including:

- Erosion control
- Water quality improvement
- Recreation opportunities
- Scenic improvement
- Shelter and shade
- Wildlife habitat
- Carbon uptake

Key elements of successful planting include excellent:

- Tree handling
- Soil cultivation
- Planting hole depth
- Root placement
- Tree firmness

The planting operation is a very important first step in the life of a tree crop. If not done properly, the following may result:

- Inadequate or excessive stocking rates
- Poor early growth
- Poor tree straightness, large branches and poor wood quality
- Tree mortality
- Toppling and subsequent windthrow
- Uneven growth within a stand

These effects may reduce future returns to the forest owner. In some cases, a site may need to be re-established, at considerable cost to the forest owner. It is therefore critical that planters do their job well.

Remember - a tree is a living thing and needs to be treated with care.

Effects of land preparation

Prior to planting, many sites receive some form of land preparation treatment. Effective land preparation can improve initial tree growth and survival, and lead to a more uniform crop.

Through appropriate land preparation, factors that limit tree growth are overcome. These factors include:

- Poor drainage
- Weed competition
- Compacted or naturally dense soils.
- Frost
- Heavy slash

Land preparation improves the site for planting by removing slash, cultivating the soil and elevating the planting spot without causing excessive soil disturbance or degradation. Combined with the use of proper planting techniques, land preparation will provide trees with a good start to growing.

The treatment of heavy slash, weeds, and dense soils can also improve planting productivity. Treatment will increase the ease of access and planting. This provides skilled planters with the opportunity to plant trees in the best spot for maximum survival and growth.

Types of land preparation operations

A range of operations can be used to improve the planting site. Broadly, land preparation operations can be divided as follows:

Type of land preparation	Purpose	Land preparation operation
Vegetation treatment	Kill (desiccate) vegetation	<ul style="list-style-type: none"> • Agrichemical application by hand or helicopter
	Flatten and/or chop standing vegetation	<ul style="list-style-type: none"> • Manual (hand) and motor-manual land clearing • Tractor crushing • Roller crush (gravity or towed)
Slash treatment	Remove or redistribute slash	<ul style="list-style-type: none"> • Windrowing • Burning • Line blade • Line rake • Mulch
Cultivation	Loosen compacted soils Improve tree stability	<ul style="list-style-type: none"> • Continuous ripping • Spot ripping • Spot cultivation
Cultivation and mounding	Reduce frost risk Improve drainage	<ul style="list-style-type: none"> • Continuous ripping-mounding • Spot ripping-mounding • V blading • Spot cultivation and mounding

Agrichemical application

- The application of agrichemicals controls weed species that compete with the planted crop.
- Can either be broadcast (over entire site), or concentrated at individual spots or along continuous strips.
- Commonly applied by helicopter (broadcast), brush gun, knapsack sprayer (concentrated).

Manual land clearing

- These operations may include land clearing by scrub cutting, or preparation by line cutting or spot clearing/releasing.
- Typically carried out by groups of workers using slashers (or other hand tools).

Motor-manual land clearing

- The most common method of motor-manual land clearing involves the use of chainsaws or brush-cutters.

Tractor crushing

- Standing vegetation can be flattened by crushing with the blade of a tractor (or skidder).
- The machine moves across the site with the blade above the ground.

Roller crushing

- Roller crushing is used on both standing scrub and on cutover.
- It can be used as a pre-burn preparation (for standing scrub) or as a land preparation treatment on its own.
- It can be used on flat to rolling terrain (towed rolling) or on steep terrain (gravity rolling).
- Roller crushers are either towed or connected by winch to a bulldozer.

Windrowing

- Windrowing clears the majority of the heavy slash from the area to be planted, leaving it piled in rows. This allows planters to traverse the site without having to climb over the logging debris and ensure that trees are planted into soil.
- Typically bulldozers and excavators are used for windrowing.

Burning

- On sites with excessive slash or standing (but dead) vegetation, controlled burning may be used.
- A less favoured method because of the loss of organic matter from the soil surface and the potential for accidental burning of surrounding areas.

Line blading and line raking

- Line blading and line raking operations are very similar to each other and are intended to clear lines through sites covered in heavy slash or scrub.
- Bulldozers and excavators can be used for line raking. Bulldozers are used for line blading.

Mulching

- On some sites, removing slash by windrowing or burning is undesirable. On these sites, mulchers attached to excavators or tractors can break the slash into a coarse chip-like mulch.
- They can also be used to treat live vegetation as an alternative to spraying.
- Mulchers can be attached to excavators or bulldozers.

Continuous ripping (and mounding)

- Ripping and mounding is used to cultivate soils where soil compaction (density) or drainage is limiting early tree growth. Ripping and mounding machines work best on clear sites. If they are working on cutover with logging residues, a path needs to be cleared through the slash prior to the cultivation pass.
- Bulldozers are used for ripping and mounding operations.

Spot ripping-mounding (and mounding)

- Spot mounding and spot ripping-mounding are very similar operations.
- They are typically carried out with cultivation tools mounted on an excavator. These include custom built spot cultivation heads, a ripping tyne and bucket, or rotary head.

- They also improve compacted and poorly drained soils.
- Spots can be positioned in the best location. Slash can be cleared before cultivation is carried out.
- Elevation of the planting spot reduces the impact of frost on young trees.

V-Blading

- V-blading is a bulldozer-based operation for creating high continuous mounds of cultivated soil.
- This operation is used for drainage on very wet sites or to overcome frost problems.

Tree stocks

Radiata pine and other species are grown either from seed, cuttings, or tissue culture plantlets.

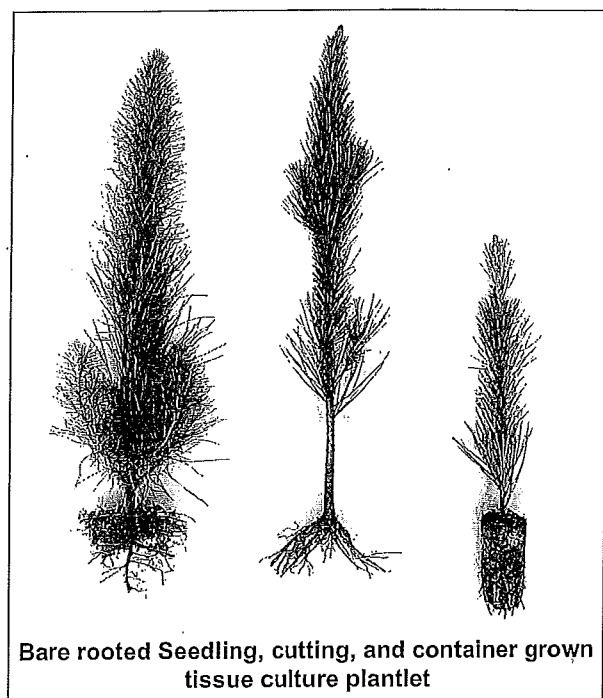
These plants are either bare-root or container-grown. They generally remain in the nursery for 1 year, which allows them to grow big enough to withstand transplanting shock.

Tree stocks are genetically improved to provide better growth, form, wood properties, and resistance to disease. A GF Plus™ rating identifies the degree of genetic development for each of the tree growth, form and quality traits.

When considering the number of trees per hectare to be planted on a site, forest owners will take into account:

- Tree mortality (how many trees will die)
- Selection of the biggest, straightest, and most healthy defect-free trees in future pruning and thinning operations
- Competition between trees to control stem diameter and branch growth.

This may vary from forest to forest.



Planting

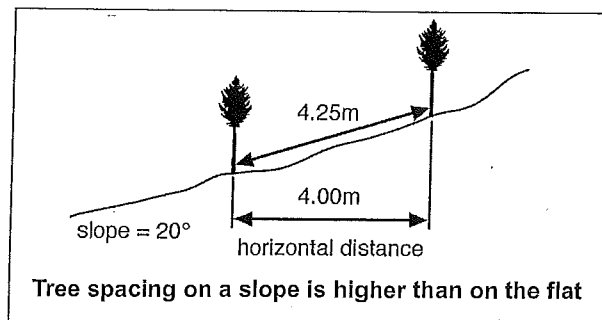
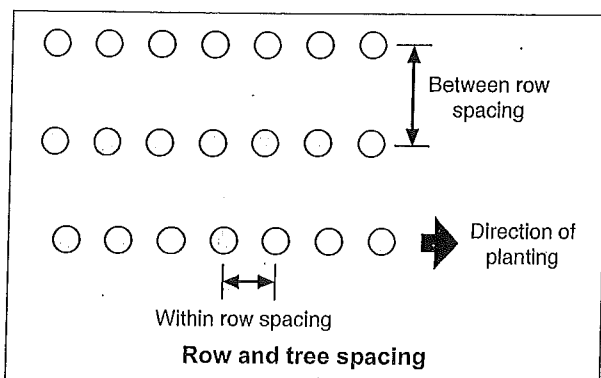
Tree planting can be divided into the following tasks:

- | | |
|---|--------------------------------|
| • Selection of planting spot | • Screefing (if necessary) |
| • Soil cultivation and opening the hole | • Root placement in hole |
| • Filling in loose soil | • Straightening and firming in |
| • Quality control | |

Selection of Planting Spots

Trees are planted in rows to:

- | | |
|---|--|
| • Make it easier to achieve the required stocking | • Produce uniform branch and diameter growth. |
| • Allow planted trees to be identified from regenerated trees for future tending operations (e.g., post-plant spot spraying). | • Assist in the management of later silvicultural operations |



The steps for selecting planting spots are:

- (1) Identify good planting spots.
- (2) Identify required row spacing.
- (3) Identify required tree spacing within rows.

The required stocking is achieved by planting trees at the correct spacing within and between rows.

The row and tree spacing (and stocking rate) should be identified in the job prescription.

Rows may be planted further apart than trees within the row to reduce planting and tending costs.

The stocking rate needs to be uniform over the site. Stocking is based on a flat area (plane). Therefore, tree spacing will need to be different on flat and sloping ground to maintain the same stocking.

For a given stocking rate, tree spacing is greater on a slope than on flat ground. If the correction for slope is not made the stocking rate will be too high.

If planting is around the contour, adjust the between-row spacing for slope.

If planting up and down the slope, adjust the within-row spacing for slope.

Planters maintain the required between-row spacing by working alongside each other. The planter then paces out (where possible) the required within-row spacing.

The best planting spot is:

- within the row
- located to maximise the chance of the tree surviving and growing well.
- at the correct tree spacing

The following guidelines should be used when selecting planting spots.

- Planting spots are ideally clear of all weeds and heavy slash. The planter may need to clear the spot with the spade or boot before cultivation (screefing).
- Where mechanical cultivation has taken place, trees should be planted on top of the cultivated area.
- Preferably it will be slightly raised above the surrounding ground. It should have the topsoil intact and not be compacted by any machines (wheel ruts).

Trees should not be planted in the following positions:

- Ruts
- Among weeds
- Next to stumps and rocks.
- Dips or wet spots
- Heavy slash
- On the edge of banks or batter slopes

In cutover planting, weeds and slash are common. They should be cleared from the planting spot by "screefing" with the spade.

If a spot has to be placed outside the correct spacing, it should remain in row. Trees planted off the row may be missed during later operations or mistaken as lower quality regeneration.

Where a site has been spot or strip-treated before planting, the job of selecting planting spots is much easier.

Between-row spacing needs to be checked on sites that have been continuously line treated. This will allow the correct within-row spacing to be determined.

Further information on land preparation is presented in the **Best Practice Guidelines for Land Preparation**.

Soil cultivation

Soil cultivation involves two steps — first loosening the soil, and then opening a hole large enough to allow the root system to be placed in it with minimal distortion.

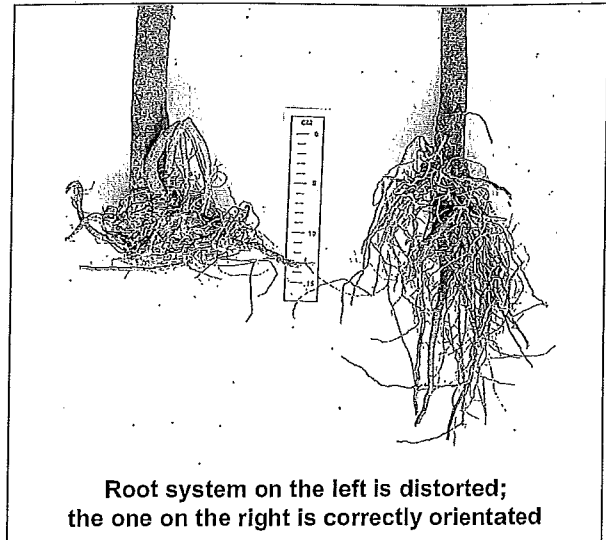
Tree planting

The most common way of planting trees in the field is with a purpose-designed planting spade. In some situations, tractor-towed planting machines may be used. Their use in cutover sites is very limited in New Zealand due to the difficulty of manoeuvring the planting machine over stumps and debris.

Planters need to handle the tree stocks carefully to avoid damage to them.

Roots need to be placed to ensure that the lateral roots are not pointing up or bunched below the stem (see right).

Correct orientation of the roots is achieved by pulling the tree up slightly before the soil is firmed around the tree stem. At least 10 cm of the tree stem should be below ground level.



Job prescriptions

The forest owner should provide a job prescription for every job undertaken in the forest. This is the set of instructions which the planters must follow in order to carry out the task. A prescription should be written simply and clearly, and outline in detail the requirements of the job. A job prescription should have:

- Specified the operation to be carried out
- The location of the site (forest/compartment/road)
- A map showing:
 - ☐ boundaries, area to be treated
 - ☐ streams
 - ☐ hazards
 - ☐ sensitive areas to be avoided
 - ☐ planting line orientation or direction
- Anticipated start date
- Expected completion date
- Contact name, address, and phone numbers for the operation supervisor
- A detailed list of technical specifications for the job to be undertaken. This will vary with the operation. For example, a planting operation should have:
 - ☐ The type of trees to be planted (species, plant type)
 - ☐ Where the trees are to be collected from
 - ☐ Maximum time between nursery and planting
 - ☐ The quality specifications for the planting stock (e.g., minimum root length) and a description of unacceptable trees that should be discarded
 - ☐ A quality specification for planting including planting tools, cuts to be made, planting depth
 - ☐ Stocking and spacing requirements
 - ☐ Tree stock storage and handling requirements
 - ☐ Penalties that will occur for poor quality work and required re-work areas.

Planting quality

The main factors affecting the quality of tree planting are:

- Planter technique (skills)
- Tree handling
- Slash cover
- Terrain (slope)
- Weather conditions.
- Tree stock quality
- Soil conditions
- Vegetation cover
- Quality monitoring.

Planter skill is the most important factor affecting quality. If incorrect techniques are used, survival, stability, tree growth, and form may be of low quality. Planters need to be aware of how handling and planting technique affect the tree. Quality control is critical to ensure planters meet the planting specifications detailed in the job prescription.

Site factors, including soil, slash and vegetation can combine to make the clearing and cultivation of a planting spot more difficult. Shortcuts should not be taken during these stages, as poor spot clearing and cultivation can lead to poor quality establishment.

The major factors contributing to poor planting are:

- Planting hole not deep or wide enough
- Inadequate soil cultivation
- No positive pull up
- Stem, root or collar damage
- Poor planting site selection
- Trees not firmed in correctly
- Incorrect planting depth
- Poorly trimmed roots
- Incorrect spacing
- Incorrect root and stem placement (roots bent up and stems not vertical)

Training and supervision

Tree planting is a very physically demanding job.

Training and supervision are very important in tree planting operations because of the effect of physical workload on hazard incidence and a poor quality job. Both can result in a cost to the worker or contractor.

The Approved Code of Practice for Safety and Health in Forest Operations requires that before **any** worker begins a tree planting operation, the employer must place them under the close supervision of a competent person. That person must continue to supervise the worker until the worker can plant safely and is not likely to harm him/herself or anyone else.

Extra attention must be given to the training and supervision of new or inexperienced operators as most serious injuries occur to operators with less than 6 months' experience.

All operators must be under a documented training programme and should be aiming to pass the relevant NZQA Units that apply to tree planting.

Workers involved in tree planting need to be fit, active, alert, properly trained and supervised, and appropriately equipped.

Workers should also understand the need for adequate rest, good nutrition and sufficient fluid intake.

Knowledge of hazards

As part of the supervision and training programme, planters need to be **shown** the hazards they will face on the job and the controls to avoid being harmed by those hazards.

Before starting any new block, all planters must be involved in identifying any significant hazards **on the site** and the way those hazards will be controlled. There must be documented evidence on site listing the hazards and controls and showing all operators have been run through those hazards and controls.

The two main hazard categories are **Health Hazards** and **Operational Hazards**.

Health hazards

Tree planting is a very physically demanding job. To maintain peak performance and prevent accidents through fatigue, planters must take special care of their bodies, including their physical fitness, diet, water intake, personal hygiene, sleep, and how they treat their bodies away from work.

Health hazards

Hazard	Control
Lack of rest/sleep	<ul style="list-style-type: none"> • Build short frequent rest breaks into your work routine. • Take at least two evenly spaced 30-minute rest breaks during the working day.
Early starts	<ul style="list-style-type: none"> • Ensure each night you replace the sleep you lose in the morning. If you get up earlier go to bed earlier. • Allow your body to adjust to the new starting times.
Alcohol abuse	<ul style="list-style-type: none"> • Avoid drinking alcohol for at least 24 hours before carrying out any hard physical work.
Lack of nutrition	<ul style="list-style-type: none"> • Start each day with a high carbohydrate breakfast like porridge, cereal, toast, bananas, pasta, or potatoes. • Eat high protein foods like lean meat, chicken, eggs, milk, and cheese at night. • Eat at the start of a break and rest to allow digestion. • Always eat a high-carbohydrate snack straight after work.
Drugs	<ul style="list-style-type: none"> • Before receiving any medication, tell your doctor what you do for a living. • If you are on long-term medication for a serious health complaint, inform the boss or crew of your condition in case you are involved in an emergency at work. • Inform the boss if you are on any medication that may affect your work. Stay home if necessary. • Non-prescription drugs may affect your ability to work, if in doubt about any medication consult your doctor.
Exposure to sun	<ul style="list-style-type: none"> • Wear sun block. • Wear light shirts on hot days. • Wear a hat. • Carry out regular health checks.
Early over-exertion/sprains and strains	<ul style="list-style-type: none"> • Start each day with a 10–15 minute warm-up and then a few stretches. • Start the day slowly until muscles are warmed up properly. • If starting a new job, allow time for the body to get used to it before working flat out. • Do some stretches at the end of the day. • Take particular care when starting back at work after the holidays.

Health hazards (cont...)

Hazard	Control
Hypothermia/chills	<ul style="list-style-type: none"> • Polypropylene clothing (thermal underwear) is excellent for cold wet weather. (Do not wear polypropylene at fires). • If necessary also wear warm hats, rainwear, or chaps. • Put a hat and warm clothes on when you stop for a break. • Bring spare dry clothing even on fine days. The weather can turn bad very quickly.
Lack of hygiene/infection	<ul style="list-style-type: none"> • Clean and dress any cuts or scratches received on the job as soon as possible and keep them covered. • Make sure the first aid kit is kept fully stocked. • Carry water and soap on the job to wash your hands before smokes. • Bath or shower every night. • Eat a balanced diet to keep your body healthy. • Wear clean clothes against the skin every day.
Occupational overuse syndrome (OOS)	<ul style="list-style-type: none"> • Use correct techniques. • Maintain planting tools. • Have regular medical examinations. • Use pre-work warm up and stretching techniques throughout the day. • Avoid jarring hands, wrists, and elbows by selecting the planting spot carefully and pressing the spade into the soil with your boot.
Dehydration/heat exhaustion	<ul style="list-style-type: none"> • Regularly drink fluids at a rate of 0.5 litres per hour and up to 1 litre per hour in hot conditions. • Drink before you feel thirsty. • While at work do not drink fluids that have more than 8% carbohydrate content, like soft drinks and cordials. • Drink high carbohydrate drinks after work to replace energy levels. • Drink plenty of water at night to recharge the body. • Drink a couple of glasses of water before leaving for work.

Operational hazards

Planting is one of the most physically demanding of tasks undertaken by forest workers. This, combined with the often varied terrain and underfoot conditions, can contribute to operational hazards.

Operational hazards

Hazard	Control
Ineffective personal protective equipment (PPE)	<ul style="list-style-type: none"> • Don't perform operation if PPE is ineffective. • Clean dirty hi-vis garments. • Replace any worn, damaged, or expired PPE • Routinely check the condition of your PPE
Steep or uneven ground conditions	<ul style="list-style-type: none"> • Wear approved safety footwear, which provides ankle support. • Change direction of planting to minimise risk of slipping • Be sure of your footing when walking. • Watch for holes or drop-offs, notify all workers if encountered. • Keep well back from rock ledges. • Use more experienced planters in hazardous areas.
Loose debris or material on slopes	<ul style="list-style-type: none"> • If working on steep slopes do not work directly below another planter. • Maintain adequate distance between workers. • Avoid knocking rocks and woody debris downhill towards other workers. • Wear hard hats on steep rocky terrain.
Lifting objects	<ul style="list-style-type: none"> • Do not lift heavy items alone. • Use correct lifting techniques. • Do not overload your planting frame. • Have good straps and padding to support the load of the planting frame and distribute its weight. • Bend your knees, not your back. • Stretch and warm up before commencing work.
Working alone	<ul style="list-style-type: none"> • Have a method of communication with other members of the crew. • Work in groups or pairs where practicable
Undergrowth	<ul style="list-style-type: none"> • Clear undergrowth from each planting spot before cultivating. • Wear leggings to protect the front of your legs..
Carrying hand tools	<ul style="list-style-type: none"> • Carry hand tools in one hand, below shoulder height, spade edge facing down
Skin irritation from needles	<ul style="list-style-type: none"> • Wear gloves and long sleeved shirt.

Operational hazards (cont...)

Hazard	Control
Dry, chafed and cracked skin from mud and cold	<ul style="list-style-type: none"> Wear gloves, apply hand cream.
Rubbing, chaffing and bruising from belts and frames	<ul style="list-style-type: none"> Use well-padded, properly adjusted, carrying bags or frames.
All-terrain vehicles (ATVs) (including quad bikes)	<ul style="list-style-type: none"> ATVs must be operated within the manufacturer's guidelines. Wear appropriate protective equipment, including full body clothing, safety boots, and gloves (if there is risk of hand injuries). Operators must be trained in the use of ATVs. Carry passengers only if stated in the manufacturer's design specifications. Ride to the condition of the trail, maintaining control at all times.

Personal protective equipment

The minimum safety requirement for planting is:

- Safety boots

In addition, the following items are suggested:

- Hi-vis shirt or vest
- A hat to protect you from sunburn, or in cold weather a balaclava for warmth
- Safety glasses where there is potential for eye injury.

Establishment tools

The basic tools are a planting spade and a frame for carrying boxes of trees.

Planting spade

Planting spades need to be purpose designed and built. They feature a strengthened blade and a footplate on the top of the blade.

The blade is typically 25 to 30 cm long to ensure that the desired depth of cultivation can be achieved.

Spades should be kept in good solid condition, with no loose handles or cracks in the spade.

The edge of the spade should be kept sharp.

Carry spade in one hand, below shoulder height, with the edge facing down.

Whilst working, soil may build up on the spade. This should be cleaned off by scraping, not by bashing it on a solid object such as a stump. On heavy clay soils, a curved trenching spade may be more suitable as it can reduce the build-up of soil on the blade.



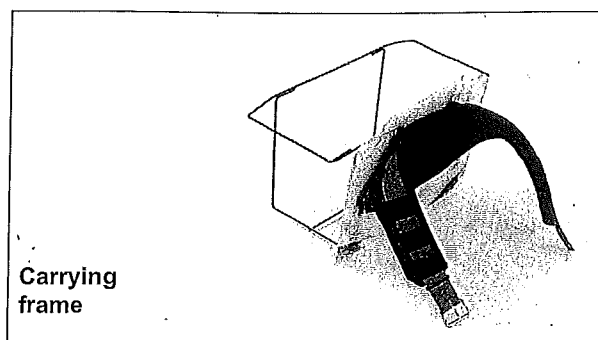
A planter with the required equipment

Carrying frame

The planting frame is designed to carry a planting box. It is fitted with a waist belt to allow the box to be carried comfortably and efficiently.

The waist strap should be made of a wide belt and fitted with padding. Also, it should be adjustable.

Bags are sometimes used in place of the carrying frame and box. This is not a recommended practice, as root distortion and stem damage can occur.



Planting stock quality

All trees being planted should be of good quality and should be properly hardened off at the nursery to reduce transplanting shock. Poor handling can result in damage to trees. Common causes and effects of poor handling are shown below.

Cause of damage	Effect on trees
Seedling stored or carried in soft bags Rough or excessive handling Removing more than one seedling at a time	<ul style="list-style-type: none"> • Root damage and distortion • Root and stem damage, drying, loss of soil and mycorrhizas from roots
Excessive soil removal during lifting or transport	<ul style="list-style-type: none"> • Root drying • Root damage • Loss of mycorrhizas
Stored in poorly ventilated or insulated containers Trees left exposed to sun or wind	<ul style="list-style-type: none"> • Sweating • Moisture stress • Drying of roots • Stem wilting

Planters need to check stock quality before planting. Planters and supervisor should check that the following quality requirements are met.

Quality planting stock should:

- Have a label showing the name of the nursery, the stock ID number and the date they were lifted from the nursery beds.
- Be 20 to 40 cm in height
- Have a stem diameter: height ratio of 40–60 (see below).
- Have no insect or fungal damage
- Have plenty of fine roots
- Have mycorrhizas (white fungal spores) present on the roots
- The label should include the species and any rating (e.g., GF Plus)
- Be 5 to 12 mm in diameter at the root collar
- Have the roots trimmed uniformly to a length of 8 to 10 cm (may differ from company to company)
- Have no damage to tips roots or stems
- Be moist and firm, not dry or limp or sweating

The stem diameter to height ratio is calculated by dividing the height (mm) by the stem diameter (mm). For example 200 mm high ÷ by 5 mm diameter = 40. A ratio higher than 60 is not acceptable.

Trees that **do not** meet these criteria should not be planted, and the contractor and supervisor should be notified.

If the entire batch is faulty, the planting contractor and forest owner should notify the nursery.

In addition, containerised stock should have:

- A root collar diameter greater than 4mm
- A root plug that does not fall away from the roots
- Roots that are not growing around the root container
- A root that is not root bound

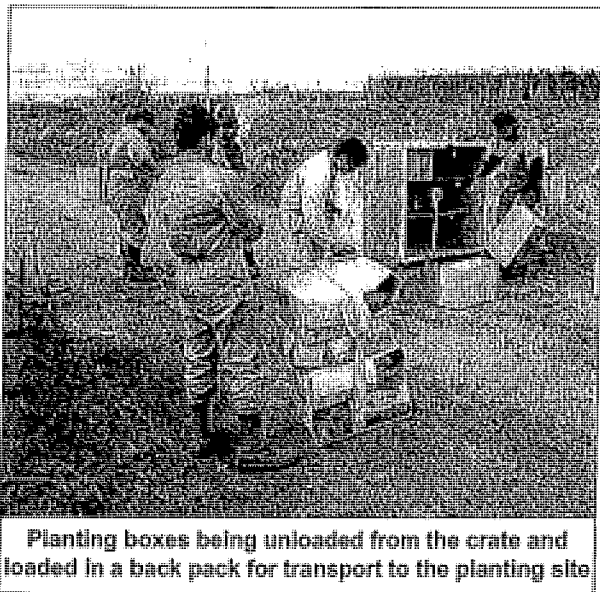
Planting procedures

Handling, storage, and transport

Trees are living things, and need to be treated with care. A critical issue in getting trees from the nursery bed to the planting site successfully is moisture retention in the trees. If they dry out they will suffer drought stress and will take longer to recover and begin to grow. In extreme cases, they will die.

At all points of the chain, between the nursery and the planting spot, the key considerations are:

- minimising damage
- retaining water in the tree.



Planting boxes being unloaded from the crate and loaded in a back pack for transport to the planting site

Trees absorb water through their roots, so it is essential that the roots retain some soil and moisture during transport and storage.

After lifting, trees should be packed and covered immediately. If conditions are dry, extra water (watergell) can be added to boxes or bags. When the boxes and crates are full they should be placed in the shade or in a cool store.

The date and time the trees were lifted from the nursery bed should be noted and written on the crate, box, bag, or packing slip.

When trees are being transported they must be covered, and not exposed to sun or wind. When trees are being stored at the planting site they should be in the shade. They must be covered. Crates used to store trees should be painted white to reflect heat.

Trees should not be stored for more than 2 days in the forest.

Some forests and nurseries still use plastic bags and large cardboard boxes to store and transport trees. The recommended system is the crate and box system, with trees packed into planting boxes and crates in the nursery.

Handling of boxes

- Crates or boxes are generally used to deliver trees in boxes or bags to a planting site. The crate is suitable shelter for the trees for 1 to 2 days. The crates should have holes to allow the trees to breathe and for air to circulate.
- Trees must be kept cool and moist at all times and should always be stored under cover, out of the sun and wind.

Before commencing planting

- Check the general condition of the trees, to ensure they meet the specifications required in the prescription and are suitable for planting.
- Ensure they have not dried or over-heated, as this may affect survival.
- Remove boxes from the crate only when they are ready for use, and place within the carrying frame. Close the crate door when not in use.
- The boxes containing the trees can be re-used several times. Empty boxes should be returned to the crate. Boxes should be handled carefully.

Unacceptable practices

- Planters have been known to whack the soil from the roots to lighten the load, and allow more trees to be stuffed into the planting box. This practice is unacceptable as it damages the roots and removes the mycorrhizas, resulting in increased mortality and poor early growth.

- Planters sometimes transfer the trees from the planting boxes to the box permanently secured to their planting frame. This procedure is not recommended as it encourages the removal of soil from the roots and results in root damage.

Selecting the planting spot

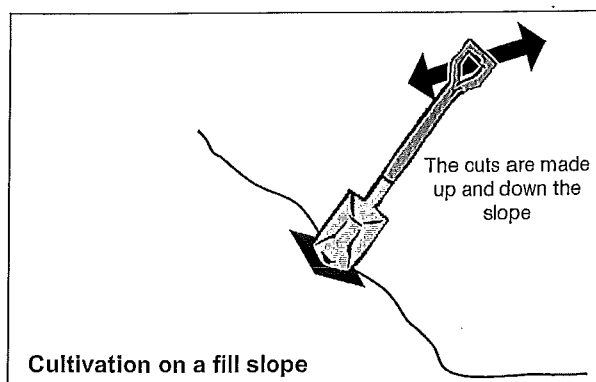
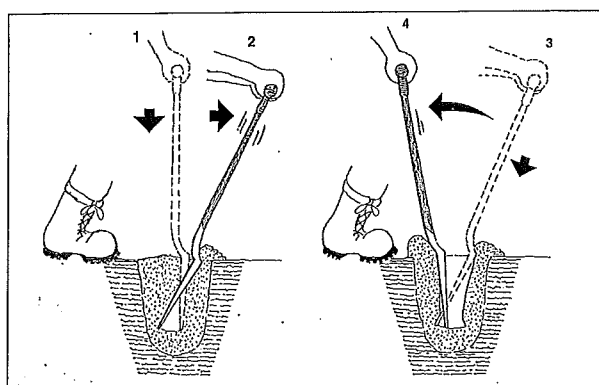
- One member of the planting crew will establish where planting is to begin and in what direction planters will work. This will often be parallel to an obvious feature, such as a road, compartment boundary, windrow, fence line, stream, or ridge.
- Planters will space themselves to achieve the desired row spacing. Marker poles are sometimes set across the planting area to allow planters to keep the lines straight.
- Generally, the more experienced and faster planters will be located on the inside rows.
- Select the first suitable planting spot. If a spot meets all the criteria except that it has weeds on it, these can be cleared off with the spade. This is referred to as screefing. The cleared spot should be at least 50cm square.
- The distance to the next planting spot is stepped out according to the specified within-row tree spacing.

Cultivating the soil

The method used to loosen the soil will depend on soil firmness and whether there is a grass cover.

Method for cultivated (loose) soils

Thrust the spade into the ground and use your foot to push it in to its full depth (25–30 cm) (1). Lever the handle back and down to loosen the soil (2). Thrust the spade down (3) so that the blade bites, and lever the spade forward (4) to further open the hole.



Where the planting spot is located on an erodible slope (such as a fill slope), angle the spade cuts so they are up and down the slope, rather than across it.

This minimises the soil disturbance and soil loss.

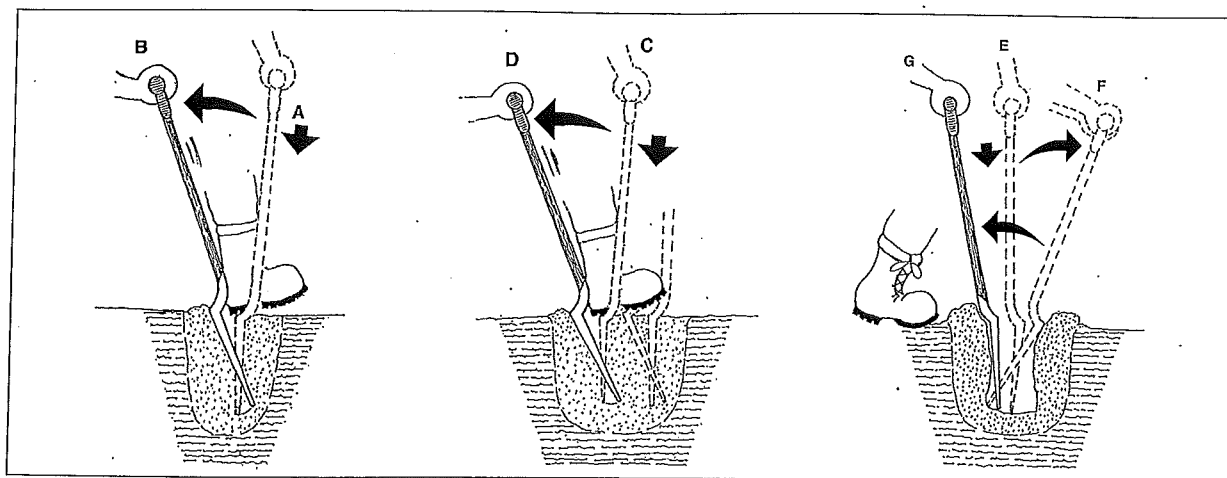
Method for firm soils

Thrust the spade into the ground and use your foot to push it in to its full depth (25–30 cm) (A). Lever the handle back and down to loosen the soil (B). Several thrust/lever actions may be required to get the spade to full depth in compact or heavy soils (clay).

Remove the spade from the ground and make a second cut parallel to the first (C), about 20 cm from the first. Again, lever the handle back and down to loosen the soil (D).

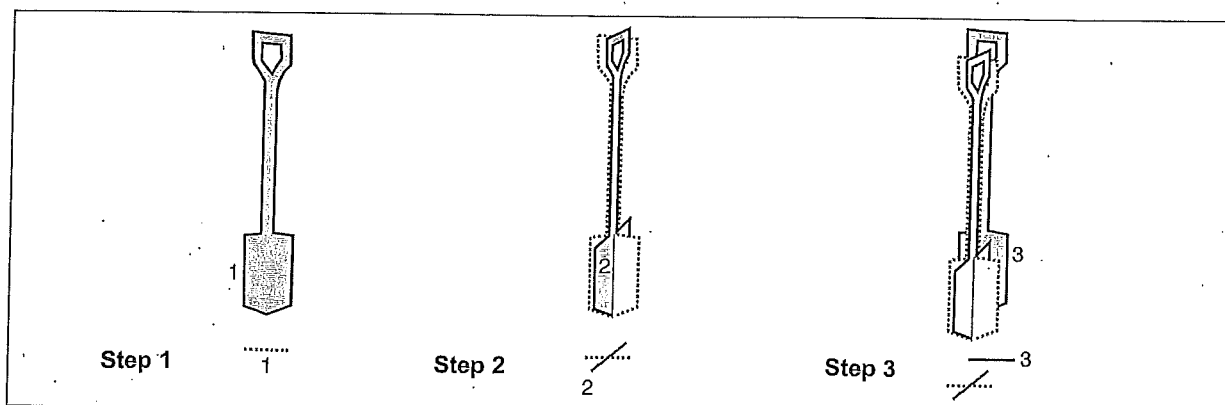
Remove the spade, turn it around 180° and use it to open a hole (not a slot) between the first and second cuts as follows: (see over page)

- Push the spade to the bottom of the loose soil
- Press down on the handle (F)
- Repeat until a wide hole is cleared particularly at the base.
- Lever it back (E)
- Lever it forward



Method for grass-covered sites

- (1) Thrust the spade into the ground and use your foot to push it in to its full depth (25–30 cm). Lever the handle back and down to loosen the soil. Several thrust/lever actions may be required to get the spade to full depth in hard or heavy soil (clay).
- (2) Remove the spade from the ground and make a second cut 90° from the first to form a cross. Lever the handle back to loosen the soil.
- (3) Remove the spade and thrust it into the ground in front of the first two cuts, and open a hole between the first and second cuts as follows:
 - Push the spade to the bottom of the loose soil
 - Press down on the handle
 - Repeat until a wide hole is cleared.
 - Lever it back
 - Lever it forward



Opening a planting hole (on a mechanically cultivated spot)

Where a site has already been cultivated, the planter will need to open a planting hole before planting a tree.

- On very loose cultivated ground, the soil may need to be firmed with the feet before a hole is opened. This reduces the chance of the soil instantly falling back into the hole made by the spade.

In all cases:

- Trees must not be held in the hand whilst the cultivation and hole opening is being done. The trees must remain in the bag until the hole is opened.
- Trees must be planted into mineral soil, not into litter or duff.

Planting the tree

- (1) After opening the hole, take **one** tree at a time from the planting box.
- (2) Place the tree in the hole with the roots in the bottom.
- (3) Lift the spade clear of the hole
- (4) Holding the stem, low down the tree, use your boot to push soil into the hole until it is filled.
- (5) Give the tree a positive pull upwards 5 to 10 cm to straighten roots. This should leave the stem buried in the soil to a depth of about 10 cm. The tree will be planted deeper than it was growing in the nursery. Some foliage may be underground.

Note: if using container-grown stock, a positive pull-up is not required and if applied will rupture the tree.

- (6) Firm the soil around the tree by standing on it with the front of the boots. Be careful not to rub bark or foliage off the tree. Never use your heel to firm in. There should be no air pockets at the bottom of the hole.

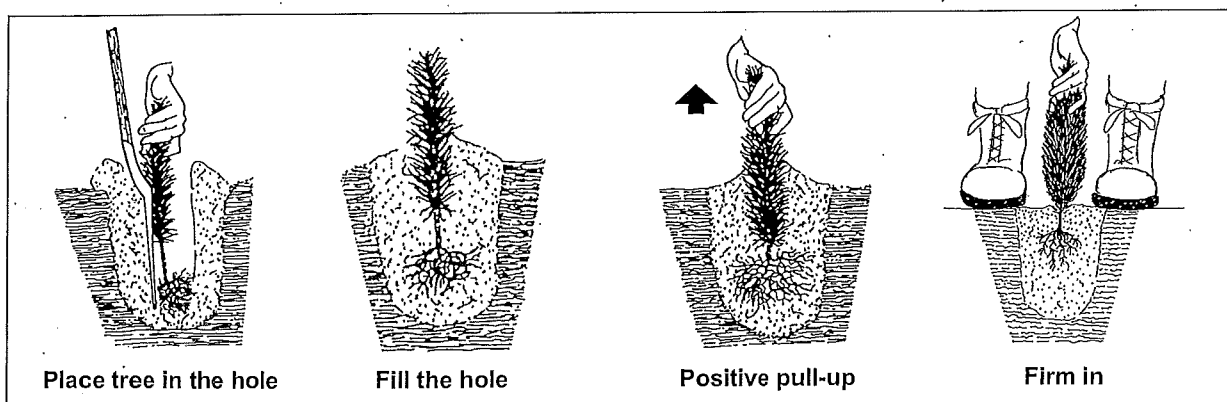
Note: Containerised trees require only minimal firming to avoid root plug damage

- (7) Make sure the tree is vertical.
- (8) If the tree is damaged during planting (top pulled off during pull up or firmness checking) it should be removed and replaced with an undamaged tree. Do not pull the tree up using the tip.

DO NOT stamp the soil in with your heel.

If the soils are very loose, the hole opening and tree planting are combined as one movement.

Note: Some variations to the planting methods described may be agreed upon between the forest owner, supervisor, contractor, and planters. When other methods of creating a planting hole are used, it is always important that good cultivation is achieved and the specifications in the job prescription are met. For example, planting depth may be specified as 1/3 of the stem height, or to the first branches above the root collar.



Rows of trees should be kept straight. This can be achieved by one worker setting out sighting poles which indicate where a planter should be aiming for as he/she walks forward. With experience, it may not be necessary to have a sight pole for every line, as some planters can space themselves by eye.

Quality control

- The quality control (QC) person should follow closely behind the planters to ensure that any problems can be dealt with quickly.
- The QC person will routinely assess each planter's performance according to the job prescription. Specifically he/she is looking at the indicators listed in the table below.
- The QC person should use a checklist and record planter's name and planting quality.
- If dug up carefully, an assessed tree can be replanted.



Left: Checking cultivation depth.
Right: Inspecting the seedling

Quality indicator	Assessed...
Tree stock	By visual assessment following delivery of trees to the site
Tree storage and handling	By checking: the suitability of the location of the crate or tree dump: <ul style="list-style-type: none"> • Handling of boxes, bags, and trees during transfer from store to planter • Planters' handling of trees during planting
Planting spacing	Using a measuring stick or pole. Visually assess selection of planting spot
Cultivation area and depth	Using a graduated steel rod to probe cultivation depth and area
Planting depth, root orientation, root plug deformation	By carefully digging up the tree and visually assessing
Tree firmness	By pulling up on the tree

Applying fertiliser

Fertiliser is sometimes applied manually following planting, either by hand or by applicator, to boost tree growth and to correct soil nutrient deficiencies, such as nitrogen and phosphorus.

This fertiliser is usually pelletised or granulated, and is applied in a separate operation to planting. Fertiliser is normally applied individually to each tree. This increases cost effectiveness by reducing application rates of fertiliser per hectare. It also reduces the uptake of fertiliser nutrient by weeds.

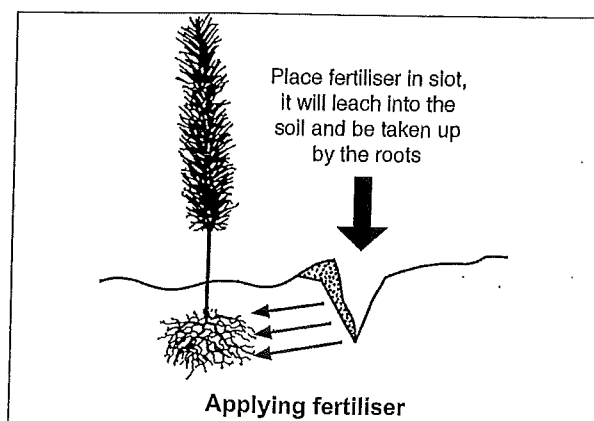
Care must be taken to place the fertiliser correctly, as per the job prescription. If the fertiliser is in contact with, or too close to the roots it can damage or kill the tree.

Applying fertiliser by hand requires the following equipment:

- a planting spade
- a planting bag or box to carry the fertiliser
- a measuring container so the right amount of fertiliser is applied

The following steps should be followed to hand-apply fertiliser.

- (1) Open up a spade slot approximately 30 cm upslope (if possible) from the tree being fertilised. The slot should be 15 to 20 cm deep.
- (2) Fill measuring scoop with the required amount of fertiliser.
- (3) Place in the slot.
- (4) Close the slot over the fertiliser with your boot.



Environmental management

While planting has minimal potential for damage to the environment, planters must ensure that all planting boxes, planting bags and rubbish are removed from the planting site on completion of the planting operation.

Burying of rubbish and planting bags is an unacceptable practice.

Glossary of terms

Agrichemical	(Herbicide) Chemical applied to a site to control unwanted vegetation.
Air pockets	An air space around the roots of a planted tree, which can result in drying out of the roots. Usually caused by poor planting technique and poor cultivation. An air pocket may reduce tree growth or cause death.
Bare root stock	Planting stock grown in nursery beds, not in containers, with good covering of soil on the roots.
Butt sweep	A bend in the butt of the tree. Results from the tree not being planted vertically, soil movement, or toppling.
Conditioning	When a tree is prepared in the nursery for planting out by wrenching and root trimming.
Container-grown stock	Planting stock grown in containers and planted with growing medium intact.
Cutover	Area of forest which has been recently harvested.
Cultivation	Loosening of soil to improve root development and tree growth.
Cutting	Planting stock grown from cuttings (piece of plant cut from tree or stool bed), not seeds.
Element deficiency	A lack of nutrients available for the tree to uptake. May be able to be corrected by applying extra nutrients as fertiliser.
Erosion	Uncontrolled movement of soil downhill.
GF Plus™ rating	Rating given for each of the tree growth, quality, and health characteristics. Higher numbers indicate better levels of genetic improvement.
Granular herbicides	Weed-killing chemicals manufactured as small grains.
Hard stock	Well-conditioned planting stock with no fresh growth (soft tissue).
Herbicides	see Agrichemical
Hi-vis	High visibility clothing or helmets, usually a bright fluorescent colour.
Job prescription	Detailed specification for a job, covering what is to be done, where, and to what standard.
Land preparation	Operations preceding planting used to modify land to enhance tree growth and planting.
Malform	Any tree that has a stem defect which is unacceptable.
Mattock	Hand tool for digging and planting in hard ground.
Mortality	Percentage of the trees planted that have died at the time of assessment.
Mycorrhizas	White fungal spores on the roots which aid nutrient uptake into the tree.
Nursery collar	A mark (where the dark-coloured bark starts) on the tree stem usually just below the foliage, indicating how deep the tree was grown in the nursery.

Glossary of terms (cont...)

Positive pull-up	Upward pull applied to the planted tree to ensure roots are pointing downwards.
Prescription	see Job prescription
Releasing	Manual or chemical operations to remove competing vegetation from around young trees.
Root collar diameter	The stem diameter of the seedling or cutting just above the roots.
Ruts	Tracks left in the soil by harvesting machinery, where soil is compacted and disturbed.
Screefing	Using hand tools to clear weeds and light slash from a planting spot before planting a tree.
Seedling	Planting stock grown from seed.
Slash	Layer of logging residue (branches, etc.) left on the cutover after logging.
Soil compaction	Compression of soil; can inhibit root growth.
Stocking	Number of trees per hectare.
Survival rate	Percentage of the trees planted still alive at the time of assessment.
Sweating	Moisture lost from the tree foliage and stem. Occurs when ventilation is poor or trees are stored in warm locations.
Toppled trees	Trees which fall over in a storm event.
Tap root	The large root which grows downwards to anchor the tree and uptake water.
1/0	A code that describes the age of the tree stock grown for 1 year in the nursery bed. The first digit is the age of the seedlings in years, and the second, the time they have been lined out.

Index to unit standards

Unit	Page numbers
6923 Demonstrate knowledge of planting plantation trees	2-8, 12-18
1234 Plant plantation trees	5-8, 12-18
1235 Plant plantation trees in a production situation	5-8, 12-18

Poroporoaki

Whaia te huarahi
o te mātauranga

*Pursue the path
of learning.*

Ka piki ake koe,
ka whānui atu nga pae.

*The higher you climb,
the wider the horizons.*

Rapuhia nga pae
i roto, i tōu nei ngakau.

*Seek also the horizons
within your self.*

E tipu, e awhi, e tū.

Grow, embrace, stand tall.

Vision. Knowledge. Performance.

FITEC

Appendix 4
Dan Witter Archaeology Report on Submissions

Resource Management Act 1991

Proposed Plan Change 26

To the Selwyn District Plan

Archaeological Report on Rakaia Huts Submissions

To: Hearings Panel

From: Dan Witter, Witter Archaeology

Hearing Date: 28 November 2011

1. Introduction

1.1 My name is Dan Witter. I am a consultant archaeologist. I have been asked to prepare a report with archaeological-related comments on submissions for the Proposed Plan Change 26 to the Selwyn District Plan.

1.2 I hold the following qualifications:

- BA in Zoology from the University of Wyoming 1965.
- MA in Anthropology from the University of New Mexico 1974.
- PhD in Prehistory from the Australian National University 1992.

1.3 I have practiced as a professional archaeologist since 1975. This includes employment as an archaeologist for the Victoria Archaeological Survey and the NSW national Parks and Wildlife Service. I have been a consultant archaeologist in New Zealand since 1999 based in the Canterbury area. I have a good understanding of New Zealand Archaeology and the principles of archaeological site conservation and management.

2. Report Content

2.1. The following topics are discussed in this report pertaining to the Proposed Plan Change 26 which is intended to provide improved protection to archaeological and Maori cultural values associated with the Rakaia River Mouth Moa Hunter Site.

- Background Information
- The proposed plan change
- Comments on Submissions
- Conclusions

3. Background Information

3.1 The archaeology of the Rakaia River Mouth Moa Hunter Site was published by Julius Von Haast in 1872. This followed the discovery in a freshly ploughed paddock of a large quantity of moa bones. The excavations by Von Haast recovered a large number of artefacts as well as butchered moa bones. The paper he published was responsible for identifying the Moa Hunter period in New Zealand prehistory. The site is recognised as having National significance. There has been subsequent archaeological work on this site by Michael Trotter and Chris Jacomb. In 2005 I became involved in an assessment of damage to the site due to earthworks for a road along the foreshore. This led to a concern by the NZ Historic Places Trust and Selwyn District Council to improve protection for archaeological and cultural values for this large and highly significant site. The land has been ploughed for over 100 years and there has been considerable residential construction in the Rakia Huts settlement. However there was reason to expect considerable undisturbed and important archaeological material to remain.

3.2. Preparations for a management plan to protect and conserve the archaeology were begun in 2007 and I prepared the report to assess the archaeological values of the site and make management recommendations. I produced a report titled “The Archaeology of the Rakaia River Mouth Moa

Hunter Site Precinct”. This included a reassessment of the boundary for the area requiring management procedures which would minimise impacts on the archaeology and provide more detailed controls over activities which might have an impact on archaeological values.

4. The Proposed Plan Change

- 4.1 The Proposed Plan Change 26 is titled “Rakaia Huts Wahi Taonga Management Areas and Sites 28 June 2011”. It is in reference to the Resource Management Act 1991 section 6(f) on historic heritage.
- 4.2 This plan change includes rules and policies which include in detail activities with the potential to have archaeological impact. These are mainly various forms of ground disturbance. Considering the archaeological sensitivity of the area, many of these are identified as requiring an Authority under the Historic Places Act 1993. Others are regarded to have little or no impact, or to be on a very minor scale.
- 4.3 A notification of the proposed plan change was posted which requested submissions from the public or from organisations. These have been compiled by Andrew Mactier for evaluation.

5. Comments on Submissions

- 5.1 The submissions received for the Proposed Plan Change 26 were mainly concerned with the criteria for the proposed boundary and activities which may impact archaeological values. These matters are discussed below.
- 5.2 The presence of archaeological material located in the strip along the terrace edge west of Pacific Drive has been questioned by R. A. - P.J. Perkins and R. G. S. - S. M. Nee. It is true that no archaeological material has been recently reported in the area between Pacific Drive and the terrace edge. This would be relevant if the proposed process of monitoring ground disturbance had been in place at the outset of building in the area. If so, then the earthworks in the area would have been sufficient to provide a good indication of what was likely to be present. Even if individuals (whether owners or members of the public) had undertaken the responsibility of providing such information it is not likely that they would have recognised most of any archaeological evidence exposed. The presence of stone flakes, fire-cracked rock and charcoal deposits, which are the most likely archaeology to be present, probably would not be identified as such. The presence of bones is also not necessarily apt to be noticed as archaeological. In my experience, moa, seal, human and other bones, in the absence of special training, are likely to be taken as sheep or cow. It is only if a mass of giant moa bones strikes someone as unusual, or a human skull is found that a reporting might be made. Adzes and other ground stone artefacts, especially of greenstone, are readily recognised, but these may not be reported or made known locally. As a result, the fact that no archaeology has recently come to official attention has no implications on whether it has been encountered. With the new proposed process it will be possible to provide documentation which may eventually indicate the real archaeological potential of the area.

- 5.3 The site published by Von Haast in 1872 shows archaeological material belonging to the Rakaia River Mouth Moa Hunter Site extending west to the edge of the terrace. This was after the area had been first ploughed and the site was fully exposed. At present the area is covered with grass and garden planting as well as buildings. This map was the main guide I used for the recommended boundary.
- 5.4 From the Von Haast map however, the western margin along the terrace does not seem to be part of the central prehistoric occupation, but more on the periphery. As a peripheral zone it might be thought to not have much archaeological potential. However, there are a variety of features which can occur around the margins of a prehistoric Maori settlement. One of these is burials. This was an issue of concern raised in the TRONT submission. Traditionally Maori interred human remains in various ways and in different kinds of places for a variety of reasons. Although there were main urupa, individual burials also may occur elsewhere. Urupa themselves may be in various places, and often are on the periphery of settlements, villages or pa. An example is at nearby Taumutu. The present urupa at the Wesleyan Church that was built on a former pa is recent. However, close to it, in the coastal dunes was what seems to have been the earlier urupa. These dunes have been mostly destroyed by wave action due to coastal cutting, and the human remains were gathered by the late Riki Ellison for reburial. This case, and other examples such as Wairau Bar, were used as part of my consideration of where to place the boundaries for the management area. However, if there had been a full scale burial ground in this area then it is likely that construction activities would have provided a human skull by now which would have been reported to the police. The potential for isolated burials still remains a possibility. In my recent work as the Pegasus archaeologist near Woodend several such isolated burials were found associated with Maori settlement areas. This the zone along the margin of the terrace must be regarded as having the possibility of burials.
- 5.5 Another factor in the defining the boundary is the configuration of the landscape. The Moa Hunter settlement on the Rakaia terraces is clearly marked out by the edge of the terraces. This is not merely the thinning out of archaeological materials, but a landscape feature. The terrace edge with its view over the Rakaia floodplain may also may have been a landscape feature where particular satellite activities were the most suitable.
- 5.6 Activities which may impact archaeological values is another issue referred to by the TRONT submission. One of these is landscaping. If landscaping includes earthmoving or trenching it has the possibility to have a massive impact on the archaeology and should be monitored.
- 5.7 Another issue introduced by TRONT is the planting of trees, ranging from individual trees to shelter belts to plantations. Tree plantations are usually done with a deep furrow made by a ripper on a bulldozer. From my experience this can impact about 20% of the area. Moreover, the tree roots tend to seek out archaeological features such as ovens or shell and bone deposits. This can be extremely disruptive and destructive. Tree roots are able to penetrate and consume bone, and as the root grows it pushes and displaces the deposit. Features such as ovens or middens seem to attract tree roots, probably because they are more porous and hold water and are nutrient-rich. Subsequent logging, stump pulling and re-planting furthers the impact. Shelter belts are more limited in size but are concentrated enough so that the impact can be substantial. However the scale of a few individual trees in hand-dug holes is not great.

6. Conclusions

- 6.1 The western boundary for the proposed plan change is not arbitrary, but is based on several criteria which indicate that there may be archaeological and cultural values up to the edge of the terrace.
- 6.2 Landscaping of the type which has sub-surface effects has the potential to affect archaeological values.
- 6.3 The scale of tree planting is an important consideration. If this includes more intensive plantings than a few trees using hand-dug holes, then it has the potential to have substantial archaeological impacts.

APPENDIX 5

Recommended Changes to PC26 (as amended through submissions)
(Township Volume)

Amendments to Plan Change 26 as a result of submissions are shown with additions double underlined and deletions ~~struck out~~.

B3.3 CULTURE AND HISTORIC HERITAGE – ISSUE

- Damage to, destruction of or inappropriate alteration of sites, places, trees and vegetation, buildings or other structures which have ~~cultural or~~ historic heritage and cultural values.

Culture and Historic Heritage in Selwyn District

Sites, areas or buildings may have heritage and cultural values if they are places or objects which people associate with their identity, history, events, customs or practices. Usually these values are shared by more than one person and in the case of tangata whenua they are shared by the local rūnanga and Ngai Tahu. In particular, wāhi tapu, wāhi taonga and mahinga kai are sites and/or areas that tangata whenua value as a critical part of their cultural identity. Heritage and cultural values may be associated with, but not limited to, old buildings, ruins, significant trees and vegetation, trees planted to commemorate special events, modern buildings that are part of a community's identity, the plants used in customary practices, land forms, routes, traditional trails and traditional activities. Most often, people associate heritage values with old buildings, ruins or significant trees and vegetation. Many other things have heritage values. For example, plants used in customary practices, landforms, modern buildings that are part of a community's identity, routes and trails, and traditional activities and trees planted to commemorate special events.

(iv) surroundings associated with the natural and physical resources

Cultural and historic ~~Historic~~ heritage values are ~~is~~ not only part of our inheritance from the past; it is also a part of our contemporary identity and sense of place. Cultural and historic ~~Historic~~ heritage values, including cultural connections and associations with places, makes an important contribution to the physical environment. In particular, culture and historic heritage values are ~~is~~ a vital part of what makes a place unique or important for the people who live there.

Cultural and historic ~~Historic~~ heritage values are ~~is~~ important because it provides a tangible insight into our past and can be an important source of knowledge. Cultural and heritage ~~Heritage~~ features can act as a reminder or social link to the past that is important to the community, but they can also provide valuable information that contributes to the knowledge of our history and environment. For example historic buildings provide information about the tools, technology and materials available at the time as well as contributing to a sense of place. Another example is examining an archaeological site to find information about how people lived in the past, and what their environment was like at that time. The accidental or inadvertent destruction or damage of cultural and heritage features can cause the loss of this knowledge as well as a social/cultural link to the past

Damage To Sites With Cultural and Historic Heritage

Sites and buildings with cultural and historic heritage values may be lost or damaged by natural forces such as fire, earthquake, weather or diseases in plants. Human and animal activities can

also affect sites and buildings. Examples include: earthworks, additions, alterations or modification to buildings or parts of buildings which are not 'in keeping' with the original style, removing buildings, ruins or trees or disturbing wāhi taonga and wāhi tapu sites.

Protecting Cultural and Historic Heritage Values

As well as the specific duties under section 6 of the Act, maintaining sites and buildings with cultural and historic heritage values in Selwyn District can:

- Help teach people about their past;

Protecting sites and structures with cultural and historic heritage values involves costs:

- Many sites and structures are privately owned or on private land. For example, some wāhi taonga and wāhi tapu sites are on land not owned by tangata whenua for whom they have value. Protecting sites and structures them may sometimes prevent the landholder from using them the site or structure for other purposes, although adapting heritage buildings for new uses is common.
- Historic heritage buildings and structures need to be maintained to ensure their retention.
- Using historic heritage buildings can be costly as when the use of any building changes, the building must be upgraded as is reasonably practicable to the same level as for a new building to comply with the New Zealand Building Code.

Any measures in the District Plan to protect the cultural and historic heritage values of sites must:

CULTURE AND HISTORIC HERITAGE – STRATEGY

The Township Volume of the District Plan uses the following basic strategy to protect sites with cultural and heritage values:

General

- Foster a partnership for protecting sites and buildings with cultural and historic cultural or heritage values between owners; local communities; local ~~runanga~~ runanga and the Council.

CULTURE AND HISTORIC HERITAGE – OBJECTIVES

Objective B3.3.2

Sites of wāhi ~~waahi~~ tapu and other importance to tāngata whenua are protected.

Explanation and Reasons

Part of promoting sustainable management of natural

Objective B3.3.1 develops a partnership approach to **culture and** heritage protection as many sites and buildings that have **cultural** or **and historic** heritage values in Selwyn District are privately owned and are still in use. The co-operation of owners These efforts should be acknowledged and encouraged.

Objective B3.3.2 reflects the duty under section 6(fe) of the Act to recognise and provide for the protection of protect sites of waahi tapu and other cultural importance wāhi tapu and other sites of cultural importance to local rūnanga Māori from inappropriate subdivision, use, and development to Māori. It is achieved through policies and methods which encourage local runanga~~rūnanga~~ and landowners to develop protocols for activities in areas with such sites. This is the preferred approach indicated by local ~~rūnanga~~runanga. The District Plan also contains rules to manage earthworks, buildings and other activities in Wāhi Taonga Sites, waahi taonga sites Wāhi Taonga Management Areas and management areas and in Silent File Areas~~silent file areas~~.

CULTURE AND HISTORIC HERITAGE – POLICIES AND METHODS

MĀORI SITES

Policy B3.3.2

Explanation and Reasons

Policies B3.3.3 and B3.3.4 recognise and provide for the protection of four types of sites in the Plan.

Where a landholder requires a resource consent to undertake an activity in a Silent File Area, a Wāhi Taonga Site, a Wāhi Taonga Management Area or a Mahinga Kai Sites~~silent file area, a waahi taonga site or management area or a mahinga kai site,~~ the Council has a policy to consider reducing or waiving fees for processing the resource consent application (see Policy B3.3.9~~10-11~~). This policy applies to heritage sites and in areas of outstanding landscapes, as well.

Method

District Plan Rules

- **Sites of Significance to Tangata Whenua Cultural Historic Heritage Sites**

CULTURE AND HISTORIC HERITAGE — ANTICIPATED ENVIRONMENTAL RESULTS

The following outcomes should result from implementing Section B3.3:

- A growing database of the history of the Selwyn District.

CULTURE AND HISTORIC HERITAGE — MONITORING

Please refer to Part E, Appendix 1.

PART C

2 LIVING ZONE RULES — EARTHWORKS

Controlled Activities — Earthworks and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

2.1.2 Any earthworks which do not comply with Rule 2.1.1.9 or 2.1.1.10 shall be a controlled activity if the written consent of the local rūnanga has been obtained, and in the case of Wāhi Taonga Management Area C39(b), the New Zealand Historic Places Trust Pouhere Taonga has provided written authorisation, has been obtained.

Restricted Discretionary Activities — Earthworks and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

2.1.7.3 Other than in Wāhi Taonga Management Area C39(b), aAny potential costs to the landholder of not being able to undertake the proposed activity on that site;

Reasons for Rules

Wāhi Taonga Management Areas are of considerable cultural and archaeological significance. Earthworks in these areas are appropriate in certain circumstances and to a certain depth, after which resource consent is required (Controlled Activity). In assessing any application for resource consent made under Rule 2.1.2, the Council will consider whether the earthworks will disturb the special site within the Wāhi Taonga Management area C39(c)(b) and whether that disturbance is inappropriate, as advised by local rūnanga and in the case of Wāhi Taonga Management Area C39(b), the Historic Places Trust Pouhere Taonga).

PART C

4 LIVING ZONE RULES – BUILDINGS

4.14 BUILDINGS AND SITES OF SIGNIFICANCE TO TANGATA WHENUA (WĀHI TAONGA MANAGEMENT AREAS)

Controlled Activities – Buildings and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

4.14.2 Any activity which does not comply with Rules 4.14.1.1 and 4.14.1.2 shall be a controlled activity if the written consent of the local runanga **has been obtained**, and in the case of Wāhi Taonga Management Area C39(b), the New Zealand Historic Places Trust Pouhere Taonga **has provided written authorisation**, **has been obtained**.

Restricted Discretionary Activities – Buildings and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

4.14.3.3 **Other than in Wāhi Taonga Management Area C39(b), a**Any potential costs to the landholder of not being able to undertake the proposed activity on that site;

PART C

10 LIVING ZONE RULES – ACTIVITIES

Controlled Activities – Activities and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

10.4.2 Any activity which does not comply with Rule 10.4.1.2 or 10.4.1.3 shall be a controlled activity if the written consent of the local rūnanga **has been obtained**, and in the case of Wāhi Taonga Management Area C39(b), the New Zealand Historic Places Trust Pouhere Taonga **has provided written authorisation**, **has been obtained**.

Restricted Discretionary Activities – Activities and Sites of Significance to Tangata Whenua (Wāhi Taonga Management Areas)

- 10.4.3.3 Other than in Wāhi Taonga Management Area C39(b), aAny potential costs to the landholder of not being able to undertake the proposed activity on that site;

PART D

DEFINITIONS

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Landscaping: means the visual improvement of an area through designed live planting of trees, shrubs and ground cover for amenity purposes and may include provision of physical features such as paving, walls, art and seating. For the purposes of this definition, landscaping does not include the re-contouring of land by removing or displacement of earth or soil, or for any earthworks associated with the erection or installation of a wall.

APPENDIX 5

Recommended Changes to PC26 (as amended through submissions) (Rural Volume)

Amendments to Plan Change 26 as a result of submissions are shown with additions double underlined and deletions ~~struck out~~.

B3.3 CULTURE AND HISTORIC HERITAGE – ISSUE

- **Damage to, destruction of or inappropriate alteration of sites, places, trees and vegetation, buildings or structures which have cultural or historic heritage and cultural values.**

Culture and Historic Heritage in Selwyn District

Selwyn District is an area which has been affected by several waves of colonisation by Māori and Europeans. As a result there are sites, places and buildings which are of cultural or heritage value to individuals, families, iwi, rūnanga and communities in the District.

Sites, areas or buildings may have heritage and cultural values if they are places or objects which people associate with their identity, history, events, customs or practices. Usually these values are shared by more than one person and in the case of tangata whenua they are shared by the local rūnanga and Ngai Tahu. In particular, wāhi tapu, wāhi taonga and mahinga kai are sites and/or areas that tangata whenua value as a critical part of their cultural identity. Heritage and cultural values may be associated with, but not limited to, old buildings, ruins, significant trees and vegetation, trees planted to commemorate special events, modern buildings that are part of a community's identity, the plants used in customary practices, land forms, routes, traditional trails and traditional activities. Most often, people associate heritage values with old buildings, ruins or significant trees and vegetation. Many other things have heritage values. For example, plants used in customary practices, landforms, modern buildings that are part of a community's identity, routes and trails, and traditional activities and trees planted to commemorate special events.

(iv) surroundings associated with the natural and physical resources

Cultural and historic ~~Historic~~ heritage values are ~~is~~ not only part of our inheritance from the past; it is also a part of our contemporary identity and sense of place. Cultural and historic ~~Historic~~ heritage values, including cultural connections and associations with places, makes an important contribution to the physical environment. In particular, culture and historic heritage values are ~~is~~ a vital part of what makes a place unique or important for the people who live there.

Cultural and historic ~~Historic~~ heritage values are ~~is~~ important because it provides a tangible insight into our past and can be an important source of knowledge. Cultural and heritage ~~Heritage~~ features can act as a reminder or social link to the past that is important to the community, but they can also provide valuable information that contributes to the knowledge of our history and environment.

For example historic buildings provide information about the tools, technology and materials available at the time as well as contributing to a sense of place. Another example is examining an archaeological site to find information about how people lived in the past, and what their environment was like at that time. The accidental or inadvertent destruction or damage of cultural and heritage features can cause the loss of this knowledge as well as a social/cultural link to the past.

Damage to Sites with Cultural and Historic Heritage Values

Sites and buildings with cultural and historic heritage values may be lost or damaged by natural forces such as fire, earthquake, weather or diseases in plants. Human and animal activities can also affect sites and buildings. Examples include earthworks, additions, alterations or modification to buildings or parts of buildings which are not in keeping with the original style, removing buildings, ruins or trees or disturbing wāhi taonga and wāhi tapu sites.

Old buildings

Protecting Cultural and Historic Heritage Values

As well as the specific duties under section 6 of the Act, maintaining sites and buildings with cultural and historic heritage values in Selwyn District can:

- Help teach people about their past;
- Foster

Protecting sites and structures with cultural and historic heritage values involves costs:

- Many sites and structures are privately owned or on private land. For example, some wāhi taonga and wāhi tapu sites are on land not owned by tangata whenua for whom they have value. Protecting sites and structures them may sometimes prevent the landholder from using them the site or structure for other purposes, although adapting heritage buildings for new uses is common.
- Heritage

Any measures in the District Plan to protect the cultural and historic heritage values of sites must:

- Recognise

CULTURE AND HISTORIC HERITAGE CULTURE AND HERITAGE— STRATEGY

The Rural Volume

CULTURE AND HISTORIC CULTURE AND HERITAGE **— OBJECTIVES**

CULTURE AND HISTORIC CULTURE AND HERITAGE **— POLICIES AND METHODS**

MĀORI SITES

Policy B3.3.4 ~~3(b)~~

The Wāhi Taonga Sites

With regard to Wāhi Taonga Management Area C39(a) at Rakaia Huts; the area is still of significant cultural and archaeological value in spite of significant alteration and disturbance to the area since European settlement. The District Plan identifies a number of activities which are considered to have less than minor effects on the cultural and archaeological values of Wāhi Taonga Management Area C39(b)(a). These activities do not require a resource consent for earthworks. Activities exempt from the earthworks rules include:

- sowing tending or cultivating crops;

CULTURE AND HISTORIC CULTURE AND HERITAGE **— ANTICIPATED ENVIRONMENTAL RESULTS**

The following results should occur from implementing Section B3.3:

- A growing database of the history of

CULTURE AND HISTORIC CULTURE AND HERITAGE **— MONITORING**

Please refer to Part E, Appendix 1.

PART C

1 RURAL RULES — EARTHWORKS

Notes

1. Rule 1 –Earthworks, does not apply to any of the following activities, except where the provisions of Rule 1.5 (Earthworks and Protected Trees) apply:
 - ~~Tending or landscaping~~ ~~Landscaping or maintenance~~ of gardens, lawns or public spaces;
 - ~~Sowing, tending or cultivating crops, grazing or planting trees:~~
 - Digging post holes;
 - ~~Drilling bores;~~
 - ~~Planting trees or removing dead or diseased trees;~~
 - ~~Cultivation;~~
 - Burying Pets;
 - Trenching compost;
 - ~~Digging soak holes, building foundations and related activities, except in Wāhi Taonga Management Area C39(a),~~ ~~;~~
 - ~~Maintaining and clearing rivers, water races or drains except in Wāhi Taonga Management Area C39(a);~~
 - ~~Maintaining or repairing existing flood protection works except in Wāhi Taonga Management Area C39(a); or~~
 - ~~Earthworks required to duct cables except in Wāhi Taonga Management Area C39(b)(a).~~

Any earthworks associated with digging post holes, cultivation, tending or landscaping gardens, planting trees or removing dead or diseased trees, providing ducting for fibre optic cables, or drilling bores, except where the provisions of Rule 1.5 (Earthworks and Protected Trees) apply.
2. Rule 1 – Earthworks does apply to earthworks associated with harvesting forests or tracks into areas to harvest forests.
3. ~~Planting of Shelterbelts, Amenity Plantings and Plantations is subject to Rule 2 – Tree Planting and Removal of Protected Trees.~~

1.2 EARTHWORKS AND SITES OF SIGNIFICANCE TO TANGATA WHENUA CULTURAL SITES (SILENT FILE AREAS, WAHI TAONGA SITES, WAHI TAONGA MANAGEMENT AREAS, MAHINGA KAI SITES)

Restricted Discretionary Activities — Earthworks and Sites of Significance to Tangata Whenua Cultural Sites (Silent File Areas, Wāhi Taonga Sites, Wāhi Taonga Management Areas, Mahinga Kai Sites)

1.2.2 Any activity which does not comply with Rule 1.2.1 shall be a restricted discretionary activity .

1.2.3.5 Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder/occupier of not
being able to undertake the proposed activity on that
site;Any alternative options available to undertake the
activity in another form or on another site and the costs
and practicality of these options;

PART C

2 RURAL RULES — TREE PLANTING AND REMOVAL OF PROTECTED TREES

2.1 SHELTERBELTS AND AMENITY PLANTING

Permitted Activities — Shelterbelts & Amenity Planting

2.1.1 The planting of any trees for amenity planting, shelterbelts shall be a permitted activity if all of the following conditions are met:

2.1.1.9 In the area listed in Appendix 5 and shown on the
Planning Maps as Wāhi Taonga Management Area
C39(a), any disturbance of soil or earth by the tree
planting(s) is limited to the disturbance of soil over
areas where that soil has been previously disturbed by
cultivation, tree planting(s) (trees, pasture or crops),
building or earthworks. Any disturbance within those
areas shall be limited to a maximum depth of 20cm;in
any area listed in Appendix 5 and shown on the
Planning Maps as a Wāhi Taonga Site or a Wāhi Taonga
Management Area, the tree planting(s) do not involve
the disturbance, damage to, removal or destruction of
any object, artefact or other symbol of pre-European
settlement, occupation or use of that site;

Restricted Discretionary Activities – Shelterbelts & Amenity Planting

- 2.1.9.4 Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder of not being able
to undertake the proposed activity on that site;Any
alternative options available to undertake the activity in
another form or on another site and the costs and
practicality of these options;

2.2 PLANTATIONS

Permitted Activities – Plantations

- 2.2.1 The planting or harvesting of any plantation shall be a permitted activity if all of the following conditions are met:
- 2.2.1.3 In the area listed in Appendix 5 and shown on the
Planning Maps as Wāhi Taonga Management Area
C39(a), any disturbance of soil or earth by the
plantation is limited to the disturbance of soil over areas
where that soil has been previously disturbed by
cultivation, tree planting (trees, pasture or crops),
building or earthworks. Any disturbance within those
areas shall be limited to a maximum depth of 20cm;

Restricted Discretionary Activities – Plantations

- 2.2.7.4 Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder of not being able
to undertake the proposed activity on that site

PART C

3 RURAL RULES - BUILDINGS

3.6 BUILDINGS AND SITES OF SIGNIFICANCE TO **TANGATA WHENUA SILENT FILE AREAS, WĀHI** **TAONGA SITES, WĀHI TAONGA MANAGEMENT** **AREAS AND MAHINGA KAI SITES**

3.6.3.5

Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder of not being able
to undertake the proposed activity on that site; Any
alternative options available to undertake the activity in
another form or on another site and the costs and
practicality of these options;

PART C

4 RURAL RULES — ROADING

4.3 ROADING AND SITES OF SIGNIFICANCE TO TANGATA WHENUA SILENT FILE AREAS, WĀHI TAONGA SITES, WĀHI TAONGA MANAGEMENT AREAS AND MAHINGA KAI SITES

**Restricted Discretionary Activities — Roading and Sites
of Significance to Tangata Whenua Silent File Areas,
Wāhi Taonga Sites, Wāhi Taonga Management Areas and
Mahinga Kai Sites**

4.3.3.5

Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder of not being able
to undertake the proposed activity on that site; Any
alternative options available to undertake the activity in
another form or on another site and the costs and
practicality of these options;

PART C

5 RURAL RULES — UTILITIES

5.10 UTILITY STRUCTURES AND SITES OF SIGNIFICANCE TO TANGATA WHENUA SILENT FILE AREAS, WĀHI TAONGA SITES, WĀHI TAONGA MANAGEMENT AREAS, MAHINGA KAI SITES — UTILITY STRUCTURES

Restricted Discretionary Activities – Utility Structures And Sites of Significance to Tangata Whenua Silent File Areas, Wāhi Taonga Sites, Wāhi Taonga Management Areas, Mahinga Kai Sites – Utility Structures

- 5.10.3.5 **Other than in Wāhi Taonga Management Area C39(a),**
~~aAny potential costs to the landholder of not being able to undertake the proposed activity on that site; Any alternative options available to undertake the activity in another form or on another site and the costs and practicality of these options;~~

5.11 UTILITY BUILDINGS AND SITES OF SIGNIFICANCE TO TANGATA WHENUA SILENT FILE AREAS, WĀHI TAONGA SITES, WĀHI TAONGA MANAGEMENT AREAS, MAHINGA KAI SITES – UTILITY BUILDINGS

Restricted Discretionary Activities – Utility Buildings and Sites of Significance to Tangata Whenua Silent File Areas, Wāhi Taonga Sites, Wāhi Taonga Management Areas, Mahinga Kai Sites – Utility Buildings

- 5.11.3.5 **Other than in Wāhi Taonga Management Area C39(a),**
~~aAny potential costs to the landholder of not being able to undertake the proposed activity on that site; Any alternative options available to undertake the activity in another form or on another site and the costs and practicality of these options;~~

PART C

6 RURAL RULES - OUTDOOR SIGNS AND NOTICEBOARDS

6.6 OUTDOOR SIGNS AND SITES OF SIGNIFICANCE TO TANGATA WHENUA SILENT FILE AREAS, WĀHI TAONGA SITES, WĀHI TAONGA MANAGEMENT AREAS AND MAHINGA KAI SITES

Restricted Discretionary Activities — Outdoor Signs and Sites of Significance to Tangata Whenua Silent File Areas, Wāhi Taonga Sites, Wāhi Taonga Management Areas and Mahinga Kai Sites

6.6.3.5

Other than in Wāhi Taonga Management Area C39(a),
aAny potential costs to the landholder of not being able
to undertake the proposed activity on that site; Any
alternative options available to undertake the activity in
another form or on another site and the costs and
practicality of these options;

PART D

DEFINITIONS

L

Landscaping: means the visual improvement of an area through designed live planting of trees, shrubs and ground cover for amenity purposes and may include provision of physical features such as paving, walls, art and seating. For the purposes of this definition, landscaping does not include the re-contouring of land by removing or displacement of earth or soil, or for any earthworks associated with the erection or installation of a wall.